GLOBAL TENDER ENQUIRY DOCUMENT

FOR PROCUREMENT OF

MGPS

FOR TWO NEW AIIMS

Under PMSSY Phase-IV & V FOR

GOVT OF INDIA

MINISTRY OF HEALTH & FAMILY WELFARE

HITES/PCD/AIIMS-IV/14/MGPS/18-19



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SECTION I

NOTICE INVITING TENDERS (NIT)

Tender Enquiry No.: HITES/PCD/AIIMS-IV/14/MGPS/18-19

Dated: 14.02.2019

 Procurement & Consultancy Services Division of HLL Infra Tech Services Limited, for and on behalf of Govt. of India, Ministry of Health & Family Welfare, invites sealed tenders, from eligible and qualified renderers' for supply, installation and commissioning of MGPS (Medical Gas Pipeline System) for the following New AIIMS medical colleges/ institutions getting established under PMSSY Phase-IV & V:

MGPS				
Event Number (Rfx) - 3000003754				
Sch No.	Consignee Name	States	Qty.	EMD (Rs.)
1	AIIMS Gorakhpur	Uttar Pradesh	1	28,82,734
2	AIIM Bhatinda	Punjab	1	28,82,734

<u>Note</u>:

- EMD is kept same for all the sites as it will be the prerogative of the purchaser to allocate site to the responsive bidders on the basis of best benefit to the exchequer/ least cost method mechanism (explained in Section IX –Qualification Criteria). Bidders are requested to submit EMD as per their eligibility, however, uniform price need to be quoted on the basis of site wise BOQ as per the list of requirement.
- The EMD as indicated in e-tendering portal is the sum of EMDs for all above schedules. The bidder shall furnish the EMD only for the number of schedules offered by them.

2. Tender No.: HITES/PCD/AIIMS-IV/14/MGPS/17-18

Sl. No.	Description	Schedule
i.	Last date for receipt of Pre-bid queries	22.02.2019, 1800 Hrs IST
ii.	Tender Processing Fee*	59,000/-
iii.	Pre-bid meeting date, time	27.02.2019, 1100 Hrs IST
iv.	Pre -bid Meeting Venue	HLL Infra Tech Services Limited, Procurement & Consultancy Services Division, B-14 A, Sector-62, Noida-201307
v.	Closing date & time for submission of online bids	20.03.2019, 1400 Hrs IST
vi.	Closing date & time for submission of Tender Processing Fee and EMD in physical form**	20.03.2019, 1400 Hrs IST
vii.	Date and Time of opening of online bids	20.03.2019, 1430 Hrs IST
viii.	Venue for opening of online bids and Submission of tender processing fee & EMD	Same as 2 (iv)

* Tender processing Fee is inclusive of GST (Our GSTIN: 09AADCH4882R1ZP)

** Bidders have to submit Original Bank Instruments for tender processing fee and EMD within the above mentioned date and time

SPECIFIC Instructions for e-Tender Participation:-

- 3. Bidders should have valid Class 3-B Digital Signature Certificate with encryption.
- 4. Bidders are requested to read the bidders help document on e-tender web site link before proceeding for bidding.
- 5. The prospective bidders have to register with the E-procurement system of HLL at <u>https://etender.lifecarehll.com/irj/portal</u>. 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).
- 6. Post receipt of User ID & Password, Bidders can log on for downloading & uploading tender document.
- 7. The tenderers shall submit Tender Processing Fee and EMD in physical form at the scheduled time and venue.
- 8. Tenderer may download the tender enquiry documents from the web site www.hllhites.com or www.lifecarehll.com or www.eprocure.gov.in/cppp or https://etender.lifecarehll.com/irj/portal.
- 9. 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.
- 10. All prospective tenderers may attend the Pre Tender meeting. The venue, date and time indicated above.
- 11. Tenderers shall ensure that their tenders, complete in all respects, are submitted **online through HLL's e-portal (as described above) ONLY. No DEVIATION is acceptable.**

IMPORTANT NOTE:-

Tender Processing Fee and EMD (as applicable) should be deposited within the scheduled date & time in the Tender Box located at:

HLL Infra Tech Services Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201307, Uttar Pradesh

> CEO HLL Infra Tech Services Limited

SECTION - II

GENERAL INSTRUCTIONS TO TENDERERS (GIT)

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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 Ministry of Health & Family welfare Govt. of India.
 - (ii) "e-Tender" means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder.
 - (iii) "e-Tenderer" means Bidder/ 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.
 - (v) "Goods" means the articles, material, commodities, livestock, furniture, fixtures, raw material, spares, instruments, machinery, equipment, medical equipment, industrial plant etc. which the supplier is required to supply to the purchaser under the contract.
 - (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) "Earnest Money Deposit" (EMD) means Bid Security/ monetary or financial guarantee to be furnished by a tenderer along with its tender.
 - (viii) "Contract" means the written agreement entered into between the purchaser and/or consignee 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 tenderer for due performance of the contract placed on it. Performance Security is also known as Security Deposit.
 - (x) "Consignee" means the Hospital (Institute/Medical College/ person to whom the goods are required to be delivered as specified in the Contract. If the goods are required to be delivered to a person as an interim consignee for the purpose of despatch to another person as provided in the Contract then that "another" person is the consignee, also known as ultimate consignee.
 - (xi) "Specification" 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 to determine conformity.
 - (xiii) "Day" means calendar day.
 - (xiv) "Local supplier" means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under this Order or by the competent Ministries/ Departments in pursuance of this order.
 - (xv) "Local content" means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value in percent.
 - (xvi) Margin of purchase preference' means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.

1.3 Abbreviations:

- (i) "TE Document" means Tender Enquiry Document
- (ii) "NIT" means Notice Inviting Tenders.
- (iii) "GIT" means General Instructions to Tenderers
- (iv) "SIT" means Special Instructions to Tenderers
- (v) "GCC" means General Conditions of Contract
- (vi) "SCC" means Special Conditions of Contract
- (vii) "DGS&D" means Directorate General of Supplies and Disposals
- (viii) "NSIC" means National Small Industries Corporation
- (ix) "PSU" means Public Sector Undertaking
- (x) "CPSU" means Central Public Sector Undertaking
- (xi) "LSI" means Large Scale Industry
- (xii) "SSI" means Small Scale Industry
- (xiii) "LC" means Letter of Credit
- (xiv) "DP" means Delivery Period
- (xv) "BG" means Bank Guarantee
- (xvi) "ED" means Excise Duty
- (xvii) "CD" means Custom Duty
- (xviii) "VAT" means Value Added Tax
- (xix) "CENVAT" means Central Value Added Tax
- (xx) "CST" means Central Sales Tax
- (xxi) "RR" means Railway Receipt
- (xxii) "BL" means Bill of Lading
- (xxiii) "FOB" means Free on Board
- (xxiv) "FCA" means Free Carrier
- (xxv) "FOR" means Free on Rail
- (xxvi) "CIF" means Cost, Insurance and Freight
- (xxvii) "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.
- (xxviii) "DDP" means Delivery Duty Paid named place of destination (consignee site)
- (xxix) "INCOTERMS" means International Commercial Terms as on the date of Tender Opening
- (xxx) "MOH&FW" means Ministry of Health & Family Welfare, Government of India
- (xxxi) "Dte. GHS" means Directorate General and Health Services, MOH&FW.
- (xxxii) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
- (xxxiii) "RT" means Re-Tender.
- (xxxiv) "GST" means Goods and Services Tax

2. Introduction

- 2.1 The Purchaser has issued these TE 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 Instruction Tenderers") provides the relevant information as well as instructions to assist the prospective tenderers in preparation and submission of tenders. It

also includes the mode and procedure to be adopted by the purchaser for receipt and opening as well as scrutiny and evaluation of tenders and subsequent placement of contract.

- 2.3 The tenderers shall also read the Special Instructions to Tenderers (SIT) related to this purchase, as contained in Section III of these documents and follow the same accordingly. Whenever there is a conflict between the GIT and the SIT, the provisions contained in the SIT shall prevail over those in the GIT.
- 2.4 Before formulating the tender and submitting the same to the purchaser, the tenderer should read and examine all the terms, conditions, instructions, checklist etc. contained in the TE documents. Failure to provide and/or comply with the required information, instructions etc. incorporated in these TE documents may result in rejection of its tender.

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 Tender

- 4.1 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, shall be written in the English language, unless otherwise specified in the Tender Enquiry. However, the language of any printed literature furnished by the tenderer in connection with its tender may be written in any other language provided the same is accompanied by an English translation and, for purposes of interpretation of the tender, the English translation shall prevail.
- 4.2 The tender submitted by the tenderer and all subsequent correspondence and documents relating to the tender exchanged between the tenderer and the purchaser, may also be written in the Hindi language, provided that the same are accompanied by English translation, in which case, for purpose of interpretation of the tender etc, the English translations shall prevail.

5. Eligible Tenderers

5.1 This invitation for tenders is open to all suppliers 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. Tendering Expense

7.1 The tenderer shall bear all costs and expenditure incurred and/or to be incurred by it in connection with its tender including preparation, mailing and submission of its tender 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 tendering process.

B. TENDER ENQUIRY DOCUMENTS

8. Content of Tender Enquiry Documents

8.1 In addition to Section I – "Notice inviting Tender" (NIT), the TE documents include:

- Section II General Instructions to Tenderers (GIT)
- Section III Special Instructions to Tenderers (SIT)
- Section IV General Conditions of Contract (GCC)
- Section V Special Conditions of Contract (SCC)
- Section VI List of Requirements
- Section VII Technical Specifications
- Section VIII Quality Control Requirements
- Section IX Qualification Criteria
- Section X Tender Form
- Section XI Price Schedules
- Section XII Questionnaire
- Section XIII Bank Guarantee Form for EMD
- Section XIV Manufacturer's Authorisation Form
- Section XV Bank Guarantee Form for Performance Security/CMC Security
- Section XVI Contract Forms A & B
- Section XVII Proforma of Consignee Receipt Certificate
- Section XVIII Proforma of Final Acceptance Certificate by the consignee
- Section XIX Consignee List

Appendix A – DIPP – Public Procurement (Preference to Make in India), Order 2017

- Appendix B Integrity pact
- 8.2 The relevant details of the required goods and services, the terms, conditions and procedure for tendering, tender 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 tenderers are expected to examine all such details etc to proceed further.

9. Amendments to TE documents

- 9.1 At any time prior to the deadline for submission of tenders, the purchaser may, for any reason deemed fit by it, modify the TE documents by issuing suitable amendment(s) to it.
- 9.2 Such an amendment will be notified in writing by registered/speed post or by fax/telex/e-mail, to all prospective tenderers, who have received the TE documents and will be binding on them.
- 9.3 In order to provide reasonable time to the prospective tenderers to take necessary action in preparing their tenders as per the amendment, the purchaser may, at its discretion extend the deadline for the submission of tenders and other allied time frames, which are linked with that deadline.

10. Clarification of TE documents

10.1 A tenderer 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 <u>pcd@hllhites.com</u> and <u>bmenoida@hllhites.com</u>. The purchaser will respond to such request provided the same is received by the purchaser **one day prior to the pre-bid meeting**. **Any queries/representations received later shall not be taken into cognizance**.

C. PREPARATION OF TENDERS

11. Documents comprising the e-Tender

- 11.1 The tender(s) shall only be submitted online as mentioned below:
 - (i) 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, EMD, Eligibility Criteria & Technical Specifications viz. Product

Specification Sheets/Brochures, OEM Certificate, etc.) has to be attached in the C-folder of e-tendering module. Bidders have to ensure that the documents uploaded in pdf format are legible.

(ii) Price Bid has to be submitted in the prescribed excel format provided with the tender enquiry.

Note:

- (i) The Tender Processing Fee and EMD have to be submitted in physical form as per Section

 I, Notice Inviting Tender of this tender enquiry.
- (ii) 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 Techno-Commercial Bid.

A) Details of Technical Tender (Un priced Tender)

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

- i) Earnest money furnished in accordance with GIT clause 19.1 alternatively, documentary evidence as per GIT clause 19.2 for claiming exemption from payment of earnest money.
- ii) Tender Form as per Section X (without indicating any prices).
- iii) Documentary evidence, as necessary in terms of clauses 5 and 17 establishing that the tenderer is eligible to submit the tender and, also, qualified to perform the contract if its tender is accepted.
- iv) Tenderer/Agent who quotes for goods manufactured by other manufacturer shall furnish Manufacturer's Authorisation Form.
- v) Power of Attorney issued by Competent Authority in favour of the person who is digitally signing/ uploading the tender(s).
- vi) Documents and relevant details to establish in accordance with GIT clause 18 that the goods and the allied services to be supplied by the tenderer conform to the requirement of the TE documents.
- vii) Performance Statement as per section IX along with relevant copies of orders and end users' satisfaction certificate.
- viii) Price Schedule(s) as per Section XI filled up with all the details including Make, Model etc. of the goods offered with prices blank (without indicating any prices).
- ix) Certificate of Incorporation.
- x) Checklist.
- xi) Cost of tender document should be payable by DD/pay order. Cheque will not be accepted.
- xii) Self-Attested copies of VAT registration certificate and PAN Card.
- xiii) Non conviction /no pending conviction certification issued by Notary on judicial stamp paper for preceding three years.
- xiv) Self-Attested copies of quality certificates i.e US FDA /BIS/CE Certificate issued by competent authority, if applicable.
- xv) Documentary evidence stating the status of bidder.
- xvi) List of procurement agencies of repute to which the tendered product have been supplied during last 12 months.
- xvii) Self-attested copies of annual report, audited balance sheet and profit & loss account for preceding five years from the date of tender opening.

- xviii) Notarized affidavit that tenderer 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.
 - xix) 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) during last two year.
 - xx) **Product catalogues / original Data Sheet must be enclosed of all quoted items**. The technical bid/technical specifications shall be submitted in the letter head of original equipment manufacturer duly sealed and signed by the authorized signatory of the manufacturer.
 - xxi) A tenderer quoting imported goods located within India shall produce documentary evidence of the goods having been imported and already located within India (i.e. Bills of Entry for the quoted items and a self-declaration confirming that the quoted items were imported for the purpose of storage in bidder warehouse and for further sale), along with their techno-commercial bid.
- xxii) The Integrity pact (At Appendix-B) 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. Bids submitted without signing the integrity pact will be ab initio rejected without assigning any reason.

B) <u>Price Tender:</u>

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:

(i) The bidder has to be diligent while filling up the Techo-Commercial Bid and Price Bid provided in excel formats and must not tamper the contents of the sheets.

- (ii) It is the responsibility of bidder to go through the TE document to ensure furnishing all required documents in addition to above, if any.
- (iii) 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 A person signing (manually or digitally) the tender form or any documents forming part of the contract on behalf of another shall be deemed to warrant that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contract and hold the signatory liable for all cost and damages.
- 11.3 A tender, which does not fulfill any of the above requirements and/or give evasive information/reply against any such requirement, shall be liable to be ignored.
- 11.4 Tender sent by fax/telex/cable/electronically shall be ignored

12. Tender currencies

12.1 The tenderer 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.
- 12.3 Tenders, where prices are quoted in any other currency may not be accepted and are liable to be ignored.
- 12.4 A tenderer quoting imported goods located within India shall produce documentary evidence of the goods having been imported and already located within India (i.e. Bills of Entry for the quoted items and a self-declaration confirming that the quoted items were imported for the purpose of storage in bidder warehouse and for further sale), along with their techno-commercial bid.

13 Tender Prices

- 13.1 The Tenderer shall indicate on the Price Schedule provided under Section XI all the specified components of prices shown therein including the unit prices and total tender 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 tenderer, same should be clarified as "NA" by the tenderer, if nothing is mentioned it would be presumed as included.
- 13.2 It is mandatory to quote for all the schedules. However, the purchaser will have the right to award the work to any number of schedule(s) as per the eligibility and to the best benefit of the exchequer. All sundry equipment, fittings, units assemblies, accessories, hardware items, foundation bolts, termination lugs for electrical connections, and all other items which are useful and necessary for efficient assembly and installation of equipment and components of the work shall be deemed to have been included in the tender irrespective of the fact whether such items are specifically mentioned in the tender documents or not.
- 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 XI. Detailed breakup of the prices for the main equipment and accessories/optional items must be provided separately, item wise in the same serial order as listed in the technical bid.
- 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 all taxes and duties like Custom Duty and /or GST. 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 any duties including Custom duty and /or GST , which will be payable on the goods in India if the contract is awarded;
 - c) Charges towards Packing & Forwarding, 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, as mentioned in List of Requirements and Price Schedule;

- e) The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule;
- f) the price of annual CMC, 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 FOB/FCA port of shipment, as indicated in the List of Requirements and Price Schedule;
 - b) the price of goods quoted CIP (name port of destination) in India as indicated in the List of Requirements, Price Schedule and Consignee List;
 - c) The charges for 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. Other local costs and Incidental costs, as specified in the List of Requirements and Price Schedule;
 - d) The charges for Incidental Services, as in the List of Requirements and Price Schedule;
 - e) The prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and
 - f) The price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule
 - g) The maintenance charges for initial five years after installation.
- 13.5 Additional information and instruction on Duties and Taxes:
- 13.5.1 If the Tenderer desires to ask for GST or any other taxes etc. to be paid extra, the same must be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

13.5.5 Customs Duty:

The Purchaser will pay the Customs duty wherever applicable upon actual production of documentary evidence.

13.5.6 Goods and Services Tax (GST) :

- a. If a tenderer asks for Goods and Services Tax to be paid extra, the rate and nature of Goods and Services Tax applicable should be shown separately. The Goods and Services Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction is legally liable to Goods and Services Tax and is payable as per the terms of the contract. If any refund of Tax is received at a later date, the Supplier must return the amount forth-with to the purchaser.
- b. In case within the delivery period stipulated in the contract, there is an increase in the statutory taxes like GST, Custom Duty, or fresh imposition of taxes which may be levied in respect of the goods and services specified in the contract, reimbursement of these statutory variation shall be allowed to the extent of actual quantum of taxes paid by the supplier. This benefit, however, cannot be availed by the supplier in case the period of delivery is extended due to unexcused delay by the supplier.
- c. But nevertheless, the Purchaser/Consignee shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty and/or GST or any other duty or tax or levy or on account of any other grounds. In case of downward revision in taxes/duties, the actual quantum of reduction of excise duty must be reimbursed to the purchaser by the supplier. All such adjustments shall include all reliefs, exemptions, rebates, concession etc. if any obtained by the supplier.

- 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 TE document, the terms FCA, FOB, FAS, CIF, CIP, DDP, etc. for imported goods offered from abroad, shall be governed by the rules & regulations prescribed in the current edition of INCOTERMS, published by the International Chamber of Commerce, Paris
- 13.9 The need for indication of all such price components by the tenderers, as required in this clause (viz., GIT clause 13) is for the purpose of comparison of the tenders by the purchaser and will no way restrict the purchaser's right to award the contract on the selected tenderer on any of the terms offered.

14. Indian Agent:

- 14.1 If a foreign tenderer has engaged an agent in India in connection with its tender, the foreign tenderer, in addition to indicating Indian agent's commission, if any, in a manner described under GIT sub clause 12.2 above, shall also furnish the following information:
 - a) As per the Compulsory Enlistment Scheme of the Department of Expenditure, Ministry of Finance, it is compulsory for Indian agents, who desire to quote directly on behalf of their foreign principals, to get themselves enlisted with the Central Purchase Organization (eg. DGS&D).
 - b) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
 - c) The details of the services to be rendered by the agent for the subject requirement.
 - d) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CMC period.
 - e) A copy of agreement between the Agent & their principal detailing the terms & conditions as well as services and after sales services as above to be rendered by the agent and the precise relationship between them and their mutual interest in the business as laid out in section VII (Technical specifications).
 - f) Principal's/Manufacturer's original Proforma Invoice with the price bid

15. Firm Price:

Unless otherwise specified in the SIT, prices quoted by the tenderer shall remain firm and fixed during the currency of the contract and not subject to variation on any account. Bidders are requested to quote BOQ wise unit price (**uniform unit prices must be quoted for same BOQ items across India**) and total price. Item wise price will remain fixed. However actual payment will be based on final measurement. If a firm quotes NIL Charges/ consideration, the bid shall be treated as unresponsive and will not be considered.

16. Alternative Tenders:

- 16.1 Alternative Tenders are not permitted.
- 16.2 However the Tenderers can quote alternate models meeting the tender specifications of same manufacturer with single EMD.
- 16.3 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 tender for the same item/product. In a tender, either the Indian Agent on behalf of the Principal/OEM or Principal/OEM itself can bid but both cannot bid simultaneously for the same item/product in the same tender.

17. Documents Establishing Tenderer's Eligibility and Qualifications:

- 17.1 Pursuant to GIT clause 11, the tenderer shall furnish, as part of its tender, relevant details and documents establishing its eligibility to quote and its qualifications to perform the contract if its tender is accepted.
- 17.2 The documentary evidence needed to establish the tenderer's qualifications shall fulfil the following requirements:
 - a) in case the tenderer offers to supply goods, which are manufactured by some other firm, the tenderer has been duly authorised by the goods manufacturer to quote for and supply the goods to the purchaser. The tenderer shall submit the manufacturer's authorization letter to this effect as per the standard form provided under Section XIV in this document.
 - b) the tenderer has the required financial, technical and production capability necessary to perform the contract and, further, it meets the qualification criteria incorporated in the Section IX in these documents.
 - c) in case the tenderer 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 TE document:

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

19. Earnest Money Deposit (EMD):

- 19.1 Pursuant to GIT clauses 8.1 and 11.1 A (i) the tenderer shall furnish along with its tender, earnest money for amount as shown in the List of Requirements. The earnest money is required to protect the purchaser against the risk of the tenderer's unwarranted conduct as amplified under sub-clause 19.7 below.
- 19.2 The tenderers who are currently registered and, also, will continue to remain registered during the tender validity period as Micro and Small Enterprises (MSEs) as defined in MSE Procurement Policy issued by Department of Micro, Small and Medium Enterprises (MSME) or with National Small Industries Corporation, New Delhi shall be eligible for exemption from EMD. In case the tenderer falls in this category, it should furnish copy of its valid registration details (with MSME or NSIC, as the case may be).
 - a) The MSE's Bidder to note and ensure that nature of services and goods/items manufactured mentioned in MSE's certificate matches with the nature of the services and goods /items to be supplied as per Tender.
 - b) Traders/resellers/distributors/authorized agents will not be considered for availing benefits under PP Policy 2012 for MSEs as per MSE guidelines issued by MoMSME.

- 19.3 The earnest money shall be denominated in Indian Rupees or equivalent currencies as per GIT clause 12.2. The earnest money shall be furnished in one of the following forms:
 - i) Account Payee Demand Draft
 - ii) Fixed Deposit Receipt
 - iii) Banker's cheque and
 - iv) Bank Guarantee
- 19.4 The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the tenderer, in favour of the "HLL Infra Tech Services Limited" 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 tenderer as per the format specified under Section XIII in these documents.
- 19.5 The earnest money shall be valid for a period of forty-five (45) days beyond the validity period of the tender. As validity period of Tender as per Clause 20 of GIT is 120 days, the EMD shall be valid for 165 days from Techno Commercial Tender opening date.
- 19.6 Unsuccessful tenderers' earnest money will be returned to them without any interest, after expiry of the tender validity period, but not later than thirty days after conclusion of the resultant contract. Successful tenderer's earnest money will be returned without any interest, after receipt of performance security from that tenderer.
- 19.7 Earnest Money is required to protect the purchaser against the risk of the Tenderer's conduct, which would warrant the forfeiture of the EMD. Earnest money of a tenderer will be forfeited, if the tenderer withdraws or amends its tender or impairs or derogates from the tender in any respect within the period of validity of its tender or if it comes to notice that the information/documents furnished in its tender is incorrect, false, misleading or forged without prejudice to other rights of the purchaser. The successful tenderer's earnest money 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 nationalised bank in India by way of back-to-back counter guarantee and the same should be submitted along with the bid.

20. Tender Validity:

- 20.1 If not mentioned otherwise in the SIT, the tenders shall remain valid for acceptance for a period of 120 days (One hundred and twenty days) after the date of tender opening prescribed in the TE document. Any tender valid for a shorter period shall be treated as unresponsive and rejected.
- 20.2 In exceptional cases, the tenderers may be requested by the purchaser to extend the validity of their tenders up to a specified period. Such request(s) and responses thereto shall be conveyed by surface mail or by fax/ telex/cable followed by surface mail. The tenderers, who agree to extend the tender validity, are to extend the same without any change or modification of their original tender and they are also to extend the validity period of the EMD accordingly. A tenderer, who may not agree to extend its tender validity after the expiry of the original validity period the EMD furnished by them shall not be forfeited.
- 20.3 In case the day up to which the tenders are to remain valid falls on/ subsequently declared a holiday or closed day for the purchaser, the tender validity shall automatically be extended up to the next working day.

21. Digital Signing of e-Tender

21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11 and any other specific instruction mentioned in the SIT using the digital signature.

D. SUBMISSION OF TENDERS

22. Submission of Tenders:

- 22.1 The tender shall be submitted online only.
 - (i) Pre-qualification and Technical compliance as per following documents (ONLY Online submissions for all the documents.)
 - a) Manufacturer's authorization in case bid is submitted by an Indian agent (A declaration must be attached here in case directly quoted by a manufacturer or a document establishing the relation of the Indian office with the manufacturer in case quoted by Indian office of the manufacturer).
 - b) Tender Form as per Section X.
 - c) Compliance of all terms and conditions of TED, like- warranty, CMC, delivery period, delivery terms, payment terms, Liquidated Damages Clause, Arbitration clause, etc.
 - d) Declaration regarding Fall Clause and Deregistration, debarment from any Govt Dept/ Agencies
 - e) Copy of PAN.
 - f) Certificate of Incorporation or a Declaration in case the firm is being a proprietary one.
 - g) Abridged Annual report of last 05 years (Balance sheet and Profit & Loss Account) completed till March/June 2018, in pdf format.
 - h) Name, address and details of account with respect to bidder and/or beneficiary of L/C.
 - i) Quality Control Requirements as per Section VIII
 - j) Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate as per section IX.
 - k) Technical Bid along with clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications along with product catalogue and data sheet in the tender enquiry.
 - The bidder should submit blank proforma invoice from the foreign manufacturer along with his technical bid, duly mentioning the specifications and code number of the parts quoted.
 - m) The original proforma invoices from the foreign principal will be applicable in case of 100% subsidiary companies incorporated in India also.
 - n) In case the bidder quotes an equipment of a foreign manufacturer and submits the documents as per Clause 22.1 (i) 1 & m from the subsidiary company of the foreign Original Equipment Manufacturer in India, the bidder must submit the Power of Attorney given to the subsidiary company by the foreign Original Equipment Manufacturer, authorizing it to do business and perform all obligations for and on behalf of the foreign manufacturer company, in India.
 - o) A tenderer quoting imported goods located within India shall produce documentary evidence of the goods having been imported and already located within India (i.e. Bills of Entry for the quoted items and a self-declaration confirming that the quoted items were imported for the purpose of storage in bidder warehouse and for further sale), along with their techno-commercial bid.

p) The Integrity pact (At Appendix-B) 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. Bids submitted without signing the integrity pact will be ab initio rejected without assigning any reason.

(ii) <u>PRICE BID (ONLY ONLINE):</u>

- a) The tenderers must ensure that they submit the Price Bid in prescribed format uploaded along with the tender enquiry. It is the responsibility of the bidder to ensure that the contents of the format are not tampered.
- b) The tenderers must ensure that they submit the on-line tenders not later than the closing time and date specified for submission of tenders.
- c) Along with price bid recent purchase order copies for the same model and technical configuration issued by institute of National importance and/or reputed central/state government hospitals should be uploaded in pdf form for reasonability of the offered price.
- d) The bidder should submit the copy of original proforma invoice from the foreign manufacturer along with the price bid.
- e) The bidder should not quote in Indian Rupees any foreign products, which are not already imported at the time of submitting the tender.
- f) The supplier shall justify the present quotes based on previous purchase orders for similar project executed either in India or Globally. If they quote any new model or upgraded version of earlier model, they may mention the same in their tender.
- 22.2 The tenderers must ensure that they submit the on-line tenders within the scheduled closing date & time. They shall also ensure to submit the original Tender Processing Fee and EMD within its scheduled date & time.

23. Late Tender:

23.1 There is NO PROVISION of uploading late tender beyond stipulated date & time in the etendering system. However, if the necessary Tender Processing Fee and EMD in original are not submitted within the scheduled time, the tender shall be declared as late tender and shall be ignored.

24. Alteration and Withdrawal of Tender

24.1 The tenderer, is permitted to change, edit or withdraw its bid on or before the end date & time.

E. TENDER OPENING

25. **Opening of Tenders:**

- 25.1 The purchaser will open the tenders at the specified date and time and at the specified place as indicated in the NIT. In case the specified date of tender opening falls on/is subsequently declared a holiday or closed day for the purchaser, the tenders will be opened at the appointed time and place on the next working day.
- 25.2 Authorized representatives of the tenderers, who have submitted tenders on time may attend the tender opening provided they bring with them letters of authority from the corresponding tenderers.

The tender opening official(s) will prepare a list of the representatives attending the tender opening. The list will contain the representatives' names & signatures and corresponding tenderers' names and addresses.

25.3 This being a Two-Tender system, the <u>Techno-Commercial Tenders</u> are to be opened in the first instance, at the prescribed time and date as indicated in NIT. These Tenders shall be scrutinized and evaluated by the competent committee/ authority with reference to parameters prescribed in the TE document. During the Techno-Commercial Tender opening, the tender opening official(s) will read the salient features of the tenders like brief description of the goods offered, delivery period, Earnest Money Deposit and any other special features of the tenders, as deemed fit by the tender opening official(s). Thereafter, in the second stage, the Price Tenders 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 tender.

F. SCRUTINY AND EVALUATION OF TENDERS

26. Basic Principle

26.1 Tenders will be evaluated on the basis of the terms & conditions already incorporated in the TE document, based on which tenders have been received and the terms, conditions etc. mentioned by the tenderers in their tenders. No new condition will be brought in while scrutinizing and evaluating the tenders.

27. Scrutiny of Tenders

- 27.1 The Purchaser will examine the Tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished and, whether the documents uploaded are in legible form.
- 27.2 The Purchaser's determination of a Tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence
- 27.3 Deleted
- 27.4 The tenders will be scrutinized to determine whether they are complete and meet the essential and important requirements, conditions etc. as prescribed in the TE document. The tenders, which do not meet the basic requirements, are liable to be treated as non-responsive and will be summarily ignored.
- 27.5 The following are some of the important aspects, for which a tender shall be declared non-responsive during the evaluation and will be ignored;
 - (i) Tender validity is shorter than the required period.
 - (ii) Required EMD or its exemption documents have not been provided.
 - (iii) Tenderer 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.
 - (iv) Poor/ unsatisfactory past performance.
 - (v) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
 - (vi) Tenderer is not eligible as per GIT Clauses 5.1 & 17.1.
 - (vii) Tenderer has not quoted for the entire quantity as specified in the List of Requirements/ BOQ for the quoted schedule.
 - (viii) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry, like delivery terms, delivery schedule, terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
 - (ix) The Integrity pact (At Appendix-B) 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. Bids submitted without signing the integrity pact will be ab initio rejected without assigning any reason.

28. Minor Informality/Irregularity/Non-Conformity

If during the preliminary examination, the purchaser find any minor informality and/or irregularity and/or non-conformity in a tender, the purchaser may waive the same provided it does not constitute any material deviation and financial impact and, also, does not prejudice or affect the ranking order of the tenders. Wherever necessary, the purchaser will convey its observation on such 'minor' issues to the tenderer by registered/speed post etc. asking the tenderer to respond by a specified date. If the tenderer does not reply by the specified date or gives evasive reply without clarifying the point at issue in clear terms, that tender will be liable to be ignored.

29 Discrepancies in Prices

- 29.1 If, in the price structure quoted by a tenderer, 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 tenderer 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 judgement of the purchaser, there is any such arithmetical discrepancy in a tender, the same will be suitably conveyed to the tenderer by registered / speed post. If the tenderer does not agree to the observation of the purchaser, the tender is liable to be ignored.

30. Discrepancy between original and copies of Tender

Not applicable being e-Tender.

31. Qualification Criteria

- 31.1 Tenders of the tenderers, which do not meet the required Qualification Criteria prescribed in Section IX, will be treated as non-responsive and will not be considered further.
- 31.2 The Purchaser reserves the right to relax the Norms on <u>Prior Experience</u> for Start-ups and Micro & Small Enterprises in Public Procurement.

The Start-ups are defined in Annexure-A of the "Action Plan for Start-ups in India". The same is available on the website of Department of Industrial policy and Promotion (DIPP), Ministry of Commerce & Industry.

The Notification is available in the below link:

http://www.finmin.nic.in/the_ministry/dept_expenditure/ppcell/RelaxNorms_StarupMedEnterpris e25072016.pdf

The FAQs are available in the below link:

http://dipp.nic.in/English/Investor/startupindia/FAQs StartupIndia 30March2016.pdf

Note:- Definition of Startup (only for the purpose of Government schemes)

(Ref: Ministry of Finance Office Memorandum No. F.20/2/2014-PPD(Pt.) dated 25th July 2016.)

Start-up means an entity, incorporated or registered in India not prior to five years, with annual turnover not exceeding INR 25 crore in any preceding financial year, working towards innovation, development, deployment or commercialization of new products, processes or services driven by technology or intellectual property.

Provided that such entity is not formed by splitting up, or reconstruction, of a business already in existence.

Provided also that an entity shall cease to be a Start-up if its turnover for the previous financial years has exceeded INR 25 crore or it has completed 5 years from the date of incorporation/ registration.

Provided further that a Start-up shall be eligible for tax benefits only after it has obtained certification from the Inter-Ministerial Board, setup for such purpose.

32. Conversion of tender currencies to Indian Rupees

In case the TE document permits the tenderers to quote their prices in different currencies, all such quoted prices of the responsive tenderers 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 Tender' opening.

33. Schedule-wise Evaluation

In case the List of Requirements contains more than one schedule, the responsive tenders will be evaluated and compared separately for each schedule. The tender for a schedule will not be considered if the complete requirements prescribed in that schedule are not included in the tender. However, as already mentioned in GIT sub clause 13.2, the tenderers have to quote for all the schedules and the purchaser will have the right to award the work to any number of schedule(s) as per the eligibility established during the techno commercial evaluation and to the best benefit of the exchequer.

34. Comparison of Tenders

Unless mentioned otherwise in Section-III at Special Instructions to Tenderers and Section-VI at List of Requirements, the comparison of the responsive tenders shall be carried out on Delivery Duty Paid (DDP) consignee site basis. The quoted turnkey prices and Comprehensive Annual Maintenance charges (CMC) prices will also be added for comparison/ranking purpose for evaluation. "Net Present value (NPV) of the actual CMC price quoted for the required CMC period after the warranty period shall be considered for bid comparison and the NPV will be calculated after discounting the quoted CMC price by a discounting factor of 10% per annum."

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

- 35.1 Further to GIT Clause 34 above, the purchaser's evaluation of a tender 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 or any other taxes which will be contractually payable (to the tenderer), on the goods if a contract is awarded on the tenderer; and
 - ii) in the case of goods of foreign origin offered from abroad, customs duty and other similar import duties/taxes, which will be contractually payable (to the tenderer) on the goods if the contract is awarded on the tenderer.
- 35.2 The purchaser's evaluation of tender will also take into account the additional factors, if any, incorporated in SIT in the manner and to the extent indicated therein.
- 35.3 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 tenders.
 - In exercise of powers conferred in Section 11 of the Micro, Small and Medium Enterprises Development (MSMED) Act 2006, the Government has notified a new Public Procurement Policy for Micro & Small Enterprises effective from 1st April 2012. The policy mandates that 25% of procurement of annual requirement of goods and services by all Central Ministries / Public Sector Undertakings will be from the micro and small enterprises. The Government has also earmarked a sub-target of 4% procurement of goods & services from MSEs owned by SC/ST entrepreneurs out of above said 25% quantity.
 - ii. In accordance with the above said notification, the participating Micro and Small Enterprises (MSEs) in a tender, quoting price within the band of L 1+15% would also be allowed to supply a

portion of the requirement by bringing down their price to the L 1 price, in a situation where L 1 price is from someone other than an MSE. Such MSEs would be allowed to supply up to 25% of the total tendered value. In case there are more than one such eligible MSE, the 25% supply will be shared equally. Out of 25% of the quantity earmarked for supply from MSEs, 4% quantity is earmarked for procurement from MSEs owned by SC/ST entrepreneurs. However, in the event of failure of such MSEs to participate in the tender process or meet the tender requirements and the L 1 price, the 4% quantity earmarked for MSEs owned by SC/ST entrepreneurs will be met from other participating MSEs.

- iii. The MSEs fulfilling the prescribed eligibility criteria and participating in the tender shall enclose with their tender a copy of their valid registration certificate with District Industries Centres or Khadi and Village Industries Commission or Khadi and Village Industries Board or Coir Board or National Small Industries Corporation or any other body specified by Ministry of Micro and Small enterprises in support of their being an MSE, failing which their tender will be liable to be ignored.
- iv. Special provision for Micro and Small Enterprise owned by women. Out of the total annual procurement from Micro and Small Enterprises, 3 per cent from within the 25 per cent target shall be earmarked for procurement from Micro and Small Enterprises owned by women.

Note: "If the bidder is a MSME, it shall declare in the bid document the UdyogAadhar Memorandum Number issued to it under the MSMED Act, 2006. If a MSME bidder do not furnish the UAM Number along with bid documents, such MSME unit will not be eligible for the benefits available under Public Procurement Policy for MSEs Order 2012." 35.4 **Preference to Make in India**: As per the order issued by Department of Industrial Policy and Promotion (DIPP) vide No. P- As per the order issued by Department of Industrial Policy and Promotion (DIPP) vide No. P-45021/2/2017-BE-II dated 15.06.2017 and the subsequent orders thereof; the purchaser reserves the right to give preference to the local supplier. A copy of this order is enclosed at **Appendix-A** which will form a part of this TED for evaluation and ranking of bids.

36. Tenderer's capability to perform the contract

- 36.1 The purchaser, through the above process of tender scrutiny and tender evaluation will determine to its satisfaction whether the tenderer, whose tender has been determined as the lowest evaluated responsive tender 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.
- 36.2 The above-mentioned determination will, interalia, take into account the tenderer's financial, technical and production capabilities for satisfying all the requirements of the purchaser as incorporated in the TE document. Such determination will be based upon scrutiny and examination of all relevant data and details submitted by the tenderer in its tender as well as such other allied information as deemed appropriate by the purchaser.

37. Contacting the Purchaser

- 37.1 From the time of submission of tender to the time of awarding the contract, if a tenderer needs to contact the purchaser for any reason relating to this tender enquiry and / or its tender, it should do so only in writing.
- 37.2 In case a tenderer attempts to influence the purchaser in the purchaser's decision on scrutiny, comparison & evaluation of tenders and awarding the contract, the tender of the tenderer shall be liable for rejection in addition to appropriate administrative actions being taken against that tenderer, as deemed fit by the purchaser.

G. AWARD OF CONTRACT

38. Purchaser's Right to accept any tender and to reject any or all tenders

The purchaser reserves the right to accept in part or in full any tender or reject any or more tender(s) without assigning any reason or to cancel the tendering process and reject all tenders at any time prior to award of contract, without incurring any liability, whatsoever to the affected tenderer or tenderers.

39. Award Criteria

Subject to GIT clause 38 above, the contract will be awarded to the lowest evaluated responsive tenderer decided by the purchaser in terms of GIT Clause 36 or on the basis of least cost to the purchaser.

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

- 40.1 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 tenderer.
- 40.2 If the quantity has not been increased to the maximum of 25% of the tendered quantity at the time of awarding the contract, the purchaser reserves the right to increase the quantity further by up to the balance available twenty five (25) per cent of the tendered quantity of goods and services (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.

41. Notification of Award

- 41.1 Before expiry of the tender validity period, the purchaser will notify the successful tenderer(s) in writing, by registered / speed post or by fax/ telex/cable (to be confirmed by registered / speed post) that its tender for goods & services, which have been selected by the purchaser, has been accepted, also briefly indicating therein the essential details like description, specification and quantity of the goods & services and corresponding prices accepted. The successful tenderer must furnish to the purchaser the required performance security within thirty days from the date of dispatch of this notification, failing which the EMD will forfeited and the award will be cancelled. Relevant details about the performance security have been provided under GCC Clause 5 under Section IV.
- 41.2 The Notification of Award shall constitute the conclusion of the Contract.

42. Issue of Contract

- 42.1 Promptly after notification of award, the Purchaser/Consignee will mail the contract form (as per Section XVI) duly completed and signed, in duplicate, to the successful tenderer by registered / speed post.
- 42.2 Within twenty one days from the date of the contract, the successful tenderer shall return the original copy of the contract, duly signed and dated, to the Purchaser/Consignee by registered / speed post. The successful tenderer should also submit Proforma Invoice from the foreign principal (if applicable as per contractual price) within 21 days from the date of NOA.
- 42.3 The Purchaser/Consignee reserve the right to issue the Notifications of Award consignee wise.

43. Non-receipt of Performance Security, Proforma Invoice and Contract by the Purchaser/Consignee:

Failure of the successful tenderer in providing performance security, Proforma Invoice and / or returning contract copy duly signed in terms of GIT clauses 41 and 42 above shall make the tenderer liable for forfeiture of its EMD and, also, for further actions by the Purchaser/Consignee against it as per the clause 24 of GCC - Termination of default.

44. Return of E M D

The earnest money of the successful tenderer and the unsuccessful tenderers will be returned to them without any interest, whatsoever, in terms of GIT Clause 19.6.

45. Publication of Tender Result

The name and address of the successful tenderer(s) receiving the contract(s) will be mentioned in the notice board/bulletin/web site of the purchaser.

46. Corrupt or Fraudulent Practices

It is required by all concerned namely the Consignee/Tenderers/Suppliers 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 Tenderers (prior to or after Tender submission) designed to establish Tender 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 Tenderer 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 TENDERERS

(SIT)

Sl. No.	GIT Clause	Торіс	SIT Provision	Page No.
	No.			
А	1 to 7	Preamble	No Change	
В	8 to 10	TE documents	No Change	
С	11 to 21	Preparation of Tenders	No Change	
D	22 to24	Submission of Tenders	Extra information	below
Е	25	Tender Opening	No Change	
F	26 to 37	Scrutiny and Evaluation of Tenders	No Change	
G	38 to 46	Award of Contract	No Change	

C. PREPARATION OF TENDERS

13 Tender Prices:

The bidders have to quote for all the schedules. The purchaser will have the right to award the work to any site as per the eligibility and to the best benefit of the exchequer.

D. SUBMISSION OF TENDERS

- i) All the necessary documents as prescribed in the NIT shall be prepared and scanned in different files (in PDF format as prescribed) and uploaded for on-line submission of Proposal.
- ii) Except Tender Processing Fee and EMD, all document(s)/ information(s) including the Financial Proposal (i.e. FORMAT FOR SUBMISSION OF FINANCIAL PROPOSAL) should be uploaded **online only** in the prescribed format given in the website. No other mode of submission shall be acceptable.
- iii) The prospective bidders may scan the documents in low resolution (75 to 100 DPI) instead of 200 DPI. The documents may be scanned for further lower resolution (if possible). This would reduce the size of the Cover and would be uploaded faster.
- iv) The Individual file size of uploading is restricted up to 5 MB. Bidders may upload multiple files (Not exceeding 5 MB individually) & give relevant file name indicating the contents.
- v) The file name of price bid should match the file of the price bid format uploaded by the purchaser in the portal. This can be downloaded from the **Notes & Attachment** under **Details** of item when the event is in **Display Mode**.
- vi) Bidders may simulate online bid submission (technical & financial) at least one week in advance of the bid submission deadline. No clarifications/troubleshooting regarding any problems being faced during bid submission online shall be entertained in the last week of bid submission.

SECTION - IV

GENERAL CONDITIONS OF CONTRACT (GCC)

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TABLE OF CLAUSES

1. Application

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 TE 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 subclause 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

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 twenty one (21) days from date of the issue of notification of award by the Purchaser/ Consignee, the supplier, shall furnish performance security to the Purchaser/Consignee for an amount equal to ten percent (10%) of the total value of the contract, valid up to sixty (60) days after the date of completion of all contractual obligations by the supplier, including the warranty obligations, initially valid for a period of minimum 66 months from the date of Notification of Award.
- 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 XV of this document in favour of the Purchaser/Consignee. The validity of the Fixed Deposit receipt or Bank Guarantee will be for a period up to sixty (60) 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 CMC security as per Proforma in Section XV, the amount of the performance security is liable to be forfeited. The Administration Department may do the needful 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 twenty-one (21) 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 Annual Comprehensive Maintenance Contract as per the 'Contract Form B' in Section XVI with respective consignees, 3 (three) months prior to the completion of Warranty Period. The CMC will commence from the date of expiry of the Warranty Period.
- 5.6 Subject to GCC sub-clause 5.3 above, the Purchaser/Consignee 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 CMC security in favour of Head of the Hospital/ Institute/ Medical College of the consignee as per the format in Section XV.

6. Technical Specifications and Standards

The Goods & Services to be provided by the supplier under this contract shall conform to the technical specifications and quality control parameters mentioned in 'Technical Specification' and 'Quality Control Requirements' under Sections VII and VIII 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 transhipment (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 and Quality Control Requirements under Sections VII and VIII 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 and Quality Control Requirements under Sections VII and VIII 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/PSA/PA, 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 and Quality Control Requirements 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 resubmit the same to the purchaser's inspector for conducting the inspections and tests again.
- 8.4 In case the contract stipulates pre-despatch 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/consignee'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-despatch 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 recognised/ reputed agency like SGS, Lloyd, Bureau Veritas, TUV prior to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

8.9 Followed by delivery of the items, a joint inspection by HITES and respective Medical College/ Institution at site will be carried out to verify the quantity and quality of goods.

9. Terms of Delivery

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 and/or transhipment 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; the shipment shall be made by Indian flag vessel or by vessels belonging to the conference lines in which India is a member country through India's forwarding agents/coordinators. In case the forwarding agent/coordinators are unable to provide timely adequate space in Indian flag vessel or by vessels belonging to the conference lines, the supplier shall arrange shipment through any available vessel to adhere to the delivery schedule given in the contract.

In case of airlifting of imported goods offered from abroad, the same will be done only through the National Carrier i.e. Air India wherever applicable. In case the National Carrier is not available, any other airlines available for early delivery may be arranged.

10.2 Instructions for transportation of domestic goods including goods already imported by the supplier under its own arrangement:

In case no instruction is provided in this regard in the SCC, the supplier will arrange transportation of the ordered goods as per its own procedure.

11. Insurance:

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 Consignee site basis, the supplier ,Indian Subsidiary/Indian agent 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 ware house to ware house (consignee site) on all risk basis. The insurance cover shall be obtained by the Supplier and should be valid till 6 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 6 months beyond date of delivery for an amount equal to 110% of the overall expenditure to be incurred by the purchaser from ware house to ware house (consignee site) on all risk basis.

If the equipment is not commissioned and handed over to the consignee within 6 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,

such extensions of the insurance will still be done by the supplier, but the insurance extension charges at actuals 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/Consignee 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/Consignee 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/Consignee, free of cost, the designs, drawings, layouts and specifications of the spare parts, as and if requested by the Purchaser/Consignee.
- 12.2 Supplier shall carry sufficient inventories to assure ex-stock supply of consumable spares for the goods so that the same are supplied to the Purchaser/Consignee promptly on receipt of order from the Purchaser/Consignee.

13. Incidental services

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 and Demonstration of the goods
- ii) Providing required jigs and tools for assembly, minor civil works required for the completion of the installation.
- iii) Training of Consignee's Doctors, Staff, operators etc. for operating and maintaining the goods
- iv) Supplying required number of operation & maintenance manual for the goods
- v) Maintenance of goods supplied

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

The supplier shall send all the relevant despatch documents well in time to the Purchaser/Consignee to enable the Purchaser/Consignee 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.

A) For Domestic Goods, including goods already imported by the supplier under its own arrangement

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post / courier (or as instructed in the contract):

(i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;

- (ii) Two copies of packing list identifying contents of each package;
- (iii) Certificate of origin (in case the goods are of foreign origin);
- (iv) Insurance Certificate as per GCC Clause 11.
- (v) Manufacturers/Supplier's warranty certificate & In-house inspection certificate.
- B) For goods imported from abroad

Within 24 hours of despatch, the supplier shall notify the purchaser, consignee, and others concerned if mentioned in the contract, the complete details of despatch and also supply the following documents to them by registered post / speed post (or as instructed in the contract). Any delay or demurrage occurred during the customs clearance on account of the non-availability of technical support/ clarifications /documents from the supplier shall be borne by the supplier:

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Original and four copies of the negotiable clean, on-board Bill of Lading/Airway bill, marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;
- (iii) Four Copies of packing list identifying contents of each package;
- (iv) Manufacturer's/Supplier's warranty certificate;
- (vi) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd, BUREAU VERITAS, TUV prior to despatch;
- (vii) Manufacturer's own factory inspection report;
- (viii) Certificate of origin
- (ix) Port of Loading;
- (x) Port of Discharge and
- (xi) Expected date of arrival.

15. Warranty:

15.1 The supplier is to assure uninterrupted service without compromising OT/ICU

- 15.2 Complete system including labour & spares should have comprehensive onsite warranty for five years; commencing from the date of issue of installation certificate by the institute. Post guarantee annual comprehensive maintenance contract (CMC) to cover main equipment/civil construction including all accessories supplied with the unit.
 - Incremental Cost (if any) for, up gradation, if required, should form part of the contract for the Warranty and Post Warranty period.
 - The Supplier (manufacturer) shall set-up a maintenance base to provide maintenance service, of the entire turnkey system being offered, at short notice during the warranty and post warranty period.
 - If the performance of any individual equipment or system is not satisfactory, the same shall be replaced by the supplier free of cost.
 - If it is found that to meet the performance criteria, any extra equipment is required the same will be provided free of cost by the supplier.
 - All faults appearing and their rectification shall be periodically advised to the hospital, the period being not more than a month.
 - Any lacuna or lacunae noticed in the functioning of the installation as a result of any design feature shall be rectified by the supplier free of cost.
 - The Supplier shall fully associate the engineers and technicians of the Institute during installation, testing and commissioning.
 - 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.

- The warranty shall remain valid for 60 months from the date of installation & commissioning with a regular updates of newer technology as and when evolved followed by a CMC for a period of 5 (Five) Years for all the equipments after the goods or any portion thereof as the case may be, have been delivered to the final destination and installed and commissioned at the final destination and accepted by the purchaser/ consignee in terms of the contract, unless specified otherwise in the SCC.
- No conditional warranty like mishandling, manufacturing defects, etc. will be acceptable.
- Warranty as well as Comprehensive Maintenance contract will be inclusive of all accessories and Turnkey work and it will also cover the following wherever applicable:-
 - Any kind of motor.
 - Plastic & Glass Parts against any manufacturing defects.
 - All kind of sensors.
 - All kind of coils, probes and transducers.
 - Printers and imagers including laser and thermal printers with all parts.
 - UPS including the replacement of batteries.
 - Air-conditioners
 - All kinds of painting, civil, HVAC and electrical work
- Proper marking has to be made for all spares for identification like printing of installation and repair dates.
- 15.3 In case of any claim arising out of this warranty, the Purchaser/Consignee shall promptly notify the same in writing to the supplier. The period of the warranty will be as per GCC clause number 15.2 above irrespective of any other period mentioned elsewhere in the bidding documents.
- 15.4 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 tender conditions
- 15.5 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 extended till the completion of the original warranty period of the main equipment.
- 15.6 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.
- 15.7 During Warranty 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
- 15.8 The Purchaser/Consignee reserve the rights to enter into Annual Comprehensive Maintenance Contract between Consignee and the Supplier for the period as mentioned in Section VII, Technical Specifications after the completion of warranty period.
- 15.9 The supplier along with its Indian Agent and the CMC provider shall ensure continued supply of the spare parts for the machines and equipments supplied by them to the purchaser for 10 years from the date of installation and handing over.
- 15.10 The Supplier along with its 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

equipments/machines/goods etc. and shall always give the most competitive price for its machines/equipments 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 tender. Such notification, in its original tender 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 despatch,
 - 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/Consignee, the supplier shall convey its views to the Purchaser/Consignee within twenty-one days from the date of the supplier's receipt of the Purchaser's/Consignee'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 tender and incorporated in the contract except for any price adjustment authorised in the SCC.

20. Taxes and Duties

- 20.1 Supplier shall be entirely responsible for all taxes, duties, fees, levies etc. 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 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 domestic goods or goods of foreign origin located within India.

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

a) On delivery:

Seventy percent (70%) payment of the delivered goods price shall be paid on receipt of goods in good condition and upon the submission of the following documents:

- (i) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Consignee Receipt Certificate as per Section XVII in original issued by the authorized representative of the consignee;
- (iii) Two copies of packing list identifying contents of each package;
- (iv) Inspection certificate issued by the nominated Inspection agency, if any.
- (v) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
- (vi) Certificate of origin.
- (vii) Manufacturer's warranty certificate.
- **b**) Ten percent (10%) payment of the delivered goods price shall be paid on installation and upon submission of following document:-

i) Installation certificate /installation report in original issued by the consignee.

c) On Acceptance:

Balance Twenty percent (20%) payment of the delivered goods value would be made against 'Final Acceptance Certificate' (FAC) as per Section XVIII of goods to be issued by the consignees subject to recoveries, if any, either on account of non-rectification of defects/deficiencies not attended by the Supplier or otherwise. FAC need to be issued by the designated consignee after installation, commissioning, testing and one month of successful trial run of the equipment.

d) Payment of other services, installation commissioning charges:- Payment of other services, labour, installation and commissioning charges etc. will be paid only after issuance of final acceptance certificate by the consignee.

B) Payment for Imported Goods:

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

a) On Shipment:

Seventy percent (70)% of the net CIP price (CIP price less Indian Agency commission) of the goods shipped 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) Four copies of supplier's invoice showing contract number, goods description, quantity, unit price and total amount;
- (ii) Original and four copies of the negotiable clean, on-board Bill of Lading/ Airway bill, marked freight pre paid and four copies of non-negotiable Bill of Lading/Airway bill;
- (iii) Four Copies of packing list identifying contents of each package;

- (iv) Insurance Certificate as per GCC Clause 11 and documents also to be submitted for payment of LC confirming that dispatch documents has already been sent to all concerned as per the contract within 24 hours;
- (v) Manufacturer's/Supplier's warranty certificate;
- (vi) Manufacturer's own factory inspection report and
- (vii) Certificate of origin by the chamber of commerce of the concerned country;
- (viii) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd, BUREAU VERITAS and TUV prior to despatch.
- b) Ten percent (10%) payment of the net CIP price (CIP price less Indian Agency commission) of the goods shipped 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 the following document:-

i) Installation certificate/ Installation Report duly sealed and signed by the consignee.

c) On Acceptance:

Balance Twenty percent (20%) payment of the delivered goods value would be made against 'Final Acceptance Certificate' (FAC) as per Section XVIII of goods to be issued by the consignees 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. FAC need to be issued by the designated consignee after installation, commissioning, testing and one month of successful trial run of the equipment.

d) Payment of Incidental Costs till consignee site & Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) will be paid in Indian Rupees to the Indian Agent on proof of final installation, commission and acceptance of equipment by the consignee.

e) Payment of Indian Agency Commission:

Indian Agency commission will be paid to the manufacturer's agent in the local currency for an amount in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation/ exchange variation. This is payable against submission of a certificate from the principal supplier that they have realised full and final settlement against their supply.

C) Payment of Turnkey, if any:

Turnkey payment will be made to the bidder/manufacturer's agent in Indian rupees indicated in the relevant Price Schedule (as per prevailing rate of exchange ruling on the date of Contract) and shall not be subject to further escalation / exchange variation. This will be paid on proof of final installation, commission and acceptance of equipment by the consignee.

D) Payment for Annual Comprehensive Maintenance Contract Charges:

The consignee will enter into CMC with the supplier at the rates as stipulated in the contract. The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by the consignee on receipt of bank guarantee for an amount equivalent to 2.5% of the cost of the equipment as per contract valid till 2 months after expiry of entire CMC period.

21.2 The supplier shall not claim any interest on payments under the contract.

- 21.3 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.
- 21.4 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/consignee, the charges thereof shall be borne by the supplier.
- 21.5 The payment shall be made in the currency/currencies authorised in the contract.
- 21.6 The supplier shall send its claim for payment in writing, when contractually due, along with relevant documents etc., duly signed with date, to the purchaser.
- 21.7 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.
- 21.8 While claiming reimbursement of duties, taxes etc. (like custom duty and /or GST) from the Purchaser/Consignee, 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, it (the supplier) shall refund to the Purchaser/Consignee forthwith.
- 21.9 In case where the supplier is not in a position to submit its bill for the balance payment for want of receipted copies of Inspection Note from the consignee and the consignee has not complained about the non-receipt, shortage, or defects in the supplies made, balance amount will be paid by the paying authority without consignee's receipt certificate after three months from the date of the preceding part payment for the goods in question, subject to the following conditions:
 - (a) The supplier will make good any defect or deficiency that the consignee (s) may report within six months from the date of despatch of goods.
 - (b) Delay in supplies, if any, has been regularized.
 - (c) The contract price where it is subject to variation has been finalized.
 - (d) The supplier furnishes the following undertakings:

"I/We, ______certify that I/We have not received back the Final Acceptance Certificate duly receipted by the consignee or any communication from the purchaser or the consignee about non-receipt, shortage or defects in the goods supplied. I/We ____agree to make good any defect or deficiency that the consignee may report within three months from the date of receipt of this balance payment.

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/Consignee 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 not 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/Consignee in writing about the same and its likely duration and make a request to the

Purchaser/Consignee for extension of the delivery schedule accordingly. On receiving the supplier's communication, the Purchaser/Consignee 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/Consignee 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 customs duty and/or GST on account of any other tax or duty which may be 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/Consignee shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty and/or GST or any other duty or tax or levy or on account of any other grounds, 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/Consignee for extension of delivery period and obtain the same before despatch. 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.
- 22.6.1 Passing of Property:
 - (i) 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 conditions of the contract.
 - (ii) 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.
 - (iii) 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 including opening of office in India as per the undertaking given in the qualification criteria, the Purchaser/Consignee shall, without prejudice to other rights and remedies available to the Purchaser/Consignee 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/Consignee may consider termination of the contract as per GCC 24. *Since the Liquidated damages are in virtue of non-performance of services, it will attract GST also which in turn shall be deducted from the bidder.*

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/Consignee, without prejudice to any other contractual rights and remedies available to it (the Purchaser/Consignee), 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/Consignee pursuant to GCC sub-clauses 22.3 and 22.4.
- 24.2 In the event of the Purchaser/Consignee terminates the contract in whole or in part, pursuant to GCC sub-clause 24.1 above, the Purchaser/Consignee may procure goods and/or services similar to those cancelled, with such terms and conditions and in such manner as it deems fit and the supplier shall be liable to the Purchaser/Consignee for the extra expenditure, if any, incurred by the Purchaser/Consignee for arranging such procurement.
- 24.3 Unless otherwise instructed by the Purchaser/Consignee, 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/Consignee.

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/Consignee in writing of such conditions and the cause thereof within twenty one days of occurrence of such event. Unless otherwise directed by the Purchaser/Consignee 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/Consignee is unable to fulfil its contractual commitment and responsibility, the Purchaser/Consignee 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/Consignee reserves the right to terminate the contract, in whole or in part for its (Purchaser's/Consignee '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/Consignee. The notice shall also indicate interalia, the extent to which the supplier's performance under the contract is terminated, and the date with effect from which such termination will become effective.

- 27.2 The goods and services which are complete and ready in terms of the contract for delivery and performance within thirty days after the supplier's receipt of the notice of termination shall be accepted by the Purchaser/Consignee following the contract terms, conditions and prices. For the remaining goods and services, the Purchaser/Consignee 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 GIT 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 cable or telex or facsimile 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 Settlement of disputes through pre- institution mediation and settlement in accordance with the commercial courts, commercial division and commercial appellate division of High Courts (Amendment) Act 2018 no 28 of 2018 Chapter IIIA
- 30.3 If the parties fail to resolve their dispute or difference by such mutual consultation within twentyone 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. In the case of a dispute or difference arising between the Purchaser/Consignee 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 of an officer in the Ministry of Law and Justice, appointed to be the arbitrator by the Director General (Health Services). 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 lakhs (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 tender enquiry 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

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.

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. General/ Miscellaneous Clauses

- 33.1 Nothing contained in this Contract shall be constructed as establishing or creating between the parties, i.e. the Supplier/its Indian Agent/CMC Provider on the one side and the Purchaser on the other side, a relationship of master and servant or principal and agent.
- 33.2 Any failure on the part of any Party to exercise right or power under this Contract shall not operate as waiver thereof.
- 33.3 The Supplier shall notify the Purchaser/Consignee /the Government of India of any material change would impact on performance of its obligations under this Contract.
- 33.4 Each member/constituent of the Supplier/its Indian Agent/CMC Provider, in case of consortium shall be **jointly and severally liable** to and responsible for all obligations towards the Purchaser/Consignee/Government for performance of contract/services including that of its Associates/Sub Contractors under the Contract.
- 33.5 The Supplier/its Indian Agent/CMC Provider shall at all times, indemnify and keep indemnified the Purchaser/Government of India against all claims/damages etc. for any infringement of any Intellectual Property Rights (IPR) while providing its services under CMC or the Contract.
- 33.6 The Supplier/its Agent/CMC Provider shall, at all times, indemnify and keep indemnified the Purchaser/Consignee/Government of India against any claims in respect of any damages or compensation payable in consequences of any accident or injury sustained or suffered by its employees or agents or by any other third party resulting from or by any action, omission or operation conducted by or on behalf of the supplier/its associate/affiliate etc.
- 33.7 All claims regarding indemnity shall survive the termination or expiry of the contract.

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.

The warranty and CMC period will be as mentioned in the list of requirement as per section VI of the tender enquiry.

SECTION - VI

LIST OF REQUIREMENTS

Part I:

MGPS					
Event Number (Rfx) - 3000003754					
Sch No.	Consignee Name	States	Qty.	Warranty in years	CMC in years
1	AIIMS Gorakhpur	Uttar Pradesh	Oty of por POO	5	5
2	AIIM Bhatinda	Punjab	Qty. as per BOQ	5	5

Part II: Required Delivery Schedule:

For Indigenous or for imported goods if supplied from India or for imported goods directly from foreign:

Supply, Installation and Commissioning to be completed within 180 days from the date of NOA or date of opening of LC or date of approval of layout drawing, whichever is later.

Layout Drawing for approval, valid Performance Security and Proforma Invoice (in case of LC opening) are to be submitted within 30 days from the date of release of NOA.

Note:

- i) Supplier has to submit clear documents for opening of LC to HITES within 30 days of placement of order. Any delay will be treated as non-performance and Liquidated Damages shall be levied.
- ii) In case of multiple LC are opened in favour of multiple manufacturers, the delivery period for all the items under the contract shall be counted from the date of opening of the first LC only.
- iii) Indigenous goods or imported goods if supplied from India (offered in INR) which are linked with supply of directly imported goods, are to be supplied within the contractual delivery period as stated in para b) above.
- iv) Since the supplier is not responsible for custom clearing and forwarding the goods to consignee site, the time taken for the same shall not be counted for computation of LD. However, time taken by the supplier to rectify the short comings of any document for custom clearing the goods to be counted in the above delivery period.

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. Five (5) persons each from each medical college/ institution needs to be trained for MGPS.

Part IV:

Turnkey (if any) as per details in Technical Specification.

Part V:

Warranty period as per details in general technical specification and as specified in Part I above. Warranty period will be 60 months from the date of installation, commissioning and acceptance or 66 months from the date of last shipment/dispatch when received at consignee site, whichever is earlier.

Part VI:

Supplier has to quote for maintenance for initial five year period as defined in tender scope of works. Comprehensive Maintenance Contract (CMC) as per details in Technical Specification as specified in part I above.

Part VII:

Required Terms of Delivery and Destination.

- a) For Indigenous goods or for imported goods if supplied from India: At Consignee Site(s)
- b) For Imported goods directly from abroad:

The foreign tenderers 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 6 months beyond date of delivery.

Destination/Consignee details are given in Section XIX.

Section – VII Technical Specifications

- **Note 1:** Tenderer's attention is drawn to GIT clause 18 and GIT sub-clause 11.1 A (iii). The tenderer is to provide the required details, information, confirmations, etc. accordingly failing which it's tender is liable to be ignored.
- **Note 2:** General: Bidders are requested to make sure that they should attach the list of equipments for carrying out routine and preventive maintenance wherever asked for and should make sure that Electrical Safety Analyzer / Tester for Medical equipments to periodically check the electrical safety aspects as per BIS Safety Standards IS-13540 which is also equivalent to IEC electrical safety standard IEC-60601 is a part of the equipments. If the Electrical Safety Analyzer/Tester is not available they should provide a commitment to get the equipments checked for electrical safety compliance with Electronic Regional Test Labs / Electronics Test and Development Centres across the country on every preventive maintenance call.
- **Note 3:** Adequate training of personnel and non-locked open software and standard interface interoperability conditions for networked equipment in hospital management information system (HMIS)

The successful tenderer will be required to undertake to provide at his cost technical training for personnel involved in the use and handling of the equipment on site at the institute immediately after its installation. The company shall be required to train the institute personnel onsite for a minimum period of 1 month

All software updates should be provided free of cost during warranty period and CMC period

Note 4: DISMANTLING AND DEMOLISHING

Providing all tools, tackles, manpower for demolishing /dismantling, alteration/ addition for lime concrete, cement concrete, R.C.C, R.B work, precast concrete or stone slabs in walls, partition walls, stone rubble masonry, dressed stone work, ashlar face stone work, marble work or precast concrete work, dismantling doors, windows and clerestory window (steel or wood) shutter including chowkhats, architrave, holdfasts etc. CI or asbestos rain water pipes of any diameter with fittings and clamps, dismantling G.I. pipes (external work) including excavation and refilling trenches after taking out the pipes, taking out doors, windows and clerestory window shutters (steel or wood), wood work in frames, trusses, purlins and rafters, dismantling steel work in single sections including dismembering and stacking, dismantling steel work in built up sections in angles, tees, flats and channels including all gusset plates, bolts, nuts, cutting rivets, welding etc., old plaster or skirting raking out joints and cleaning the surface for plaster, dismantling of R.C.C. spun vent shaft including excavating the cement concrete pit completely, taking out the shaft, refiling the excavated gap, stacking the useful materials near the site extra for cutting reinforcement bars, Dismantling aluminium/ Gypsum partitions doors, windows, fixed glazing and false ceiling including disposal of unserviceable surplus material and stacking of serviceable material within 1000 meters lead and any other work as directed by engineer-in-charge.

Disposal of building rubbish/ malba/ similar unserviceable, dismantled or waste materials by mechanical means, including loading, transporting, unloading to approved municipal dumping ground or as approved by Engineer-in-charge.

TECHNICAL SPECIFICATIONS

Technical specifications of Centralized Medical Gas Pipeline System for respective AIIMS under PMSSY Phase – IV

SN	MGPS Technical Specification for AIIMS		
	The MGPS comprises of:		
1	Primary LMO Tank System(20KL+10KL inclusive of Control Panel & Automatic Switchovers)		
2	Secondary Oxygen Manifold and Emergency oxygen manifold with automatic control panels		
3	Nitrous Oxide Manifold and Emergency NO2 Manifold with automatic control panel		
4	CO2 Manifold and Emergency CO2 Manifold with automatic control panel		
5	Medical Air Supply System (4 Bar & 7 Bar) complete.		
6	Medical Vacuum (suction) Supply System Complete.		
7	Distribution Piping Complete with Accessories.		
8	Area Valve Service System.		
9	AGSS system Complete		
10	Alarm Systems (Master & Area)		
11	Gas Outlets with Probes		
12	Bed Head Panels		
13	Other associated & Optional works		
15	RESPONSIBILITY OF BIDDER		
	Bidder shall be responsible for complete design, supply, installation, testing and commissioning including Civil		
1	Modification works, demolition and construction as applicable .The bidders are required to survey the site before		
-	furnishing the quotations.		
	Bidder shall execute all required civil, electrical, plumbing, lighting, fire safety, exhaust systems, false ceiling trap		
2	door/ cutout and repair(if any) and other works as maybe required for complete installation and trouble-free		
2	functioning as a part of the 'Civil Modification'.		
	Hospital will provide one point electrical supply with isolator in the plant room. The wiring, lighting, fans, exhaust		
3	etc have to be done by the bidder.		
4	Control panel for Vacuum system and Air plant system has to be supplied by the bidder.		
4	Bidder will be responsible for trenching or other associated work related to installation and commissioning of		
5	complete MGPS system.		
6	The MGPS bidder has to terminate/interconnect all the medical gas lines upto/to the OT/MOT.		
-	Installation and commissioning of area valve service unit and alarm unit for the operation theatre shall be done		
7	by the MGPS bidder.		
	Medical gas pipe line inside the minor operation theatre has to be done by the MGPS bidder. MGPS bidder shall		
8	cooperate with the MOT bidder for associated works (The interconnection of MOT Gas pipelines, is the		
	responsibility of MGPS bidder, MOT vendor will keep all MGPS line outside of the MOT)		
	The bidder shall be responsible for the complete works including the submission of working drawings, and		
•	isometric views, detailed work schedule and materials. Bidder shall be responsible for design, supply, installation,		
9	testing and commissioning of medical gas supply system in coordination with respective institute authorities &		
	HLL/HITES.		
10	Bidder shall be responsible for free maintenance of all component of Gas pipeline system during warranty period		
10	including all filters & consumables.		
	Bidder should provide factory test certificates for the materials used. Bidder should supply complete set of part		
	manuals, service manuals and user manuals for all the systems and subsystems supplied. Final electrical safety		
11	test, system test, leakage and calibration should be done by authorized persons using calibrated test equipment		
	as per standards.		
	The Medical Gas Pipe Line System must follow Single Standard any one only from: NFPA 99c/HTM 02-01/ ISO		
12	7396-1/DIN/EN except Copper Pipe, For AGSS Ventury type is not acceptable.		
	All Gas Outlets in MOT (i.e. O2, N2O, MA4, MA7, Vacuum, CO2(if required), etc.) will come with OT		
13	Pendants(Under MOT Tender) Bidder has to provide pipe lines upto all MOTs.		
	Bidder shall co-ordinate with respective Departments Head for their final Gas Outlets requirement per bed in		
14			
14	Bidder shall co-ordinate with respective Departments Head for their final Gas Outlets requirement per bed in their wards and should incorporate the same in drawing.		

15	The final Payment will be made on the actual consumption of the BOQ Items and ranking will be done with tendered BOQ.
16	The following systems/Items must be from the same principal company/Manufacturer
16 1	Control Panels & Manifold for O2, N2O & CO2
2	Medical Air Plant
2	Medical Vacuum Plant
4	AGSS Plant
5	Area & Master Alarm
6	All types Outlets
7	Oxygen flowmeter
8	AVSU
9	Line Isolation Valves
10	High Pressure Tubes
	The third party compliance certification after installation to be done for the standard followed i.e. HTM 02-
17	01/NFPA 99C/DIN/EN/ISO-7396-1 except copper pipe from the authorised agency. The cost for the same will be
	borne by the bidder.
18	Bidder must have a satisfactory installation of complete MGPS as per any International standard as asked in tender and demo may be taken for the same.
	Bidder will be provided after award either AutoCAD or PDF or hard Copy of building Layout drawing for
19	preparation of MGPS drawings. Bidder has to submit the drawings within 20 days after NOA.
	Bidder should be responsible for suitable arrangement of heat dissipation and Air-Conditioning as per offered
20	MGPS plant requirement/recommendations from the Manufacturer and as per local site condition. Bidder
20	should also take care of backup arrangement for AC and Exhausts as the MGPS Plant may run 24x7 as per the
	requirement.
	Gas outlet configuration location wise as below:
	General Ward Bed (on Wall): O2-1 & Vc-1 for each bed
	Super Speciality General Bed (On Wall): O2-1 & Vc-1 for each bed and MA4-1 for each Cubicle
	Private Room & Isolation Room/Special Ward(like- Dialysis,etc) (On BHP): O2-1, Vc-1 and MA4-1 for each bed
	ICU/CCU Bed (on BHP) : O2-2, Vc-2 & MA4-2 for each bed
21	Pre-Op Bed/Emergency (on BHP): O2-1, Vc-1 & MA4-1 for each bed HDU/Post-Op Bed (on BHP): O2-2, Vc-2 & MA4-1 for each bed
	Treatment/Procedure Room (On Wall): 02-1, Vc-1 and MA4-1 for each bed
	Endoscopy/Etc : 02-1, Vc-1 , MA4-1, C02-1, N2O-1
	Minor OT/Cath Lab/CT/LINAC/Etc (On BHP): O2-2, Vc-2, MA4-1, N2O-1 for each Room (For MRI/LINAC/ETC Pipe
	line of same services should be provide upto/outside of the room)
	The Configuration may change as per special request from consignee/institute specific requirements, if any
22	Bidder should be responsible for dedicated earthling (Chemical type) for MGPS Plant room(If required)
23	Bidder has to design the MGPS system as per the matrix and specification mentioned in the tender, any
23	clarification/suggessions regarding the design of MGPS system should be submitted before pre-bid meeting.
24	Bidder has to clarifiy their doubts or prerequisites during prebid meeting. Bidder has to submit the list of
	prerequisites along with bid. No further pre-requisite/requirement after placement of NOA will be addressed.
25	Zoning of MGPS should be done to meet the peak flow requirement with suitable backup arrangements for all services, if required.
	Interconnection to Manifolds with LMO Tank with necessary automatic switchover panels between LMO &
26	Manifold will be responsibility of bidder upto 100m distance.
	All tanks (Air, Vac and AGSS(if applicable) should be install outside of the MGPS Plant room on dedicated
27	plateform near MGPS Plant room and this platform should be responsibility of MGPS Bidder with shed as per
	their requirement.
, T	Bidder should submit the MGPS Plant and Manifold equipment loading design with foot print of all component
28	as per their offered plant along with bid within the area of 200 sq m. bidder may keep the tanks inside, only
	when their offered plant and manifold are coming within the 200 sq m area alongwith proper sitting space for
	technicians, cylinder storage space for filled and empty, also height of tanks should be maximum 3.5m.
	Bidder should be responsible for complete development of LMO area from greenfield condition.

2	In stitute will provide our estated and all water and during some stitute where 0 are stilled as an
2	Institute will provide one point elecrical, water and drain connection at the plant & manifold room Institute will provide dedicated shaft for MGPS riser
5	
4	Institute will provide connecting trench from manifold/plant room to hospital building, if MGPS plant/manifold room is not within the same hospital building
-	Institute will provide temporary storage for storing of raw materials of MGPS system during installation period
5	and the security of the store is the responsibility of MGPS vendor
-	Institute will provide working electrical power supply for installation to MGPS vendor (On chargable basis as per
6	institute norms or bidder has to make their own arrangements)
_	Institute will provide shitch/socket for MGPS Area alarms(Above false ceiling level) on the location as
7	approved/required by consignee.
	Institute will provide power & Data input(if required) at all Bed Head Panel Locations at the hieght of 1250mm
8	from FFL as per approved plan of consignee.
	Scope and Technical Specification:
1	Oxygen Supply System
1.1	LIQUID MEDICAL OXYGEN TANK (VACCUM INSULATED EVAPORATOR) AND ALLIED EQUIPMENTS APPLICATION:
	Storage of Liquid Oxygen and Supply of High purity Oxygen gas for medical use after conversion of liquid to gas
	through ambient atmospheric vaporizer.
	LIQUID MEDICAL OXYGEN STORAGE TANK:
	The double walled Vaccum Insulated Evaporator shall be constructed of stainless steel inner vessel contained
	within a carbon steel outer vessel. The annular space between the vessels shall be filled with non-inflammable
	perlite insulation material to insulate under vacuum. The VIE should be self pressurizing type by partial
	evaporation of liquid oxygen through a pressure building coil by a non ferrous imported pressure regulator. The
	vessel shall be supplied as a functional whole with all materials of construction & the cleaning regime suitable for
	medical grade liquid oxygen.
	Quantity: 20 KL X 1 No. and 10 KL X 1 No.
	Installation: Outdoor
	Type: Double walled, vertical
	Capacity: Minimum 20,000 liters water capacity- 1no.
	Minimum 10,000 litres water capacity- 1 No
	Design code :ASME Sec.VIII Div.I latest Edition / EN -13458-2 Annexure-C/ AD2000 MARKBLATTER 2004 Edition
	Max. working pressure: 17 Bar G
	Design temperature: -196°C to +50°C
	Hydraulic Test Pressure: 26 bar G
	Type of Insulation: Vacuum, Perlite filled
	Safety Valve Set pressure: 17 Bar G (dual safety valve with three way diverter valve)
	Bursting Disc Set Pressure : 23 Bar G (Bursting disc)
	Standard fittings: Pressure rising coil, pressure building regulator of adequate capacity and size, dual safety valve
	with imported three way diverter valve, bursting disc., pressure gauges, liquid over flow line, Liquid level gauge
	and adequate numbers of extended spindle glove valve etc.
	Maximum Evaporation Rate: <0.35% of net value.
	Material of Construction: Inner shell and wetted parts of SS 304 Outer shell of CS ASTMA 516 Gr. 70 / CGA 341
	2002 EN13455 S275/S355
	Joint Efficiency : 100%
	Radiography :100% for inner, for outer spot
	External piping :From LMO Tank to Vaporizer SS304
	From Vaporizer to inlet of Pressure Reducing Station SS304
	From Outlet of Pressure Reducing Station to Main header Copper
	Cryogenic Valves: Non ferrous (Imported)
	Cryogenic Safety Valves : Imported
	Pressure Building regulator :Non ferrous
<u> </u>	Leak Detection test : Helium Leak detection
-	Painting :Primer and finish with White RAL 9010
	Inspection : By 3rd party (SGS/LLOYDS/TUV)
1	

١	Withdrawal rate :1000 cum per hr. at 12 Bar G
1	ACCESSORIES:
ļ	LMO Tank alongwith P&ID shall be fitted with the following accessories:
٦	Top Fill Valve
F	Bottom Fill Valve
I	Liquid charging line blow valve
l	Liquid Delivery Valve
(Overflow Valve
(Gas blow valve
F	Filling Coupling
١	Vaporizer Coupling
l	Liquid Level Gauge (Dial 100 mm).
ł	High Level Valve
F	Equalizing Valve
I	Low level Valve
I	Pressure Gauge (100mm dial, Range 0-25 kg/cm2)
-	Pressure Gauge Isolation Valve
	Pressurizing Valve
ſ	Pressurizing Coil
F	Filter
F	Pressure Regulator
	Economizer
(Check Valve
F	Evacuation Port
1	Vacuum Gauge Connection Port/vacuum probe valve.
	SAFETY FITTING:
	Two safety valves for inner vessel fitted on pipe line with flow divert valve
	Rupture disc for inner vessel.
	Safety valve for inlet pipeline.
	Safety valve for pipeline of pressurizing evaporator.
	One rupture disc/ safety device on outer vessel.
_	SUBMITTALS:
	The Liquid Medical oxygen tank shall accompany the Original Quality Test Certificate covering following
	Documents:
	Approval letter from CCOE along with approved drawing from CCOE.
	Approval letter from CCOE for use of cryogenic vessel(s) at site.
	Certificate from the authorized inspection agency.
_	Heat chart for pressure parts.
-	Dimension checks report.
	Dished End reports.
	Mechanical properties test report for production test coupon.
-	Visual inspection report.
	Radiography examination report.
-	Liquid penetrant examination.
	Cleaning inspection report.
	Hydro-pressure test report.
-	Liquid Oxygen supply system
	One vessel of 1X20 KL Liquid oxygen VIE vessel system will be the primary (main) supply source and another
1	vessel of 1X10 KL will be secondary source. In case of failure in liquid oxygen supply, it should automatically

The unit should consist of a double walled vertical vessel (inner pressure vessel made of stainless steel and outer vessel of carbon steel). It should be fitted with standard accessories and should be "passed" the standard inspection requirement at factory for VIE. The copy of the certificate should be forwarded to HLL prior to shipping and original should be enclosed along with the shipping document. Bidder should follow international Standards.
Product and Service Specification:
Proposed capacity of the primary liquid oxygen storage tank is 20X1 KL and secondary is 10 KL.
Gas outlet pressure to be maintained at 4.2 kg/cm2.
Space taken for installation should be as per regulations of Indian explosive controller and having easy access for LMO tank.
The site would be protected by fence around, well lit by sodium vapour lamps and demarcated with proper signage.
Indication of liquid oxygen level and outlet gas pressure should be provided.
Automatic change over should be provided between the primary and secondary LMO tanks. In case of failure in liquid oxygen supply, it should automatically switch over to an emergency oxygen manifold having 2 x 20 cylinders Specification of Components
Product: The liquid medical oxygen (LMO) supplied at site should be of IP grade. The LMO supplied should comply with all relevant SMPV regulations and standards under the preview of the Indian Drugs and Cosmetic Act rules. They should also satisfy the IP 2007 specifications.
Storage Tank Specifications
The storage tank and the vaporizer coils should be designed as per the ASME Sec.VIII Div.I latest Edition / EN - 13458-2 Annexure-C/ AD2000 , MARKBLATTER 2004 Edition
The cryogenic vessel will be of cylindrical shape with vaporiser and the pressure control system. It should be provided with the essential components to fill the liquid, to build up pressure, to relieve pressure, to withdraw product and to evacuate the vessel. All protective, safety and alarm provisions mandatory to Liquid Medical
Oxygen plants should be supplied.
The requirement of the Cryogenic Vessel should be:
1. Configuration: Vertical
2. Inner vessel maximum allowable working Pressure: 17 kg/cm2
3. Inner vessel hydrostatic test pressure: Greater than 26 kg/ cm2
4. Outer vessel material of construction: Carbon steel
5. Inner vessel material of construction: Stainless steel
6. Independent AV coil should be provided with each vessel.
Storage Tank Capacity
Vacuum insulated evaporator vessel should have a capacity of 20X1 kilo liters and other with 1X10 kilo litres. The AV coil should have adequate capacity to handle the gas flow requirements of the hospital.
Vaporiser Coil
 1. Maximum operating Pressure: 20 kg/cm2
 2. Design Pressure: 22 kg/cm2
 3. Pneumatic test Pressure: Greater than 24 kg/cm2
4. Inlet temperature: - 196 to +40°C.
5. Duty cycle: Continuous duty
6. Flow rate : 1200 cubic metre/ hour
The fence, foundation, lighting, signage, approach gate etc are to be designed and installed by the vendor.
Safety
The vendor should ensure that all international safety norms and standards applicable as implemented and certified by the CCE.
Following are the mandatory provisions for vessel:
Vessel low liquid level alarm
Vessel low pressure alarm
Pipeline low pressure alarm.
Twin regulator
Twin safety valve
Non return valve and 3 way diverter (bypass) valve

1.4	The size of Manifold should be as mentioned in BOQ of respective Institute and it shall be compatible with Class-D type bulk cylinders. Manifold shall consist of two high pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with respective numbers of cylinder pigtail connections to suit cylinder valves as per IS.3224/ BS/ ASME incorporating a check valve at the header connection. Each header bar assembly shall be provided with a high pressure shut off valve.Oxygen Manifold should consist of 2 rows of respective numbers of class D-type bulk oxygen cylinders. The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The system should have non – return valves for easy changing of cylinders without closing the bank. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized. Emergency Oxygen Manifold (without Cylinders) The size of Manifolds should be as mentioned in BOQ of respective Institute and it shall be compatible with
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	The size of Manifolds should be as mentioned in BOQ of respective Institute and it shall be compatible with
1.3	Oxygen Manifold Supply System (without Cylinders)
	indications by the operator.
	Control panel should have Alarm reset switch/Mute /acknowledgement switch to control and monitor the alarm
	flow requirement of respective institute)
	bidders has to supply 02 numbers of Automatic Control Panel and design the system in such a way to meet the
	Hospital/Institute (If the requirement is more than flow capacity requirement automatic control panel the
	The Automatic Control Panel should be installed in such a way to meet the peak flow requirement of the
	The heavy duty control panel should be provided with a flow capacity of 2000 or more LPM at 50 to 60 psi.
	The Control Panel shall include two pressure relief valves, one high pressure approx. 200/350psi and one low pressure approx.75 psi.
	switch settings.
	be cleaned for Oxygen Service and installed inside the cabinet to minimize tampering with the regulators or
	All components inside the Control Panel like Pressure Regulators, piping and control switching equipment should
	All functional components should be enclosed in corrosion resistant robust material.
	Indication for changing the cylinders should be clearly identified on the front of the control panel.
	to provide an uninterrupted gas flow. It should be 100% automatic and should not require manual adjustment.
	contained in the control cabinet. In the event of an electrical power failure the valves should automatically open
	in delivery supply line pressure. Changeover should be performed by electrically/pneumatically operated valves
	with digital display, fully automatic type and switches from "Bank in Use" to "Reserve bank " without fluctuation
	regulators should be provided in the control cabinet for final delivery pressure regulation. One delivery pressure regulator in service and one should be ready for service in a standby mode. The Manifold control panel should be
	for each cylinder bank should be used to initially reduce cylinder pressure and two single stage pressure regulators should be provided in the control cabinet for final delivery pressure regulation. One delivery pressure
	The manifold assembly should provide two stages of pressure regulation. A single stage primary regulator, one
	American UL listed.
	standards. It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/
	The fully automatic oxygen control panel should comply with HTM 02-01/NFPA 99C/ DIN / EN / ISO-7396-1
	Automatic control panel should be constructed in accordance with the requirement of international standards.
1.2	Fully Automatic Oxygen Control Panel
	and ready to use during emergencies.
	Bulk cylinders for the manifold will be arranged by the hospital. The hospital will ensure that the cylinders are full
	Log of all works undertaken in the plant should be meticulously maintained by the vendor.
	the vendor. Experienced personnel should be readily available.
	All routine preventive maintenance and break-down maintenance of the liquid oxygen plant should be done by
	Maintenance
	All statutory requirements of the Chief Controller of Explosives of India and SMPV rules need to be followed, besides all regulations and guidelines put forward by the Govt. Of India from time to time should be followed.
	Statutory Requirements
	Alarm on low pressure back-up manifold cylinders
	Alarm on indicating manifold in use in case the vessel is not in use.
	Automatic changeover to manifolds with control panel

	Manifold shall consist of two high pressure header bar assemblies to facilitate connection of respective numbers of primary and secondary cylinder supplies. Each header bar shall be provided with respective numbers of cylinder pigtail connections to suit cylinder valves as per IS.3224/ BS/ ASME incorporating a check valve at the header connection. Each header bar assembly shall be provided with a high pressure shut off valve.
	Oxygen Manifold should consist of 2/1 rows of respective numbers of class D-type bulk oxygen cylinders. The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The system should have non – return valves for easy changing of cylinders without closing the bank. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized.
1.5	Oxygen Flow meter with Humidifier Bottle
	Back Pressure Compensated flow meter for accurate gas flow measurement with following features:
A)	Control within a range of 0-15 LPM.
B)	It should meet strict precision and durability standard.
C)	The flow meter body should be made of brass chrome plated materials.
D)	The flow tube and shroud components should be made of clear, impact resistant polycarbonate.
E)	Flow tube should have large and expanded 0-15 LPM range for improved readability at low flows.
F)	Inlet filter of stainless steel wire mesh to prevent entry of foreign particles
0	The humidifier bottle is made of unbreakable & reusable polycarbonate /polysulfone material autoclavable at
G)	121 degree centigrade .
H)	Humidifier Bottle should be covered under warranty & CMC.
I)	Should be BIS/CE certified/ UL Listed
2	NITROUS OXIDE SYSTEM
2.1	Fully Automatic Nitrous Oxide Control Panel
	The fully automatic N2O control panel should comply with HTM 02-01/ NFPA 99 C/ EN /DIN /ISO 7396-1 STANDARD. It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.
	The manifold assembly should provide two stages of pressure regulation. A single stage primary regulator, one for each cylinder bank should be used to initially reduce cylinder pressure and two single stage pressure regulators should be provided in the control cabinet for final delivery pressure regulation. One delivery pressure regulator in service and one should be ready for service in a Standby mode. The Manifold control panel should be digital, fully automatic type and switches from "Bank in Use" to "Reserve bank " without fluctuation in delivery supply line pressure. Changeover should be performed by electrically/pneumatically operated valves contained in the control cabinet. In the event of an electrical power failure the valves should automatically open to provide an uninterrupted gas flow. The manifold should not require any manual resetting or adjustments after the replacements of the depleted cylinders.
	The Control Panel shall include two pressure relief valves, one high pressure approx.200psi and one low pressure approx.75 psi.
	The control panel should also have heaters to prevent ice formation on the regulators at high flow rates. The Control Panel should be made to provide Heavy Duty and have a flow capacity of 1500 LPM or more at 50 to 60 psi.
	The Automatic Control Panel should be installed in such a way to meet the peak flow requirement of the Hospital/Institute (If the requirement is more than flow capacity requirement automatic control panel the bidders has to supply 02 numbers of Automatic Control Panel and design the system in such a way to meet the flow requirement of respective institute)
	Control panel should have Alarm reset switch/Mute / acknowledgement switch to control and monitor the alarm indications by the operator.
2.2	Nitrous Oxide Manifold (Without Cylinders)
	The size of Manifolds should be as mentioned in BOQ of respective Institute and it shall be compatible with Class-D type bulk cylinders.

	Manifold shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with respective number of cylinder pigtail connections to suit cylinder valves as perIS.3224/ BS/ ASME incorporating a check valve at the header connection. Each header bar assembly shall be provided with a high pressure shut off valve. The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The cylinder should be locked with the help of cylinder brackets and fixing chains which should be galvanized.
2.3	Emergency N2O Manifold (Without Cylinders)
	The size of Manifolds should be as mentioned in BOQ of respective Institute and it shall be compatible with Class-D type bulk cylinders.
	Manifold shall consist of two high-pressure header bar assemblies to facilitate connection of primary and secondary cylinder supplies. Each header bar shall be provided with respective numbers of cylinder pigtail connections to suit cylinder valves as per IS 3224/ BS/ ASME incorporating a check valve at the header connection. Each header bar assembly shall be provided with a high pressure shut off valve. Nitrous oxide manifold should consist of 2 rows of respective numbers of cylinders.
	The manifold should be hydraulically tested to 3500 psig. The manifold should be so designed that it shall suit easy cylinder changing and positioning. The system should have non – return valves for easy changing of cylinders without closing the bank. The cylinder should be placed with the help of cylinder brackets and fixing chains which should be galvanized.
3	Medical and Surgical Air System (Package Unit) - Tolerance of +/-5% is acceptable on plant flow capacity
	Air-cooled Oil-Less compressors for continuous duty application with highest output of compressed air, low power consumption and very low vibration resulting in low noise level.
	The medical air plant shall fully comply with the requirements of the HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1. It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed (Incase of NFPA 99c the control panel of plant must be UL/ETL Listed and Undertaking from manufacturer for this tender reference must be submitted for using the same control panel in the system offered)
3.1	Air Compressor Modules
	It should be Oil-Less Screw Compressors /Scroll Compressors to produce the plant output of {minimum Liters Per Minutes(LPM) Plant capacity } as mentioned in BOQ of respective institute as primary and same capacity as standby.
	Medical quality air shall be delivered at a nominal pressure of 400 kPa (4 bar) and 700kPa(7 bar) gauge for supply of the hospital medical air and surgical air.
	Compressor plant should be designed in such a way that compressors will switch on in a sequential manner as per flow demand.
	The compressors should be standalone ones with independent power supply. Each Compressor should be suitable for both continuous and frequent start/stop operation at a nominal plant pressure of 10bar or more.
	The duty compressors shall be automatically rotated by the plant control system to ensure even wear. Compressors shall be supplied and installed. Desiccant dryer shall be provided with a dew point sensing switch that shall provide an alarm on the plant control panel and central hospital alarm system when the water concentration in the delivered air rises above the limit. Duplex desiccant dryer and filtration modules shall be provided with three or more individual stages of filtration as follows: Stage 1: Coalescing filter upstream of the desiccant dryer for removing liquid water particles down to 1micron. Stage 2: Particulate filter after the desiccant dryer for dust protection and removing particles down to 1 micron.
	Stage 3: Bacteria filter for removing particles down to 0.01 micron.
	Purity should be tested as per the American Pharmacopeia / European Pharmacopeia standard.
	The plant control and power management system shall monitor the safe operation of the plant, providing signal into the alarm system as per the requirements of the standard.
	Pressure Reducing Station : for 4 bar and 7 bar should fully comply and meet with the requirements of the standard. Simplex pressure reducing station shall comprise as in-line pressure regulator, with downstream pressure gauge. Isolation valves and pressure release valves should be provided as per the standard. Duplex pressure reducing station to have two branches, connected to the MGPS in parallel in order to allow maintenance on the components of one branch, while the gas flow is maintained in the other branch.Ball Valves - Full bore which operate from fully open to fully closed position with a quarter turn of the handle.Complete pressure reducing station with base plate mounted for ease of installation.

	Padlocks available to allow locking of the valves in both open and closed positions and must have easy to read
	pressure gauges. Base plate mounted and supplied with copper stub pipes for ease of installation using inert
	jointing procedures.
	The compressor system should have-
1	Intake filter Delivery pipe
2	Mounting on air tank along with all standard fittings viz. safety valve, pressure gauge, delivery valve, drain valve etc.
3	Bidder shall provide all electric control panels, starters etc required for proper functioning of motor.
4	Desiccant Air Dryer – 2 nos.(Duplex)
5	2-Stage or more Breathing Air Filters – 2 sets(Duplex)
6	Outlet pressures for drills/equipment and ventilators should be a minimum of 7 bar and 4 bar respectively.
7	Duplex pressure reducing station
	The compressor should be heavy duty, reliable with long MTBF. Each compressor cylinder is to be protected by a temperature switch, which will stop the drive motor and provide an alarm signal in the event of abnormal discharge air temperature. Each compressor module should include an inline filter with particle retention of 10 microns, inlet isolation valve, discharge isolation valve, and pressure relief valve. The capacity should be capable to take care of total load of all the outlets.
3.2	Vertical Air Receiver
	Total air receiver capacity shall be at least 50% (+/- 5%) of the primary plant capacity (capacity as mentioned in the tender) in 1 minute in terms of free air delivered at normal working pressure. Each air receiver shall be protected by a pressure relief valve, a fusible plug and include a pressure gauge with isolating valve and a drain cock.
	The corrosion resistant coated receiver is to be equipped with tested safety pressure relief valve, sight glass pressure gauge, automatic drain, three-valve by-pass and source isolation valve. Should be fabricated as per ISO/ASME/BS
3.3	Air Treatment Module
	The air treatment module should include dual dryers, dual filtration system and a dewpoint transmitter with local audible and visual signals and dry contacts for remote monitoring. The components should be mounted on a common base with interconnecting copper/brass piping and upstream and downstream isolation valves. The isolation valves must allow either set of components to be serviced without shutting down the system. Dryers should be of heatless desiccant design and sized to provide for the peak calculated demand. The desiccant
	dryers should be equipped with dew point dependent switching feature tominimize the need for purge air.
	The dual filtration system should remove liquid and particulate matter, consisting of 0.5micron coalescing filters with differential pressure indicators and automatic drain, airline pressure regulators with gauges, final pressure relief valve, and sampling valve.
	Each bank should consist of three stage treatment. Digital dew point monitor is to be supplied with alarm contacts as per requirement of the standard.
3.4	System Controls
	The "Continuous on Demand" feature will stop the operation of the motors during periods of low or no demand. The control include individual self-protected combination motor controls with short circuit protection, single phase and thermal overload protection, individual control circuit with transformers primary and secondary protection, pressure sensors, temperature switches with reset buttons, and an electronic controller to automatically change the operating sequence of the compressors. The cabinet shall have status display to include system pressure, dew point pump operation, accumulated time, maintenance interval, fault
	conditions, and silence button, lighted Hand-Off-Automatic selector switches and safety disconnect operating handles. All required local alarm functions shall be integrated in to the packaged system.
2 5	The system should be designed to function even if the programmable controller fails.
3.5	Accessories Accessories including for job site installation such as inlet and discharge flexible connectors, vibration mounting
	pads, and source isolation valve should be supplied.

	It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed (In-case of NFPA 99c the control panel of Plant must be UL/ETL Listed and Undertaking from manufacturer must be submitted for using the same control panel in the system offered)and should comply with HTM 0201/ NFPA 99 C / EN /DIN/ISO 7396-1
4.1	Vacuum Pump Module
	It should be Oil Sealed Rotary Vane Type to produces the plant output of {minimum Liters Per Minutes(LPM) Plant capacity } as mentioned in BOQ of respective institute as primary and same as standby
	Designed flow capacity should be minimumof LPM capacity as mentioned in BOQ of respective institute. The vacuum plant shall comprise air-cooled, oil lubricated rotary vane vacuum pumps suitable for both continuous and frequent start/stop operation at inlet vacuum levels between 500mmHg and 660 mmHg.
	The control system should normally employ automatic rotation of the lead pump to maximize pump life and ensure even wear.Vacuum pump inlets shall include a wire mesh filter and integral non-return valve to prevent oil suck back and pressure increases in the vacuum system.
	Each vacuum pump shall be fitted with anti-vibration pads between the pump foot and mounting frame. The plant shall be fitted with duplex bacteria filter system.
4.2	Vacuum Receiver
	The vacuum receiver shall be made of rust free corrosion resistant steel and fabricated as per ASME/BS/ISO for a vacuum pressure of 760mmHg. It should include bypass valves, manual drain valves, vacuum gauge. Vacuum reservoir shall have total volume of at least 100 % of primary plant output (+/- 5%) (capacity as mentioned in the tender) in one minute in terms of free air aspired at normal working pressure.
4.3	System Controls The control include individual self-protected combination motor controls with short circuit, single phase and thermal overload protection, individual control circuit transformers with fuse less primary and secondary protection, pressure sensors, temperature switches with reset buttons, and an electronic controller to automatically change the operating sequence of the compressors. The system should have a status display to show the system pressure, elapsed time, maintenance interval, fault conditions, and silence button, lighted Hand-Off-Automatic selector switches and safety disconnect operating handles.
	All required local alarm functions should be integrated into the packaged system. The circuitry should be designed so that the audible signal can be silenced and the visual indicator will remain until the fault has been cleared and the reset button resets. Local alarm functions should be annunciated for reserve pump in use
4.4	Bacterial Filters
	The filters should be designed for removal of solid, liquid and bacterial contamination from the suction side of vacuum pump systems, preventing damage to the pump and the potential biological infection of the surrounding environment. The dryer should be particulate filter dryer with ability to remove particles as small as 1micron.
	Each individual filter shall have the capacity to deliver full design flow such that one set is designated duty and the other will be standby. Bacteria filters shall have efficiency at least 99.999% when tested by the sodium flame method in accordance with BS 3928:1969/as per required standard utilising particles in the 0.02 to 2 micron size range. The pressure drop across each clean filter at 50% of the system design flow should not exceed 25 mm Hg (3 kPa) at a vacuum of 475mm of Hg (63 kPa). Bacteria filters shall be marked with the legend 'Bio-Hazard'.
	Each bacteria filter shall be provided with a transparent sterilizable collection jar to collect condensate. The total water capacity of the pressure vessels shall be at least 100% of the design flow rate of the plant in 1 minute in terms of free air aspired.
4.5	Accessories
	Accessories included for job site installation are inlet and discharge flexible connectors, vibration mounting pads, and source isolation valve, inlet check valve, thermal malfunction switch and vacuum control switch. Flexible connectors on inlet and exhaust of each pump, exhaust tee with union as well as copper tubing with Shutoff-cock for gauge/bypass valve and vacuum switch etc.
	All the filters should be covered under warranty period and CMC Period.
5	Ward Vacuum Units
	It must consists of the following:-
1	1no of Suction Regulator and 1no of 1000 ml polysulfone /polycarbonate collection jar.
2	Digital Suction Regulator: Suction regulator should be supplied with a safety jar, including and antibacterial filter and an anti-overflow safety device. Should have wide membrane continuous suction controller
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4	Should have vacuum gauge fitted with a protective bumper device.
5	Should have on/off knob allowing for the quick restoration of a readjusted vacuum level.
6	Must have central adjustment knob with a color coded for 0 to 750 mm Hg or more. Should have Polysulfone/ polycarbonate 100cc safety jar, autoclavable at 121° C at 5mins, unbreakable, fitted with an anti-overflow safety device and equipped with antibacterial filter. It should be totally transparent, to ensure perfect sucked liquid visibility.
5A	Low flow ward vacuum unit - Should have vacuum levels: 0-250 mm of Hg +/-10%
6	Theatre Vacuum unit for OT
	It must consist of the following: -
1	Digital Suction Regulator and 2nos. 1500ml or more polysulfone/ polycarbonate collection jar and both to be mounted on a trolley.
	Suction Regulator: Suction regulator should be supplied with a safety jar, including an anti-bacterial filter and an
2	anti-overflow safety device. Should have wide membrane continuous suction controller
3	Should have vacuum levels : 0-750 mm of Hg or more
4	Should have vacuum gauge fitted with a protective bumper device.
5	Should have on/off knob allowing for the quick restoration of a readjusted vacuum level.
6	Must have central adjustment knob with a color coded for 0-750 mm Hg or more. Should have polysulfone/ polycarbonate safety jar, autoclavable at 121 ^o C, unbreakable, fitted with an anti-overflow safety device and equipped with antibacterial filter.
7	Collection jar should be totally transparent, to ensure perfect sucked liquid visibility.
7	AGSS (Anesthetic Gas Scavenging System) Plant -
	Anesthetic Gas Scavenging System (AGSS) of minimum 2500LPM as Primary & 2500LPM as Standby , It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed (In-case of NFPA 99c the control panel of Plant must be UL/ETL Listed and Undertaking from manufacturer must be submitted for using the same control panel in the system offered) and should comply with HTM 02-01/ NFPA 99 C/EN/ISO 7396-1.
	The package should consist of rotary vane/claw type vacuum pumps (Dry/Oil less only) , a control panel, and mounted on a common base frame.
	AGSS pump: AGSS pump shall operate completely dry . Each pump should be completely air cooled and have absolutely no water requirements. The suitable wiring from OTs to AGSS plant for remote control/suitable reservoir (as aplicable) is the responsibility of the bidder.
	System in-line non-return values should allow individual pump servicing. Active anesthetic gas scavenging systems should be designed to safely remove exhaled anesthetic agents from the operating environment and dispose of them to atmosphere from the highest point of the hospital building, thus preventing contamination of the operating department and providing a safe and healthy workspace for the personal. AGSS design should be dependent upon flow rate and pressure drop characteristics of the individual components of systems. It is essential that terminal units, remote controls (If required) and pump units work in synchronized manner after connection of workstation to the AGSS System.
	Installation should be on roof top/suitable location. Piping, Non-Return-Valves (NRVs), and inlet nozzle should be suitably placed. Connecting hose suitable to fit with anesthesia workstation should be provided.
8	DISTRIBUTION PIPING
8.1	Piping specifications Copper pipe should be as per standard BS: EN 13348:2008/ ASTM B819 standards, Solid drawn, seamless, deoxidized, non-arsenical, half hard (hard can be accepted only for sizes 54mm or more), tempered and degreased copper pipe conforming to the standard. All copper pipes should be degreased & delivered capped at both ends. The pipes should be accompanied with manufacturers test certificate for the physical properties & chemical composition.
	Copper pipe must have reputed third party inspection certificate (Eg. Lloyd's or TUV or SGS).
	Fittings should be made of copper and suitable for a working Pressure of up to 17bar and especially made for brazed socket type connections. All valves shall be pneumatically tested for twice the working pressure and factory degreased for medical gas service.
	Copper fittings should comply with EN 1254:1 factory degreased and brazing filler metals should comply with EN 1044. Fitting should be degreased, individually packed for medical use.
	The minimum thickness of copper pipes of 35mm and above outer diameter, should be 1.2mm and the thickness of copper pipes less than 28mm outer diameter, should be 1mm as mentioned in respective Institute's BOQ.

8.2	Installation & testing							
	Installation of piping shall be carried out with utmost cleanliness. Only pipes, fittings and valves that have been							
	degreased and fittings shall be used at site. Pipe fixing clamps shall be of nonferrous or non-deteriorating plastic							
	suitable for the diameter of the pipe.							
	Inert gas welding technique should be used by passing oxygen Free Nitrogen Gas inside the copper pipes during							
	silver brazing, in order to avoid carbon deposition inside the copper pipes. Only copper-to-copper joints are							
	permitted on site except threaded or flanged joints may be made where pipelines are connected to items such as							
	valves and control equipment. No flux shall be used for joining Copper to Copper joints and on for joints made on							
	site. Copper to copper joints shall be brazed using a 5% silver-copper phosphorous brazing alloy CP104. A total of							
	5 joints shall be cut out for examination to establish the quality of the joints being made on site. The insides shall							
	be clean and free from oxides and particulate matter and the minimum penetration of the brazing alloy at any point shall be three times the wall thickness of the tube. If the joints examined do not conform to these							
	requirements, then adjacent joints shall be cut out and examined until the extent of faulty workmanship has							
	been made good. Copper-to-brass or gunmetal joints shall only be made under controlled conditions off site. The							
	joints are ordinarily used to join short copper pipe tails to brass, gunmetal or bronze fittings to permit their							
	connection into the pipeline. The sub-assemblies shall be degreased and individually sealed in bags or boxes							
	before delivery to site.							
	Adequate supports should be provided while laying pipelines to ensure that the pipes do not sag. Suitable sleeves							
	shall be provided wherever pipes cross through walls / slabs. All pipe clamps shall be non-reactive to copper.							
	After erection, the pipes are to be flushed with dry nitrogen gas and then pressure tested with dry nitrogen at a							
	pressure equal to twice the working pressure or 150 psig, whichever is higher for a period of not less than 24							
	hours.							
	Length and quantity of individual items (Copper pipes, AVSUs, Alarm panels, Isolation valves, Outlets, pendants							
	etc.) are mentioned. However quantity will be calculated and paid at actuals. Bidder should quote unit price for							
	all the items as detailed							
	Maximum interval between supports (Horizontal and Vertical)							
	(12mm Pipe - 1.5m, 15mm pipe - 1.5m, 22mm pipe – 2m, 28mm pipe-2m, 35mm pipe-2.5m, 42mm pipe -2.5m,							
	(1211111 Pipe - 1.511, 151111 Pipe - 1.511, 221111 Pipe - 211, 281111 Pipe - 211, 551111 Pipe - 2.511, 421111 Pipe - 2.511, 551111 Pipe - 2.51111 Pipe - 2.511111 Pipe - 2.5111111111111111111111111111111111111							
8.3	Painting							
	All the pipes from manifold/plant upto the outlets should be painted with two coats of synthetic enamel paint							
	and colour codification should be as per standards followed and with consultation with competent authorities of							
	the Institute.							
9								
9	GAS OUTLETS							
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	Area valve service units should fully comply and meet with HTM 02-01/NFPA 99C/EN/DIN/ISO7396-1. It should
	provide a zone isolation facility for use either in an emergency or for maintenance purpose The Area Valve
	Service Unit should incorporate a ball valve in a lockable box with emergency access. It should be reliable and
	easy to operate, easy purge, sample & pressure testing and emergency supply system.
	Medical gas/vacuum services should be fixed copper, piped to and from their respective area valve service units.
	A color coded service identity label should be fitted behind the valve handle. The unit should provide a zone
	isolation facility. Gas Flow direction should be indicated.
	The box shall be made from extruded aluminium to prevent corrosion. All wetted parts (except seals and gaskets)
	should be brass or copper. Each unit assembly should be factory tested for gas tightness. Rubber pipe grommets
	should be provided to ensure any leaking gas does not escape from the unit into a wall cavity. All visible
	aluminum surfaces should be powder coated.
11	ALARM SYSTEM
11.1	Master Alarm (Digital)
	Should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.
	Complies with HTM 02-01 / NFPA 99C/EN/DIN/ ISO 7396-1 Standards.
	Each Master Alarm should be modular in design and be fitted with required number of master alarm modules.
	The master alarms should be capable to monitor minimum 40 Point.
	Each point represents an alarm condition that the source equipment might have. When an alarm condition exists,
	a red light flashes and the audible alarm sounds. If several alarm conditions occur simultaneously, the most
	recent alarm light should flash, while the other alarm lights should remain lit. When an alarm condition is
	created, an audible alarm should be actuated. A dry contact module should be available to interface with a
	building management system.
	The box material should be of gauge steel of requisite thickness and equipped with mounting brackets. The
	emissions from alarms should conform with EMC standards.
	Master alarm management system should be designed to display alarm conditions from the source supply units
	indicating the broad status of the source equipment and manifolds as well as the master distribution status from
	the source supplies. Depending on the alarm priority, a visual and audible alarm should be initiated to indicate an
	alarm condition.
	Each panel shall display and/or input up to forty point alarms. Panel should be ready to use with BMS system.
	The master alarm must be able to monitor the following source alarm conditions.
	Oxygen Source Empty/Fault
	 Oxygen Cylinder Bank Empty/Fault
	 Oxygen Emergency Bank Empty/Fault
	Air Compressor Faulty/Operation
	 Vacuum Pump Faulty/Operational
	· Vacuum Deficiency Vacuum Reservoir
	 And Other MGPS Signals & Alarms
	Bidder shall be responsible for all cabling from local alarm panels to master alarm panel .
	Master alarm should be integrated with BMS/HIS
11.2	Medical Gas Area Alarm
	The medical gas central alarms should be capable of monitoring up to 5 medical gas services (As specified in BOQ
	of respective institute) by means of pressure sensors which detect deviations from the normal operating limits of
	either pressure or medical vacuum. The area alarm should have a digital display of pressures. The medical gas
	area alarm should fully satisfy the HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1 requirements and should be US
	FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.
	An audible warning should sound simultaneously with any failure indication and a mute facility should be
	provided. "
	Note: The bidder may offer combined unit of AVSU & alarm, bidder has to match the quantiy of AVSU/Alarm
	whichever is higher
12	Line Isolation Valves
	The Lockable line valves must degreesed and complete valve with stuffed pipe & fittings, factory tested and complice with HTM 02 01 (NEDA 00 C/EN/DIN/ISO 7306 1 standard
13	complies with HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1 standard.
13	Supply of O2 Cylinders – Class D Type
	Should be as per BIS/IS/ASME Standard

14	Supply of O2 Cylinders – Class D Type
	Should be as per BIS/IS/ASME Standard
15	Horizontal/ Vertical Bed Head Panel
	It shall confirm to HTM 02-01/ NFPA 99 C/EN/DIN/ISO 7396-1. The design should be approved by the respective
	institute before installation and it is responsibility of the bidder after getting order they have to discuss with
	respective institute and finalized the Bed Head Panel (Vertical/Horizontal) as per site condition. Vertical BHP
	should be upto False Ceiling Lavel and all outlets and sockets should be located at reachble hieght. Horizontal
	BHP should be of maximum 1000mm for 2 Gas outlet configuration, 1200mm for upto 4 outlets configuration
	and 1500mm for 6/8 Outlet configurations.
	It should have following features:-
	Efficient, Safe & Robust design in extruded aluminium section.
	Smooth curved surfaces, and choice of base colour and fascia plates.
	Unit should have integrated rail system to mount accessories
	The headwall system should be constructed of aluminium extrusions joined together to form a carcass to suit the
	particular application. Unit should be factory assembled for electrical and mechanical components.
	Segregation of services i.e. Low voltage supplies, High Voltage supply and Medical gases should be maintained
	with minimum 2 tier/2 channel arrangements.
	Front fascia plate should be removable individually to access for respective service.
	It should have one rail for mounting Accessories.
	Each bed-head unit shall be supplied with electrical and electrical outlets pre-fitted, wired and certified. (Wired
	up to the distribution box provided with leakage protection & proper earthling arrangements)
	Note: Gas Outlets quantities are already taken in consideration of quantities of respective outlets in BOQ
	Should have per unit as under :
	Oxygen – 2
	Vacuum – 2
	Medical Air-1
	Holder for vacuum collection jar –1
	Nurse call switch – 1 (not in the scope of MGPS Vendor only space for same has to provide)
	Infusion pump mount pole with adapter for mounting at least two infusion pumps
	5 /15A combined Electrical socket with switch – minimum 4 Nos. with 2 outlet combination, 6 Nos. with 4 outlet
	combination and 8 Nos. with 6/8 outlet combination
	RJ-45 socket/ Ethernet -01
	Two spare spaces
	Monitor Bracket
16	High pressure tubes for O2, N2O, Compressed Air,& Vacuum
	It should be colour coded for individual services i.e. white for Oxygen, Blue for N2O and Yellow for Vacuum, Black
	for air. Antistatic rubber tube should be as per ISO standards. It should be CE marked/UL Listed. (The 200m Hose-
	Gas wise requirement should be taken from respective institute before supply total lengths should be 200m
	inclusive of all type. If institute requires more than payment will be made on actual basis as per finalized BOQ
	rate)
17	Electrical Wiring with Electrical Panels –
	All wiring inside the Manifold Room and Plant room required for MGPS equipment and General electrification.
	Institute will provide one point supply only. Other are under the scope of bidder. All the work should be as per
	BIS/CE standard and material used should be reputed make only.
18.	CARBON DIOXIDE SYSTEM
	The system should consist of medical CO2 Manifold 4 + 4 Primary & 2+2 Standby with Class-D type Cylinders (12
	Nos over and above than BOQ quantity of CO2 cylinders) and control panel . Control panel of CO2 should be US
	FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.
	The Modular Manifold supply system shall provide carbon dioxide piped distribution system.
	The Modular Manifold system should be in such a way that it increases flexibility and allows easy enlargement of
	the manifold capacity in case of future expansion. Should be complies with HTM 02-01/ NFPA 99 C/EN/DIN/ ISO
	7396-1 standard.
	Fully Automatic Control panel for CO2 System

	The Manifold Control System should supply any type of medical gas from both left and right hand manifold banks. Operation and performance criteria should fully satisfy the requirements of HTM 02-01/ NFPA 99 C/EN/DIN/ ISO 7396-1 standard. The fully automatic CO2 control panel should comply with the standard. It should be US FDA / European CE Certified with 4 digit notified body number or American ETL/ American UL listed.
	The Manifold Control System shall supply on uninterrupted flow of 500 L/min. to a 400 k Pa (4 bar) distribution system. Either the left or right hand manifold bank may be designated "Duty" and should automatically changeover to supply the distribution system from the "Standby" bank when pressure in the "Duty" bank falls to a predetermined level.
19	Interconnection to LMO Tank (Optional Price should be quoted)
	Price should be quoted per meter basis for inclusive of all installation, material (Copper Pipes, fittings, etc), trenches and labour etc. charges as per site condition. The payment will be made on actual meter consumption for interconnection from LMO tank to Gas Manifold room after 100m.
20	Site Modification –
	i. Bidder should be responsible for antistatic rubber flooring in the manifold room and thickness of flooring not less than 1inch.
	ii. Bidder should provide a raised Loading/Unloading Platform of suitable sized adjacent to manifold room, so that cylinder can be loaded & unloaded easily form the lorry/vehicle.
	iii. Bidder should be responsible for foundation of Plant Room (If required) for Medical Air Plant, Vacuum Pant & AGSS Plant.
	iv. Bidder should co-ordinate with respective Institute/Authorities for the availability of Office Room for & Toilet for MGPS Operator into Manifold/Plant Room.
	v. Bidder should be responsible for all civil modifications and repair for successful completion of MGPS Plant, Manifold, and Pipeline installation and commissioning throughout the proposed blocks/buildings
	vi. Bidder should be responsible for internal walls/partitions & doors for creating separation between MGPS Plant and Manifold room, etc as per their requirement. Institute will provide shell structure of approx. 200 sq m and one point electrical supply and drain(if required)
21	Extra Works (Optional)
а	Construction of MGPS Operator Room & Toilet (Optional) Bidder should be responsible for construction of Operator Room of 10X8Feet and Toilet 6x5Feet full finished with all fixtures & general electrification with Fan & Ventilation and it should be in same building or adjacent. All works should be as per CPWD/PWD Specifications.
b	Construction of Overhead/Under Ground trench size approx 1.5mx1m (Optional) – Please quote rate for per meter basis all inclusive, Payment will be made on actual basis. Note: All bidder has to quote 20meter Overhead/Under Ground trench as standard for interconnection between buildings/plant/manifold/etc block and extra will be paid on the basis of actual requirement.
с	Construction of 9" brick wall (500 Sq.ft) with Plaster on both sides with paint matching the surrounding premises. Payment shall be made at actuals.
d	Demolition of brick wall 200 Cu.ft. Payment shall be made at actuals.

Bill of Quantity (BOQ) for each sites are as defined below:

	BOQ MGPS SYSTEM - AIIMS Gorakhpur									
SN.	Item Description	Unit Qty								
1	Oxygen Supply System									
1.1	LMO Tank and Accessories as per specification	Nos.	1							
1.2	Fully Automatic Oxygen Control System : Supply, Installation testing and commissioning of Fully Automatic Oxygen Control System. As per specification	Nos	2							
1.3	Oxygen Manifold (2x16) : Supply, Installation, testing and commissioning of (2x16 size) class D cylinder Oxygen Supply System. As per specification	Nos	2							

1.4	Emergency Oxygen Supply System : Supply, Installation, testing and commissioning of (2x5 or 1x10 size) class D cylinder Emergency Oxygen Supply System. As per specification	Nos	2
1.5	Oxygen Flow meter with Humidifier Bottle: Supply, installation, testing and commissioning of oxygen flow meter with humidifier bottle. As per specification	Nos	960
2	Nitrous Oxide (N2O) System		
2.1	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply, installation testing and commission of fully automatic control panel for Nitrous Oxide. As per specification	Nos	1
2.2	Nitrous Oxide Manifold System, (2x8 size): Supply, installation, testing and commissioning of Nitrous Oxide Manifold system .As per specification	Nos	1
2.3	Emergency Nitrous Oxide Manifold System, (2x4 or 1x8 size): Supply, installation, testing and commissioning of cylinder Emergency Nitrous Oxide supply System .As per specification	Nos	1
3	Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 12000 LPM as Primary & 3000 LPM as standby or Total minimum Plant Capacity of 15000LPM and as per specification. vendor may offer 2 plant and do zoing also to meet the flow capacity	Nos	1
4	Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of medical vacuum plant having a minimum capacity of 14000LPM as primary and 14000 LPM as standby as per specification. vendor may offer 2 plant and do zoing also to meet the flow capacity	Nos	1
5	Ward Vacuum Unit: Supply, installation, testing and commissiong of Ward Vacuum Unit as per specification.	Nos	930
5A	Low flow ward vacuum unit SITC as per specification	Nos	40
6	Theater Vaccum Unit for Operation Theaters: Supply, installation, testing and commissiong of Theater Vacuum Unit as specification.	Nos	40
7	Duplex AGSS System: Supply, Installation, testing and commissioning of medical AGSS plant having a minimum capacity of 2500 LPM as primary and 2500 LPM as standby as per specification.	Nos	1
8	Copper Pipes		
	Solid drawn, seamless, deoxidised, non- arsenical, half hard, tempered and degreased copper pipes as per specification.		
8.1	108mm OD X 1.5mm thick	m	300
8.2	76mm OD x 1.5mm thick	m	470
8.3	54mm OD X 1.2mm thick	m	2100
8.4	42mm OD X 1.2mm thick	m	550
8.5	35mm OD X 1.2mm thick	m	1050
8.6	28mm OD X 1 mm thick	m	1700
8.7	22mm OD X 1 mm thick	m	11200
8.8	15mm OD X 1 mm thick	m	27700
8.9	12mm OD X 1 mm thick	m	9300

9	Gas Outlet Points/ Terminal Units with probe: Supply,Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar , Vacuum, CO2 and AGSS as per specification		
9.1	Oxygen outlet with probe	Nos	1123
9.2	Nitrous Oxide outlet with probe	Nos	20
9.3	Medical Air 4 outlet with probe	Nos	526
9.4	Vacuum outlet with probe	Nos	1123
9.5	Medical Air 7 outlet with probe	Nos	11
9.6	AGSS outlet with probe	Nos	5
9.7	CO2 outlet with probe	Nos	11
10	AREA VALVE BOX (WITHOUT VALVES): Supply,Installation, testing and commissioning of Area Valve Boxes. as per specification		
10.1	Valve Box - 2 Gas Service	Nos	2
10.2	Valve Box - 3 Gas Service	Nos	40
10.3	Valve Box - 4 Gas Service	Nos	7
10.4	Valve Box - 5 Gas Service	Nos	2
10.5	Valve Box - 6 Gas services	No	17
11	MEDICAL GAS ALARM PANEL: Supply, Installation, testing and commissioning of Medical Gas Alarm Panel.as per specification		
11.1	Medical Gas Area Alarm for 2 services	Nos	2
11.2	Medical Gas Area Alarm for 3 services	Nos	44
11.3	Medical Gas Area Alarm 4 services	Nos	6
11.4	Medical Gas Area Alarm 5 services	Nos	2
11.5	Medical Gas Area Alarm 6 services	Nos	17
11.6	Master Alarm Panel	No	1
12	LINE ISOLATION VALVES: Supply, Installation, testing and commissioning of Line Isolation Valves as per specification		
12.1	15 mm ball valve	Nos	436
12.2	22 mm ball valve	Nos	187
12.3	28 mm ball valve	Nos	30
12.4	35 mm ball valve	Nos	12
12.5	42 mm ball valve	Nos	21
12.6	54 mm ball valve	Nos	24
12.7	76 mm ball valve	Nos	10
12.8	108 mm ball valve	Nos	12
13	Supply of O2 cylinders-Class D cylinders as per specification	Nos	170
14	Supply of N2O cylinders-Class D cylinders as per specification	Nos	40
15	Supply of CO2 cylinders-Class D cylinders as per specification	Nos	15
16	15A. Bed Head Horizontal (Without outlets) as per specification - 50% of total Qty 15B. Vertical Wall Panel (Without outlets) as per specification - 50% of total Qty	Nos	263

17	Supply, installation, testing and commissioning of Medical gas hose assemblies as per standard followed as per specification	m	800
18	Electric wiring inside the gas manifold and plant room including electrical panel for plant & Manifold rooms, etc work as per specification	Ls	1
19	Site Modification as per Specification	Ls	1
20	CO2 Manifold with control panel as per specification	No.	1
21	Extra Works as per specification		
	a Construction of Operator Room and Toilet (OPTIONAL)	Ls	1

	BOQ MGPS SYSTEM - AIIMS Bhatinda		
SN.	Item Description	Unit	Qty
1	Oxygen Supply System		
1.1	LMO Tank and Accessories as per specification	Nos.	1
1.2	Fully Automatic Oxygen Control System : Supply, Installation testing and commissioning of Fully Automatic Oxygen Control System. As per specification	Nos	2
1.3	Oxygen Manifold (2x16) : Supply, Installation, testing and commissioning of (2x16 size) class D cylinder Oxygen Supply System. As per specification	Nos	2
1.4	Emergency Oxygen Supply System : Supply, Installation, testing and commissioning of (2x5 size) class D cylinder Emergency Oxygen Supply System. As per specification	Nos	2
1.5	Oxygen Flow meter with Humidifier Bottle: Supply, installation, testing and commissioning of oxygen flow meter with humidifier bottle. As per specification	Nos	890
2	Nitrous Oxide (N2O) System		
2.1	Fully Automatic Manifold Control Panel for Nitrous Oxide: Supply, installation testing and commission of fully automatic control panel for Nitrous Oxide. As per specification	Nos	1
2.2	Nitrous Oxide Manifold System, (2x8 size): Supply, installation, testing and commissioning of Nitrous Oxide Manifold system .As per specification	Nos	1
2.3	Emergency Nitrous Oxide Manifold System, (2x4 size): Supply, installation, testing and commissioning of cylinder Emergency Nitrous Oxide supply System .As per specification	Nos	1
3	Medical Air Plant (Package Unit) including electrical control panel: Supply, Installation, testing and commissioning medical air plant having a minimum capacity of 11000 LPM as Primary & 3000 LPM as standby or Total minimum Plant Capacity of 14000LPM and as per specification. vendor may offer 2 plant and do zoing also to meet the flow capacity	Nos	1
4	Medical Vacuum Plant (Package unit): Supply, Installation, testing and commissioning of medical vacuum plant having a minimum capacity of 11000LPM as primary and 11000 LPM as standby as per specification. vendor may offer 2 plant and do zoing also to meet the flow capacity	Nos	1
5	Ward Vacuum Unit: Supply, installation, testing and commissiong of Ward Vacuum Unit as per specification.	Nos	866

5A	Low flow ward vacuum unit SITC as per specification	Nos	28
6	Theater Vaccum Unit for Operation Theaters: Supply, installation, testing and commissiong of Theater Vacuum Unit as specification.	Nos	43
7	Duplex AGSS System: Supply, Installation, testing and commissioning of medical AGSS plant having a minimum capacity of 2500 LPM as primary and 2500 LPM as standby as per specification.	Nos	1
8	Copper Pipes		
	Solid drawn, seamless, deoxidised, non- arsenical, half hard, tempered and degreased copper pipes as per specification.		
8.1	108mm OD X 1.5mm thick	m	110
8.2	76mm OD x 1.5mm thick	m	450
8.3	54mm OD X 1.2mm thick	m	2170
8.4	42mm OD X 1.2mm thick	m	1150
8.5	35mm OD X 1.2mm thick	m	800
8.6	28mm OD X 1 mm thick	m	2700
8.7	22mm OD X 1 mm thick	m	8900
8.8	15mm OD X 1 mm thick	m	20000
8.9	12mm OD X 1 mm thick	m	4800
9	Gas Outlet Points/ Terminal Units with probe: Supply,Installation, testing and commissioning of Gas outlet points for Oxygen, Nitrous Oxide, Medical Air 4 Bar , Vacuum, CO2 and AGSS as per specification		
9.1	Oxygen outlet with probe	Nos	1059
9.2	Nitrous Oxide outlet with probe	Nos	17
9.3	Medical Air 4 outlet with probe	Nos	457
9.4	Vacuum outlet with probe	Nos	1059
9.5	Medical Air 7 outlet with probe	Nos	5
9.6	AGSS outlet with probe	Nos	2
9.7	CO2 outlet with probe	Nos	7
10	AREA VALVE BOX (WITHOUT VALVES): Supply,Installation, testing and commissioning of Area Valve Boxes. as per specification		
10.1	Valve Box - 2 Gas Service	Nos	10
10.2	Valve Box - 3 Gas Service	Nos	70
10.3	Valve Box - 4 Gas Service	Nos	6
10.4	Valve Box - 5 Gas Service	Nos	2
10.5	Valve Box - 6 Gas services	No	20
11	MEDICAL GAS ALARM PANEL: Supply, Installation, testing and commissioning of Medical Gas Alarm Panel.as per specification		
11.1	Medical Gas Area Alarm for 2 services	Nos	6
11.2	Medical Gas Area Alarm for 3 services	Nos	47
11.3	Medical Gas Area Alarm 4 services	Nos	5
11.4	Medical Gas Area Alarm 5 services	Nos	2
11.5	Medical Gas Area Alarm 6 services	Nos	20
11.6	Master Alarm Panel	No	1

12	LINE ISOLATION VALVES: Supply, Installation, testing and commissioning of Line Isolation Valves as per specification		
12.1	15 mm ball valve	Nos	326
12.2	22 mm ball valve	Nos	126
12.3	28 mm ball valve	Nos	10
12.4	35 mm ball valve	Nos	5
12.5	42 mm ball valve	Nos	18
12.6	54 mm ball valve	Nos	8
12.7	76 mm ball valve	Nos	11
12.8	108 mm ball valve	Nos	9
13	Supply of O2 cylinders-Class D cylinders as per specification	Nos	170
14	Supply of N2O cylinders-Class D cylinders as per specification	Nos	40
15	Supply of CO2 cylinders-Class D cylinders as per specification	Nos	15
16	15A. Bed Head Horizontal (Without outlets) as per specification - 50% of total Qty 15B. Vertical Wall Panel (Without outlets) as per specification - 50% of total Qty	Nos	226
17	Supply, installation, testing and commissioning of Medical gas hose assemblies as per standard followed as per specification	m	800
18	Electric wiring inside the gas manifold and plant room including electrical panel for plant & Manifold rooms	Ls	1
19	Site Modification as per Specification	Ls	1
20	CO2 Manifold with control panel as per specification	Nos	1
21	Extra Works as per specification		

HLL Infra Tech Services Limited

LIST OF OUTLET & OTHER ACCESSORIES DETAIL OF GORAKHPUR

					Gas C	Dutlet	Point			F M	Vacu	uum U	Inits	BHP		Alar	rm Pai	nels				AVSU					lso	olatior	Valv	es					
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV			
	Ward (4 Bed)	4	4	1		4				4	4														- 2 1										
	Ward (2 Bed)	2	2	1		2				2	2																								
	Ward (4 Bed)	4	4	1		4				4	4																								
	Ward (4 Bed)	4	4	1		4				4	4															1									
	Ward (4 Bed)	4	4	1		4				4	4																								
	Ward (2 Bed)	2	2	1		2				2	2																								
Ground	Ward (2 Bed)	2	2	1		2				2	2																								
Floor	Ward (4 Bed)	4	4	1		4				4	4					4					1														
	Ward (4 Bed)	4	4	1		4				4	4														2	4									
	Ward (2 Bed)	2	2	1		2				2	2														2	1									
	Ward (4 Bed)	4	4	1		4				4	4														2	4									
	Ward (4 Bed)	4	4	1		4				4	4														2	1									
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	4									
	Treatment Room	1	1	1		1				1	1														2	1									

					Gas (Dutlet	Point			F M	Vac	uum L	Jnits	BHP		Alar	m Pa	nels				AVSU			Isolation Valves									
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	BHP	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV		
	Private Room (1 Bed)	1	1	1		1				1	1			1																				
	Private Room (1 Bed)	1	1	1		1				1	1			1																				
	Treatment Room	1	1	1		1				1	1														2	1								
	Private Room (1 Bed)	1	1	1		1				1	1			1																				
	Ward (2 Bed)	2	2	1		2				2	2																							
	Ward (4 Bed)	4	4	1		4				4	4																							
	Ward (4 Bed)	4	4	1		4				4	4														2	1								
	Ward (4 Bed)	4	4	1		4				4	4																							
	Exam/Treatment Room	1	1	1		1				1	1										_													
	ОТ			Availa	able w	ith Pe	ndant						2						1					1	5	1								
	Recovery (4 Bed)	4	8	4		8				4	4			4											2	1								
	Trauma & Resuscitation(7 Bed)	7	14	7		14				7	7			7											2	1								
	Isolation Room(1 Bed)	1	1	1		1				1	1			1											2	1								
	Observation (8 Beds)	8	8			8				8	8														2	1								
	Traige & Resuscitation(7 Bed)	7	14	7		14				7	7			7											2	1								

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					Gas (Outlet	Point			F M	Vac	uum l	Jnits	BHP		Ala	rm Pa	nels				AVSL	J		Isolation Valves								
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV	
	Traige(4 Bed)	4	8	4		8				4	4			4																			
	Gen X-ray	1	1	1		1				1	1														3	1							
	Dialysis (19 Beds)	19	19	19		19				19	19			19											2	1							
	Ward (2 Bed)	2	2	1		2				2	2														_								
	Isolation Room(1 Bed)	1	1	1		1				1	1			1											2	1							
	Cardiac ICU(16 Beds)	16	32	16		32				16	16			16							1				2	1							
	Isolation Room(1 Bed)	1	1	1		1				1	1			1											•								
	Isolation Room(1 Bed)	1	1	1		1				1	1			1											2	1							
	OT-1		•	•			•	•					2												5	1							
	OT-2												2												5	1							
First	OT-3												2			3	2		14			2		14	5	1							
Floor	OT-4												2			ľ	-							14	5	1							
	OT-5	1		Availa	able w	ith Pe	ndant						2			1		<u> </u>					<u> </u>		5	1					20 mm		
	OT-6												2					<u> </u>					<u> </u>		5	1							
	OT-7												2												5	1							
	OT-8												2												5	1							
	OT-9												2												5	1							

					Gas (Dutlet	Point			F M	Vac	uum U	Inits	BHP		Alarm Panels						AVSU	I		Isolation Valves									
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV		
	OT-10								1				2												5	1								
	OT-11												2												5	1								
	OT-12												2												5	1								
	OT-13												2												5	1								
	OT-14												2												5	1								
	Endoscopy	1	1	1		1	1			1	1														3	1								
	Endoscopy	1	1	1		1	1			1	1														3	1								
	Pre-OP(13 Beds)	13	13	13		13				13	13			13											2	1								
	Recovery (8 Bed)	8	16	8		16				8	8			8											2	1								
	Post OP (14 Bed)	14	28	14		28				14	14			14							1				2	1								
	Ward (4 Bed)	4	4	1		4				4	4																							
	Ward (2 Bed)	2	2	1		2				2	2																							
	Ward (4 Bed)	4	4	1		4				4	4																							
Second	Ward (4 Bed)	4	4	1		4				4	4					2	1				1	2			2	1								
	Ward (4 Bed)	4	4	1		4				4	4																							
	Ward (2 Bed)	2	2	1		2				2	2																							
	Ward (2 Bed)	2	2	1		2				2	2																							

					Gas (Dutlet	Point			F M	Vac	uum U	Inits	BHP		Alar	rm Pa	nels				AVSU	I				lsc	lation	n Valv	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	CO2	O2 Flow Meter	NVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Ward (4 Bed)	4	4	1		4				4	4																					
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Treatment Room	1	1	1		1				1	1														-	•						
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4														-	•						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	CathLab	1	1	1		1	1			1	1			1							1				3	1						
	Recovery(6 Bed)	6	12	6		12				6	6			6		1					1				2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
Third	Ward (2 Bed)	2	2	1		2				2	2					4					4				2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					

					Gas C	Dutlet	Point			F M	Vacu	uum U	Inits	BHP		Alar	m Pa	nels				AVSU					lso	lation	Valve	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4														2	4						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Treatment Room	1	1	1		1				1	1														2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (2 Bed)	2	2	1		2				2	2																					

					Gas (Dutlet	Point			F M	Vaci	uum U	Inits	BHP		Alaı	rm Pai	nels				AVSU					lso	lation	Valv	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Well Baby Nursery (14 Bed)	14	14	14		14				14	7	7													2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Gynaec Ward (2 Bed)	2	2	1		2				2	2																					
	Gynaec Ward (2 Bed)	2	2	1		2				2	2														2	1						
	Isolation Room(1 Bed)	1	1	1		1				1	1			1																		
	Isolation Room(1 Bed)	1	1	1		1				1	1			1																		
	NICU (16 Bed)	16	32	16		32				16		16				-									2	1						
	Eclampsia (2 Bed)	2	2	2		2				2	2			2											2	1						
	Labour (6 Bed)	6	6	6		6				6	6														2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1]									2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
Fourth	Private Room (1 Bed)	1	1	1		1				1	1			1		4					4				2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						<u> </u>
	Private Room (1	1	1	1		1				1	1			1											2	1						

					Gas (Dutlet	Point			F M	Vacu	uum U	nits	BHP		Alar	m Pai	nels				AVSU					lso	lation	n Valv	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Bed)																															
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Treatment Room	1	1	1		1				1	1														2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Treatment Room	1	1	1		1				1	1														2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						

					Gas (Dutlet	Point			F M	Vacu	uum U	Inits	BHP		Alar	m Pa	nels				AVSU					lso	latior	n Valve	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	BHP	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4														-	•						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						

					Gas C	Dutlet	Point			F M	Vacu	uum U	Inits	BHP		Ala	rm Pa	nels				AVSU	J				lso	lation	Valvo	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Treatment Room	1	1	1		1				1	1																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Treatment Room	1	1	1		1				1	1																					
	02																										4			1	1	
RISER	V																															5
RIJER	A4																												4	1	1	
	A7																											1	2			

					Gas (Dutlet	Point			F M	Vac	uum l	Jnits	BHP		Ala	rm Pai	nels				AVSL	J				lso	olatior	ı Valv	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	N20																								2	1	1					
	AGSS																													5	1	
	CO2																								5		1					
		41 1	49 3	26 3	0	49 3	3	0	0	41 1	38 8	23	30	151	0	17	3		15	0	12	4		15	23 0	88	6	1	6	7	3	5
Extra	For Future Provisions/Chan ges		20	10	5	20	5	2	5	10	10	5	5	10	1	5	1	1	1	1	5	1	1	1	40	20	10	5	5	5	2	1
	Total Quantities		513	273	5	513	8	2	5	421	398	28	35	161	1	22	4	1	16	1	17	5	1	16	270	108	16	6	11	12	5	6
<u> </u>																																
				L		L																										
	T								1																							
				Ga	as Out	let Po	int				Vac	uum l	Jnits	Bed Hea d Pan el		Ala	m Pa	nels				AVSL	J				lso	olatior	n Valv	es		

					Gas (Dutlet	Point			F M	Vaci	uum U	Inits	BHP		Alar	m Pa	nels				AVSU	I				lso	lation	Valv	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NVV	Low Flow WVU	TVU	внр	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
FLOOR	LOCATION Part -2 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	BHP	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Treatment Room	1	1	1		1				1	1																					
	Treatment Room	1	1	1		1				1	1														2	1						
	Treatment Room	1	1	1		1				1	1														2							
	Treatment Room	1	1	1		1				1	1																					
Ground	Treatment Room-11 Bed	11	11	1		11				11	11					2					2				2	1						
Floor	Treatment Room	1	1	1		1				1	1														2	1						
	Treatment Room	1	1	1		1				1	1														2	-						
	LINAC Bunker	1	1	1		1	1			1	1														2	1						
	LINAC Bunker	1	1	1		1	1			1	1														2	1						
	Medical Gas Manifold Room		1	1	1	1	1	1	1																5	1						
First Floor	Surgical ICU- 15 Bed	15	30	15		30				15	15			15		5					6				2	1						

					Gas C	Dutlet	Point			F M	Vacu	uum U	Inits	BHP		Alar	m Pa	nels				AVSU	I				lsc	lation	n Valve	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Respiratory ICU- 15 Bed	15	30	15		30				15	15			15											2	1						
	Isolation Room	1	1	1		1				1	1			1											2	1						
	Isolation Room	1	1	1		1				1	1			1											2	1						
	Isolation Room	1	1	1		1				1	1			1											2	1						
	Paediatric ICU- 15 Bed	15	30	15		30				15	8	7		15											2	1						
	HDU-15 Bed	15	30	15		30				15	15			15											2	1						
	Isolation Room	1	1	1		1				1	1			1											2	1						
	Isolation Room	1	1	1		1				1	1			1											2	1						
	Isolation Room	1	1	1		1				1	1			1											2	1						
	Isolation Room	1	1	1		1				1	1			1											2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (2 Bed)	2	2	1		2				2	2														2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Treatment Room	1	1	1		1				1	1																					
	Treatment Room	1	1	1		1				1	1																					

					Gas (Dutlet	Point			F M	Vac	uum L	Inits	BHP		Alar	rm Pa	nels				AVSU					lso	lation	Valvo	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MWU	Low Flow WVU	TVU	BHP	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Treatment Room	1	1	1		1				1	1																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1											2							
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Isolation Room	1	1	1		1				1	1			1																		
	Ward (2 Bed)	2	2	1		2				2	2																					
Correct.	Ward (4 Bed)	4	4	1		4				4	4					_					~				~							
Second	Ward (4 Bed)	4	4	1		4				4	4					3					3				2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					

					Gas (Dutlet	Point			F M	Vacu	uum U	Inits	BHP		Alar	rm Pa	nels				AVSU					lso	olation	n Valve	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4										_				2	1						
	Ward (2 Bed)	2	2	1		2				2	2																					
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1											-	•						
	Treatment Room	1	1	1		1				1	1																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4														2	•						
	Ward (4 Bed)	4	4	1		4				4	4																					

					Gas C	Dutlet	Point			F M	Vac	uum L	Inits	BHP		Alar	rm Pa	nels				AVSU					lso	lation	n Valve	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Treatment Room	1	1	1		1				1	1																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Ward (4 Bed)	4	4	1		4				4	4																					
	Treatment Room	1	1	1		1				1	1																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					

					Gas (Dutlet	Point			F M	Vac	uum L	Inits	BHP		Ala	rm Pa	nels				AVSU					lsc	lation	Valv	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NWU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (2 Bed)	2	2	1		2				2	2														2	1						
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (2 Bed)	2	2	1		2				2	2										-											
Third	Ward (4 Bed)	4	4	1		4				4	4					3					3											
	Ward (4 Bed)	4	4	1		4				4	4					1					1				2	1						
	Ward (4 Bed)	4	4	1		4				4	4										1											
	Ward (4 Bed)	4	4	1		4				4	4										1		<u> </u>									
	Ward (2 Bed)	2	2	1		2				2	2							1			1				2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Treatment Room	1	1	1		1				1	1]]				•							
	Private Room (1	1	1	1		1				1	1			1		1					1				2	1						

					Gas (Dutlet	Point			F M	Vac	uum L	Inits	BHP		Ala	rm Pa	nels				AVSU					lsc	lation	n Valve	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	c02	O2 Flow Meter	MVU	Low Flow WVU	TVU	внр	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Bed)																															
	Treatment Room	1	1	1		1				1	1										_											
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Ward (2 Bed)	2	2	1		2				2	2														2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					

					Gas (Dutlet	Point			F M	Vac	uum L	Inits	BHP		Ala	rm Pa	nels				AVSU					lso	lation	n Valve	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Treatment Room	1	1	1		1				1	1						-															
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Treatment Room	1	1	1		1				1	1														2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1							1				-	-						
	Treatment Room	1	1	1		1				1	1					1																
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
Fourth	Ward (4 Bed)	4	4	1		4				4	4										4				2	4						
Fourth	Ward (2 Bed)	2	2	1		2				2	2					4					4				2	1						

					Gas (Dutlet	Point			F M	Vacu	uum L	Jnits	BHP		Ala	rm Pa	nels				AVSU	I				lso	olation	valve	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (2 Bed)	2	2	1		2				2	2														2	1						
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1																	Ţ	
	Private Room (1 Bed)	1	1	1		1				1	1			1											2	1						

					Gas (Dutlet	Point			F M	Vac	uum L	Inits	BHP		Ala	rm Pa	nels				AVSU					lsc	lation	Valvo	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	02 Flow Meter	NVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (2 Bed)	2	2	1		2				2	2					_					_											
	Ward (4 Bed)	4	4	1		4				4	4					_					_											
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Ward (2 Bed)	2	2	1		2				2	2																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4														2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Treatment Room	1	1	1		1				1	1																					
	Ward (4 Bed)	4	4	1		4				4	4																					

					Gas (Dutlet	Point			F M	Vac	uum l	Jnits	BHP		Ala	rm Pa	nels				AVSU	J				lso	olatior	n Valv	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Treatment Room	1	1	1		1				1	1																					
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Private Room (1 Bed)	1	1	1		1				1	1			1																		
	Treatment Room	1	1	1		1				1	1																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4					_									2	1						
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4																					
	Ward (4 Bed)	4	4	1		4				4	4						-															
	02														1		1										4	1	1	1		
	V											1			1		1	1													1	5
RISER	A4					1						1			1		1	1	1										4	1	1	
	AGSS																													5	1	
		517	578	231	1	578	3	1	1	517	510	7	0	92	0	17	0	0	0	0	18	0	0	0	97	47	4	1	5	7	3	5
Extra	For Future Provisions/Chan ges		20	10	5	20	5	2	5	10	10	5	5	10	1	5	1	1	1	1	5	1	1	1	40	20	10	5	5	5	2	1

					Gas C	Dutlet	Point			F M	Vac	uum U	Inits	BHP		Alar	rm Pa	nels				AVSU	I				lso	lation	n Valvo	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Total Quantities		598	241	6	598	8	3	6	527	520	12	5	102	1	22	1	1	1	1	23	1	1	1	137	67	14	6	10	12	5	6
												MCDS	E MAT	RIX - Go	rokhr																	
			1									MGPC		Bed	гакпр		<u>'U</u>															
				Gas C)utlet	Point	(Nos)				Vac	uum U	Inits	Hea d Pan el	A	larm	Panel	S			AV	SU					lso	lation	ı Valvo	es		
FLOOR	LOCATION OPD Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Lithotripsy	<u> </u>	1	1		1	1			1	1														3	1						
CDOU	Urodynamics Lab	<u> </u>	-	-		-				1	1														2	1						
GROU ND	CT Scan	1	1	1		1	1			1	1						1					1			3	1						
	CT Scan	1	1	1		1	1			1	1														3	1						
	MRI	1	1	1		1	1			1	1														3	1						[

					Gas C	Dutlet	Point			F M	Vac	uum L	Jnits	BHP		Ala	rm Pa	nels				AVSU	J				lso	olatior	n Valv	es		
FLOOR	LOCATION Part -1 Hospital Block	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NWU	Low Flow WVU	TVU	BHP	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
	Fluroscopy/Gen X-ray	1	1	1		1				1	1														2	1						
	Fluroscopy	1	1	1		1				1	1														2	1						
	X-Ray	1	1	1		1				1	1														2	1						
	X-Ray	1	1	1		1				1	1														2	1						
	X-Ray	1	1	1		1				1	1														2	1						
	X-Ray	1	1	1		1				1	1														2	1						
		11	11	11	0	11	4	0		11	11		0	0	0	0	1	0	0	0	0	1	0	0	26	11	0	0	0	0	0	0
Extra	For Future Provisions/Chan ges		1	1	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	3	1	0	0	0	0	0	0
	Total Quantities		12	12	0	12	4	0	0	12	12	0	0	0	0	0	1	0	0	0	0	1	0	0	29	12	0	0	0	0	0	0
	Grand Total		1123	526	11	1123	20	5	11	960	930	40	40	263	2	44	6	2	17	2	40	7	2	17	436	187	30	12	21	24	10	12

HLL Infra Tech Services Limited

LIST OF OUTLET & OTHER ACCESSORIES DETAIL OF BHATHINDA

						Gas	Outlet	Point			F M		/acuui Units		BH P		Ala	rm Pai	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	SCIER	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NVU	Low Flow WVU	TVU	внр	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
1		LINAC	1	1	1		1	1			1	1						1					1			3	1						
2		LINAC	1	1	1		1	1			1	1											-			•	-						
5		Recovery Room(2 Bed)	2	4	2		4				2	2			2		1					1				2	1						
3	Basem ent	GAMMA	1	1	1		1	1			1	1						1					1			3	4					·	
4	em	PET CT	1	1	1		1	1			1	1						1					1			2	1						
		TPS/Simulator	1	1	1		1	1															1			3	1						
		Brachy Therapy	1	1	1		1	1												1						3							
6		ОТ	1		Av	ailabl	e with	Pend	ant		1			2											1	6	1						
7	Ground	Procedure Room	1	1			1				1	1																					
8		Procedure Room	1	1			1				1	1				1					1					1	1						
9		Procedure Room	1	1			1				1	1																					
10		Procedure Room	1	1			1				1	1									1					1	1						
11		Procedure Room	1	1			1				1	1				4					4					4	4						
12		Procedure Room	1	1			1				1	1				1					1					1	1						

HITES/PCD/AIIMS-IV/14/MGPS/18-19

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						Gas (Outlet	Point			F M		acuur Units		BH P		Alar	rm Pa	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
13		Procedure Room	1	1			1				1	1									4					1	4						
14		Procedure Room	1	1			1				1	1									1					1	1						
15		Endoscopy1	1	1	1		1	1		1	1	1												1		4	1						
16		Endoscopy2	1	1	1		1	1		1	1	1												1		4							
17		Post Recovery (4 Bed)	4	8	4		8				4	4			4				1			1				2	1						
18		Pre-OP (2 Bed)	2	2	2		2				2	2			2							•				-	•						
19		СТ	1	1	1		1	1			1	1						1					1			3	1						
20		MRI	1	1	1		1	1			1	1											I			3	-						
21		X-Ray	1	1			1				1	1									1					1	1						
22		X-Ray	1	1			1				1	1									•						•						
23		X-Ray	1	1			1				1	1				1					1					1	1						
24		Fluoroscopy	1	1			1				1	1									1					1	-						
25		Mammography	1	1			1				1	1									1					1	1						
26		Observation (22 Bed)	22	22			22				22	22				1					1					1	1						
27		Triage & Resiscitation(1 8 Bed)	18	36	18		36				18	18					1					1				2	1						
31		X-Ray	1	1			1				9	9																					
28		Criticl Care(9 Bed)	9	18	9		18				1	1					1					1				2	1						

						Gas (Dutlet	Point			F M		acuui Units		BH P		Ala	rm Pa	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NVW	Low Flow WVU	UVT	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
29		OT1	1		Δv	ailable	e with	Pond	ant					2						1					1	5	1						
30		OT2	1					renu	ant					2						1					1	5	1						
32		Isolation Room	2	2	2		2				1	1			2							1				2	1						
33		Ward (4 Bed)	4	4	1		4				4	4					1																
34		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
35		Ward (4 Bed)	4	4	1		4				4	4																					
36		Ward (4 Bed)	4	4	1		4				4	4																					
37		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
38		Ward (4 Bed)	4	4	1		4				4	4					1									2	•						
39		Ward (4 Bed)	4	4	1		4				4	4					-																
40		Procedure /Treatment Room	1	1	1		1				1	1														2	1						
43		C-Section OT	1		A	ailahl		Dand	- nt					2						1					1	5	1						
44		C-Section OT	1		AV		e with	rena	anı					2						1					1	5	1						
41		LDRP	1	1	1		1				1	1					4					4				2	1						
42		LDRP	1	1	1		1				1	1					1					1				2	1						
		C-Section Recovery	4	8	4		8				4	4			4		1					1				2	1						
45		Labour Room	1	1	1		1				1	1					1					1				2	1						
46		Baby	1	1	1		1				1		1													2							

						Gas C	Dutlet	Point			F M		acuui Units		BH P		Alar	m Par	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	MUUDAV	N2O	AGSS	C02	O2 Flow Meter	NVW	Low Flow WVU	UVT	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
		Resuscitation																															
47		Labour Room	1	1	1		1				1	1																					
48		Baby Resuscitation	1	1	1		1				1		1																				
49		Eclampsia	1	1	1		1				1	1			1																		
50		Eclampsia	1	1	1		1				1	1			1		1					4				2	1						
51		Eclampsia	1	1	1		1				1	1			1		1					1				2	I						
52		Eclampsia	1	1	1		1				1	1			1																		
53		Post Labour Room	5	10	5		10				5	5																					
54		Pre-Labour Room	5	5	5		5				5	5					1					1				2	1						
55		Isolation Room(NICU)	1	1	1		1				1	1			1																		
56		Isolation Room(NICU)	1	1	1		1				1	1			1		1					1				2	1						
57		NICU(15 Bed)	15	30	15		30				15		15		15							1				2	1						
58		Nursery (11 Bed)	11	11	11		11				11	5	6				1					1				2	1						
59		Procedure Room	1	1	1		1				1	1														2	4						
60	Firet	Procedure Room	1	1	1		1				1	1					4									2	1						
61	First	Procedure Room	1	1	1		1				1	1					1									•							
62		Procedure Room	1	1	1		1				1	1														2	1						

						Gas C	Dutlet	Point			F M		/acuui Units		BH P		Ala	rm Pa	nels			1	AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N20	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
63		Procedure Room	1	1	1		1				1	1														•							
64		Procedure Room	1	1	1		1				1	1														2	1						
65		OT1 Robotic	1											2												6	1						
66		OT2 Robotic	1											2												6	1						
67		OT3 Transplant	1											2											ĺ	6	1						
68		OT4	1											2											İ	6	1						
69		OT5 Transplant	1											2											·	6	1						
70		OT6	1											2											ĺ	6	1						
71		OT7	1		A	-: - - -		Penda						2						14					14	6	1						
72		OT8	1		AV		e with	Penaa	ant					2						14					14	6	1						
73		OT9	1											2												6	1						
74		OT10	1											2												6	1						
75		OT11	1											2												6	1						
76		OT12	1											2						1					ĺ	6	1						
77		OT13 Robotics	1											2						1					ĺ	6	1						
78		OT14	1											2						1					ĺ	6	1						
79		Post OP (16 bed)	16	32	1 6		32				16	16			16		1					1				2	1						
80		Pre OP (14 Bed)	14	14	1 4		14				14	14			14		1					1				2	1						

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						Gas C	Dutlet	Point			F M		/acuui Units		BH P		Alar	m Pa	nels				AVSU					lso	lation	Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
81		Post Cath (4 Bed)	4	8	4		8				4	4			4																		
82		Cath Lab	1	1	1		1	1			1	1			1			1					1			3	1						
83		Cath Lab	1	1	1		1	1			1	1			1																		
84		Surgical ICU (20 Bed)	20	40	2 0		40				20	20			20		1					1				2	1						
85		Surgical ICU (20 Bed)	20	40	2 0		40				20	20			20		1									0	•						
86		Treatment Room	1	1	1		1				1	1					1					1				2	1						
87		Ward (4 Bed)	4	4	1		4				4	4																					
88		Ward (4 Bed)	4	4	1		4				4	4																					
89		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
90		Ward (4 Bed)	4	4	1		4				4	4																					
91	-	Ward (4 Bed)	4	4	1		4				4	4																					
92	-	Ward (4 Bed)	4	4	1		4				4	4					1																
93	-	Ward (4 Bed)	4	4	1		4				4	4																					
94	-	Isolation Room	1	1	1		1				1	1			1							1				2	1						
95	-	Isolation Room	1	1	1		1				1	1			1																		
96		Procedure /Treatment Room	1	1	1		1				1	1																					
97		Ward (4 Bed)	4	4	1		4				4	4					1					1				2	1						

						Gas C	Dutlet	Point			F M		acuur Units		BH P		Ala	rm Pa	nels				AVSU					lso	olation	ı Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	NACUUM	N2O	AGSS	C02	O2 Flow Meter	NVW	Low Flow WVU	UVT	dHB	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
98		Ward (4 Bed)	4	4	1		4				4	4																					
99		Ward (4 Bed)	4	4	1		4				4	4																					
10 0		Ward (4 Bed)	4	4	1		4				4	4																					
10 1		Ward (4 Bed)	4	4	1		4				4	4																					
10 2		Ward (4 Bed)	4	4	1		4				4	4																					
10 3		Ward (4 Bed)	4	4	1		4				4	4																					
10 4		Isolation Room	1	1	1		1				1	1			1							1				2	1						
10 5		Isolation Room	1	1	1		1				1	1			1																		
10 6		Procedure /Treatment Room	1	1	1		1				1	1																					
10 7		Procedure Room	1	1	1		1				1	1																					
10 8		Procedure Room	1	1	1		1				1	1														2	1						
10 9		Procedure Room	1	1	1		1				1	1																					
11 0	Second	Procedure Room	1	1	1		1				1	1					1									2	1						
11 1		Procedure Room	1	1	1		1				1	1														2	4						
11 2		Procedure Room	1	1	1		1				1	1														2	1						
11 3		Medical ICU (20 Bed)	20	40	2 0		40				20	20			20		1					1				2	1						

						Gas C	Dutlet	Point			F M		acuur Units		BH P		Alar	m Pai	nels				AVSU					lso	latior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
11 4		Treatment Room	1	1	1		1				1	1																					
11 5		Medical ICU (20 Bed)	20	40	2 0		40				20	20			20											0							
11 6		Treatment Room	1	1	1		1				1	1					1					1				2	1						
11 7		Ward (4 Bed)	4	4	1		4				4	4																					
11 8		Ward (4 Bed)	4	4	1		4				4	4																					
11		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
9 12 0		Ward (4 Bed)	4	4	1		4				4	4																					
12 1		Ward (4 Bed)	4	4	1		4				4	4																					
12 2		Ward (4 Bed)	4	4	1		4				4	4					1																
12 3		Ward (4 Bed)	4	4	1		4				4	4																					
12 1 12 2 12 3 12 4 12 5		Isolation Room	1	1	1		1				1	1			1							1				2	1						
12 5		Isolation Room	1	1	1		1				1	1			1																		
12 6		Procedure /Treatment Room	1	1	1		1				1	1																					
12 7		Ward (4 Bed)	4	4	1		4				4	4																					
12 7 12 8 12		Ward (4 Bed)	4	4	1		4				4	4					1					1				2	1						
12 9		Ward (4 Bed)	4	4	1		4				4	4																					
									100											14.0		_											_

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	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			Gas C	Dutlet	Point			F M		/acuui Units		BH P		Ala	m Par	nels				AVSU					lso	olatior	n Valv	es				
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N20	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
13 0		Ward (4 Bed)	4	4	1		4				4	4																					
13 1		Ward (4 Bed)	4	4	1		4				4	4																					
13 2		Ward (4 Bed)	4	4	1		4				4	4																					
13 3		Ward (4 Bed)	4	4	1		4				4	4																					
4		Isolation Room	1	1	1		1				1	1			1							1				2	1						
13 5			1	1	1		1				1	1			1																		
		/Treatment	1	1	1		1				1	1																					
7		Ward (4 Bed)	4	4	1		4				4	4																					
8		Ward (4 Bed)	4	4	1		4				4	4																					
13 9		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
0		Ward (4 Bed)	4	4	1		4				4	4																					
14 1	Third	Ward (4 Bed)	4	4	1		4				4	4					1																
2		Ward (4 Bed)	4	4	1		4				4	4																					
14 3		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
14 4		Isolation Room	1	1	1		1				1	1			1							-				-	•						
14 5		Isolation Room	1	1	1		1				1	1			1																		
HITI	ES/PCD/A	AIIMS-IV/14/MC	GPS/1	18-19			Page	e No.	101									D	ated	14.02	2.201	9											

						Gas C	Dutlet	Point			F M		/acuu Units		BH P		Ala	rm Pa	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N20	AGSS	C02	O2 Flow Meter	WVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
14 6		Procedure /Treatment Room	1	1	1		1				1	1																					
14 7		Ward (4 Bed)	4	4	1		4				4	4																					
14 8		Ward (4 Bed)	4	4	1		4				4	4																					
14 9		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
14 9 15 0		Ward (4 Bed)	4	4	1		4				4	4																					
15 1		Ward (4 Bed)	4	4	1		4				4	4																					
15 2 15 3		Ward (4 Bed)	4	4	1		4				4	4					1																
15 3		Ward (4 Bed)	4	4	1		4				4	4																					
15 4		Isolation Room	1	1	1		1				1	1			1							1				2	1						
15 5		Isolation Room	1	1	1		1				1	1			1																		
15 6		Procedure /Treatment Room	1	1	1		1				1	1																					
13 7		Ward (4 Bed)	4	4	1		4				4	4																					
13 8		Ward (4 Bed)	4	4	1		4				4	4					1					1				2	1						
13 9		Ward (4 Bed)	4	4	1		4				4	4					1					'				-	1						
14 0		Ward (4 Bed)	4	4	1		4				4	4																					

						Gas C	Dutlet	Point			F M	۷	/acuu Units	m	BH P		Ala	rm Pa	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N20	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
14 1		Ward (4 Bed)	4	4	1		4				4	4																					
14 2		Ward (4 Bed)	4	4	1		4				4	4																					
14 2 14 3 14 4		Ward (4 Bed)	4	4	1		4				4	4																					
14 4		Isolation Room	1	1	1		1				1	1			1							1				2	1						
14 5		Isolation Room	1	1	1		1				1	1			1																		
14 6		Procedure /Treatment Room	1	1	1		1				1	1																					
14 7		Ward (4 Bed)	4	4	1		4				4	4																					
14 8		Ward (4 Bed)	4	4	1		4				4	4																					
14 9		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
15 0		Ward (4 Bed)	4	4	1		4				4	4																					
14 9 15 0 15 1 15 2 15 3		Ward (4 Bed)	4	4	1		4				4	4					1																
15 2		Ward (4 Bed)	4	4	1		4				4	4																					
15 3		Ward (4 Bed)	4	4	1		4				4	4																					
15 4		Isolation Room	1	1	1		1				1	1			1							1				2	1						
15 5 15 6		Isolation Room	1	1	1		1				1	1			1																		
15 6		Procedure /Treatment	1	1	1		1				1	1																					
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						Gas C	Dutlet	Point			F M		acuur Units		BH P		Ala	rm Pa	nels				AVSU					lso	olation	ı Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	NACUUM	N2O	AGSS	C02	O2 Flow Meter	NVW	Low Flow WVU	NVT	dHB	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
		Room																															
13 7		Ward (4 Bed)	4	4	1		4				4	4																					
13 8		Ward (4 Bed)	4	4	1		4				4	4																					
13		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
9 14 0		Ward (4 Bed)	4	4	1		4				4	4																					
14 1		Ward (4 Bed)	4	4	1		4				4	4																					
		Ward (4 Bed)	4	4	1		4				4	4					1																
14 2 14 3		Ward (4 Bed)	4	4	1		4				4	4																					
14 4	Fourth	Isolation Room	1	1	1		1				1	1			1							1				2	1						
14 5		Isolation Room	1	1	1		1				1	1			1																		
14 6		Procedure /Treatment Room	1	1	1		1				1	1																					
14 7		Ward (4 Bed)	4	4	1		4				4	4																					
14 8		Ward (4 Bed)	4	4	1		4				4	4																					
14		Ward (4 Bed)	4	4	1		4				4	4					1					1				2	1						
9 15 0		Ward (4 Bed)	4	4	1		4				4	4																					
15 1		Ward (4 Bed)	4	4	1		4				4	4																					

						Gas C	Dutlet	Point			F M		/acuui Units		BH P		Alar	m Par	nels				AVSU					lso	blatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N20	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	внр	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
15 2		Ward (4 Bed)	4	4	1		4				4	4																					
15 3		Ward (4 Bed)	4	4	1		4				4	4																					
15 4		Isolation Room	1	1	1		1				1	1			1							1				2	1						
15 5		Isolation Room	1	1	1		1				1	1			1																		
15 6		Procedure /Treatment Room	1	1	1		1				1	1																					
13 7		Ward (4 Bed)	4	4	1		4				4	4																					
13 8		Ward (4 Bed)	4	4	1		4				4	4																					
13 9		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
14 0		Ward (4 Bed)	4	4	1		4				4	4																					
14 1	-	Ward (4 Bed)	4	4	1		4				4	4																					
14 2		Ward (4 Bed)	4	4	1		4				4	4					1																
14 3		Ward (4 Bed)	4	4	1		4				4	4																					
14 4		Isolation Room	1	1	1		1				1	1			1							1				2	1						
14 5		Isolation Room	1	1	1		1				1	1			1																		
14 6		Procedure /Treatment Room	1	1	1		1				1	1																					

						Gas C	Dutlet	Point			F M	۷	/acuui Units	m	BH P		Ala	rm Pa	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N20	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
14 7		Ward (4 Bed)	4	4	1		4				4	4																					
14 8		Ward (4 Bed)	4	4	1		4				4	4																					
14 9		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
9 15 0 15 1		Ward (4 Bed)	4	4	1		4				4	4																					
15 1		Ward (4 Bed)	4	4	1		4				4	4																					
15 2 15		Ward (4 Bed)	4	4	1		4				4	4					1																
15 3		Ward (4 Bed)	4	4	1		4				4	4																					
3 15 4 15 5		Isolation Room	1	1	1		1				1	1			1							1				2	1						
15 5		Isolation Room	1	1	1		1				1	1			1																		
15 6		Procedure /Treatment Room	1	1	1		1				1	1																					
13 7		Ward (4 Bed)	4	4	1		4				4	4																					
13 8 13 9		Ward (4 Bed)	4	4	1		4				4	4																					
13 9	Fifth	Ward (4 Bed)	4	4	1		4				4	4					1					1				2	1						
14 0	i nui	Ward (4 Bed)	4	4	1		4				4	4																					
14 1		Ward (4 Bed)	4	4	1		4				4	4																					
14 2		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
нт	FS/PCD//	AIIMS-IV/14/MC	DC/1	18-19			Dog	- No	106									D	ated	14.02	2 201	9											

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						Gas C	Dutlet	Point			F M		/acuui Units		BH P		Ala	rm Pa	nels				AVSU					lso	blatior	n Valv	es		
S.NO.	FLOOR	LOCATION	SCIER	OXYGEN	MA 4 Bar	SA 7 Bar	NACUUM	N2O	AGSS	C02	O2 Flow Meter	NVU	Low Flow WVU	UVT	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
14 3		Ward (4 Bed)	4	4	1		4				4	4																					
14 4		Isolation Room	1	1	1		1				1	1			1																		
14 5		Isolation Room	1	1	1		1				1	1			1																		
14 6		Procedure /Treatment Room	1	1	1		1				1	1																					
14 7		Ward (4 Bed)	4	4	1		4				4	4																					
14 8		Ward (4 Bed)	4	4	1		4				4	4																					
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15 5		Isolation Room	1	1	1		1				1	1			1																		
15 6		Procedure /Treatment Room	1	1	1		1				1	1																					
13 7		Ward (4 Bed)	4	4	1		4				4	4					1					1				2	1						

						Gas C	Dutlet	Point			F M		/acuui Units		BH P		Ala	rm Pa	nels				AVSU					lso	latior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N20	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
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Page No. 108

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 | O2 Flow Meter

 | MVU

 | Low Flow WVU

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 | ВНР

 | Alarm- 2 Gas

 | Alarm - 3 Gas | Alarm - 4 Gas

 | Alarm- 5 Gas
 | Alarm- 6 Gas

 | AVSU - 2 Gas | AVSU - 3 Gas
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HITES/PCD/AIIMS-IV/14/MGPS/18-19

Page No. 109

Dated 14.02.2019

						Gas (Dutlet	Point			F M		acuur Units		BH P		Alaı	m Par	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N20	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
		Private Suite(1 Bed)	1	1	1		1				1	1			1																		
		Private Room(1 Bed)	1	1	1		1				1	1			1																		
		Private Room(1 Bed)	1	1	1		1				1	1			1							1				2	1						
		Private Room(1 Bed)	1	1	1		1				1	1			1																		
		Private Room(1 Bed)	1	1	1		1				1	1			1		1																
		Private Room(1 Bed)	1	1	1		1				1	1			1							1				2	1						
		Private Room(1 Bed)	1	1	1		1				1	1			1							I				2	1						
		Private Room(1 Bed)	1	1	1		1				1	1			1																		
		Private Room(1 Bed)	1	1	1		1				1	1			1																		
		Private Room(1 Bed)	1	1	1		1				1	1			1							1				2	1						
		Private Room(1 Bed)	1	1	1		1				1	1			1							I				2	1						
		Private Room(1 Bed)	1	1	1		1				1	1			1		1																
		Private Room(1 Bed)	1	1	1		1				1	1			1																		
		Private Room(1 Bed)	1	1	1		1				1	1			1							1				2	1						
		Private Room(1 Bed)	1	1	1		1				1	1			1							1				-	1						
		Private Room(1 Bed)	1	1	1		1				1	1			1																		

HITES/PCD/AIIMS-IV/14/MGPS/18-19 Page

						Gas (Dutlet	Point			F M		/acuu Units		BH P		Ala	m Pa	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	NVN	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
13 7		Ward (4 Bed)	4	4	1		4				4	4																					
13 8 13 9 14 0		Ward (4 Bed)	4	4	1		4				4	4																					
13 9		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
14 0		Ward (4 Bed)	4	4	1		4				4	4																					
14 1		Ward (4 Bed)	4	4	1		4				4	4																					
14 2 14 3		Ward (4 Bed)	4	4	1		4				4	4					1																
14 3		Ward (4 Bed)	4	4	1		4				4	4																					
14 4		Isolation Room	1	1	1		1				1	1			1							1				2	1						
14 5		Isolation Room	1	1	1		1				1	1			1																		
14 6		Procedure /Treatment Room	1	1	1		1				1	1																					
14 7		Ward (4 Bed)	4	4	1		4				4	4																					
14 8 14 9		Ward (4 Bed)	4	4	1		4				4	4																					
14 9		Ward (4 Bed)	4	4	1		4				4	4					1					1				2	1						
15 0		Ward (4 Bed)	4	4	1		4				4	4																					
15 1		Ward (4 Bed)	4	4	1		4				4	4																					
15 2		Ward (4 Bed)	4	4	1		4				4	4										1				2	1						
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						Gas (Dutlet	Point			F M		acuur Units		BH P		Ala	m Pa	nels				AVSU					lso	olatior	n Valv	es		
S.NO.	FLOOR	LOCATION	BEDS	OXYGEN	MA 4 Bar	SA 7 Bar	VACUUM	N2O	AGSS	C02	O2 Flow Meter	MVU	Low Flow WVU	TVU	ВНР	Alarm- 2 Gas	Alarm - 3 Gas	Alarm - 4 Gas	Alarm- 5 Gas	Alarm- 6 Gas	AVSU - 2 Gas	AVSU - 3 Gas	AVSU - 4 Gas	AVSU - 5 Gas	AVSU - 6 Gas	15 mm IV	22 mm IV	28 mm IV	35 mm IV	42 mm IV	54 mm IV	76 mm IV	108 mm IV
15 3		Ward (4 Bed)	4	4	1		4				4	4																					
15 4		Isolation Room	1	1	1		1				1	1			1																		
15 5		Isolation Room	1	1	1		1				1	1			1																		
15 6		Procedure /Treatment Room	1	1	1		1				1	1																					
	Extra	For Future Provisions/Cha nges		20	10	5	20	5	2	5	10	10	5	5	10	2	5	1	1	1	2	5	1	1	1	40	20	10	5	5	5	2	1
		02																												7		1	
15 7		V																															8
15 8		A4																														8	
15 9	Riser	A7																												3			
16 0		N2O																								2	1			3			
16 1		CO2																								3							
16 2		AGSS																													3		
		Total Quantities	901	1059	457	5	1059	17	2	7	890	866	28	43	226	6	47	5	2	20	10	70	6	2	20	326	126	10	5	18	8	11	9

GENERAL TECHNICAL SPECIFICATIONS

GENERAL POINTS:

- 1. Warranty:
 - a) Five years Comprehensive Warranty as per Conditions of Contract of the TE document for complete equipment (including Batteries for UPS, other vacuumatic parts wherever applicable) from the date of installation, commissioning and Turnkey Work from the date of satisfactory installation, commissioning, trial run & handing over of equipment to Hospital/Institution/Medical College.
 - b) 95% up time Warranty of complete equipment with extension of Warranty period by double the downtime period on 24 (hrs) X 7 (days) X 365 (days) basis.
 - c) All software updates should be provided free of cost during Warranty period.
- 2. After Sales Service:

After sales service centre should be available at the city of Hospital/Institution/Medical College 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 Tenderer/Indian Agent. Undertaking by the Principals that the spares for the equipment shall be available for at least 10 years from the date of supply.

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 consignee.

- 4. Annual Comprehensive Maintenance Contract (CMC) of subject equipment with Turnkey:
 - a) The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual of the manufacturer, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years on yearly basis for complete equipment (including Batteries for UPS, other vacuumatic parts wherever applicable) and Turnkey (if any). The supplier shall visit each consignee site as recommended in the manufacturer's technical/ service /operational manual, but at least once in six months during the CMC period
 - b) The cost of CMC may be quoted along with taxes applicable on the date of Tender Opening. The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such taxes and no claim for the same will be entertained later.
 - c) Cost of CMC will be added for Ranking/Evaluation purpose. The same will be taken at Net Present Value with a 10% discounting factor each year.
 - d) The payment of CMC will be made on six monthly basis after satisfactory completion of said period, duly certified by end user on receipt of bank guarantee for 2.5% of the cost of the equipment as per Section XV valid till 2 months after expiry of entire CMC period.
 - e) There will be 95% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
 - f) During CMC period, the supplier is required to visit at each consignee's site at least once in 6 months commencing from the date of the successful completion of warranty period for preventive maintenance of the goods.
 - g) All software updates should be provided free of cost during CMC.
 - h) Failure of the above [4. e) to 4. g)] by the supplier, may lead to the forfeiture of the Bank Guarantee for Annual CMC.
 - i) The payment of CMC will be made as stipulated in GCC Clause 21.

Turnkey/Site Modification work:

Turnkey is indicated in the technical specification of the respective items, wherever required. The Tenderer shall examine the existing site where the equipment is to be installed, in consultation with HOD of Hospital/Institution/Medical College concerned. Turnkey details of each Hospital/Institution/Medical College are given at the end of Technical Specification. The Tenderer to quote prices indicating break-up of prices of the Machine and Turnkey Job of each Hospital/Institution/Medical College. The Turnkey costs may be quoted in Indian Rupee will be added for Ranking Purpose.

The taxes to be paid extra, to be specifically stated. In the absence of any such stipulation the price will be taken inclusive of such duties and taxes and no claim for the same will be entertained later.

Section – VIII Quality Control Requirements

(Proforma for equipment and quality control employed by the manufacturer(s)

Tender Reference No.

Date of opening

Time

Name and address of the Tenderer:

Note: All the following details shall relate to the manufacturer(s) for the goods quoted for.

- 01 Name of the manufacturer
 - a. full postal address
 - b. full address of the premises
 - c. telegraphic address
 - d. telex number
 - e. telephone number
 - f. fax number
- 02 Plant and machinery details
- 03 Manufacturing process details
- 04 Monthly (single shift) production capacity of goods quoted for
 - a. normal
 - b. maximum
- 05 Total annual turn-over (value in Rupees)
- 06 Quality control arrangement details
 - a. for incoming materials and bought-out components
 - b. for process control
 - c. for final product evaluation
 - Test certificate held
 - a . type test
 - b . BIS/ISO certification
 - c . any other
- 08 Details of staff

07

- a. technical
- b skilled
- c unskilled

Signature and seal of the Tenderer

Section – IX Qualification Criteria

- 1. **Status:** The Bidder should be a Manufacturer or its authorized Agent.
 - (Bidder who meets all the qualification criteria need to quote directly. If the Indian subsidiary is meeting all the qualification parameter, they can quote directly or else the foreign principal can quote directly and they may mention in their bid that services will be rendered through their Indian Subsidiaries. However, they will be entirely responsible for execution of the contract as per terms and conditions and scope of services defined in the TED.)

The bidders/ firms identifying as MSME and or start-up firms are exempted from fulfilling Qualification criteria. However, this does not exempt any bidder/ firm/ manufacturer from fulfilling the quality requirements.

Note: "If the bidder is a MSME, it shall declare in the bid document the UdyogAadhar Memorandum Number issued to it under the MSMED Act, 2006. If a MSME bidder do not furnish the UAM Number along with bid documents, such MSME unit will not be eligible for the benefits available under Public Procurement Policy for MSEs Order 2012."

- 2. **Turnover:** Eligible Bidders should have a minimum cumulative average annual turnover in the past three financial years (i.e. for 2015-16, 2016-17, 2017-18) to qualify for the number of schedule as mentioned in **Eligibility Table.**
- 3. **Minimum Work of Similar Nature:** Eligible bidders should have successfully executed globally in last Seven years from the date of tender opening, similar turnkey project of value, equivalent to or exceeding 50% of the estimated schedule/ tender value. Out of total 50% value, at least one single order for similar work of minimum 10% of the estimated schedule/ tender value should have been executed globally. The details of requirement of cumulative schedule values for MWSN (minimum work of similar nature) are mentioned in Eligibility Table. The value of the executed works shall be brought to the current costing level by enhancing the actual value of work at simple rate of 7% per annum, calculated from the date of completion to last date of receipt of tenders.

Example/Clarification: Similar Project means that Medical Gas Pipeline System meeting major technical parameters irrespective of material of construction.

4. (a) Average Net Worth: Eligible bidders should have an Average Net Worth (i.e. Assets minus Liabilities) for the last five years (i.e. from 2015-16, 2016-17, 2017-18) of not less than 10% of the cumulative estimated value of work to qualify for the number of schedule as mentioned in Eligibility Table.

Or

(b) Solvency Certificate: Eligible bidders should submit a solvency certificate issued by a Nationalized / Scheduled bank anytime during the last six month from the date of tender opening, for a value of not less than 30% of the cumulative estimated value of work to qualify for minimum number of schedule as mentioned in Eligibility Table.

In case of a foreign bidder the solvency certificate can be submitted from a branch of a foreign bank having banking operations in India.

- 5. Office in India:- The bidder must have office/offices in India at the time of submitting bid. Proof of having office in India must be submitted along with the bid. In case the bidder does not have an office in India, at the time of submitting the bid, he should give an undertaking that he will open an office in India within 90 days from the date of award of contract in case the contract is awarded and he should also submit an undertaking in a non-judicial stamp paper duly notarised that they they will continue operation in India during the post installation period of at least 10 years to ensure required standard of service delivery with respect to warranty, CMC obligation of the equipment supplied and installed.
- 6. **Financial Status:** Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 31st March 2018 or 30th June 2018 or 30th September 2018 Audited Profit & Loss

account and Balance Sheet (duly notarized copies) for the immediate last five consecutive financial years should be submitted along with the bid.

7. **Manufacturer Authorization:** Eligible bidders quoting as an Indain Agent (ref. GIT calsue 14, Indian Agents) should submit a mandatory letter of authority from the Foreign Principal / Manufacturer, with name of manufacturing company for major products quoted by them as per given format as deatiled below.

For the following major items, Manufacturer's Authorization should be submitted as per format at Section XIV A :

1	Oxygen Supply System
2	Nitrous Oxide System
3	Medical Air Plant (Package Unit) including electrical control panel
4	Medical Vacuum Plant (Package unit)
5	Duplex AGSS System
6	Gas Outlet Points/ Terminal Units with probe
7	Medical Gas Alarm Panel
8	CO2 Manifold with control panel (optional)

For the following items, Manufacturer's Authorization should be submitted as per format at Section XIV-B:

1	Copper pipes
2	Line Isolation Valves

Note:

Bidder must clearly spell out in his bid what product and technical configuration he is quoting against the tender requirement. The manufacturer of the quoted product should also be binding legally to perform against the said contract including warranty and CMC terms.

8. **Bid for Complete Schedule/Part Schedule:** Bidder cannot choose to submit bid for part schedule/part sub schedule. If the bid is submitted for part schedule/sub schedule, the same will be termed as non-responsive. A bidder intending to get qualified and considered for award of work for more than one schedule will be required to meet the above qualification criteria on cumulative basis related to experience as well as financials, for such number of schedules.

Eligibility Table:

ole	R	equirement o	f Minimum Cur	mulative Values (In IN	R) to determine nun	nber of Eligible Schedul	es
Cumulative Schedule/ Eligible Number of Schedules	Estimated Cost	EMD to be submitted	Average Annual Turnover	Similar Projects executed in last seven years for meeting 50% of the estimated cost	Single order executed in last seven years for meeting 10% of estimated cost	Avg. Net Worth in last five years for meeting 10% of the estimated cost	Solvency for meeting 30% of the estimated cost
AIIMS Gorakhpur	1506,55,350	28,82,734	451,96,605	753,27,675	150,65,535	150,65,535	451,96,605
AIIMS Bhatinda	1376,18,000	28,82,734	412,85,400	688,09,000	137,61,800	137,61,800	412,85,400

Note: The bidders have to quote for all the schedules while submitting their bids. The purchaser will have the right to award the work for any schedule(s)/site(s) considering bidders eligibility and considering the best benefit (at the least cost) to the purchaser. In case a Bidder intending to get qualified in more than one schedule they should submit EMD accordingly for such number of schedules on cumulative basis. Thus, the bidder must quote for all the schedules mandatorily; **otherwise their bid will be summarily rejected.**

Least Cost Method: - Least cost method to the purchaser means award of work that has least cost to the purchaser.

Sample Examples

The below examples have taken only six schedules into consideration for the purpose of demonstrating the method. Actual evaluation will be done for Seventeen (17) schedules.

	Example N	No.1	(I)	(II)	(111)	(IV)	(V)	(VI)
	Bidders	6	Sch. 01	Sch. 02	Sch. 03	Sch. 04	Sch. 05	Sch. 06
	Qualified in No. of schedules	L1 for sites (Nos.)	Rs. Cr					
А	1	1	14	15	16	19	18	12
В	3	2	12	13	18	18	15	14
С	1	1	16	14	15	16	13	18
D	2	2	18	17	14	15	16	13
Е	1	-	15	20	17	21	19	16
F	3	-	13	14	16	17	14	15
L1	bidder and cos	t Sch. Wise	B(12)	B(13)	D(14)	D(15)	C(13)	A(12)
	Award to Bi (based on lea		B(12)	B(13)	D(14)	D(15)	C(13)	A(12)

In this example, the no(s) of schedules for which each bidder is L1 is equal to or less than the no. of schedules for which it is qualified. Therefore, Bidders will be awarded the work on L1 basis for each schedule as per the above table.

	Example I	No.2	(I)	(II)	(III)	(IV)	(V)	(VI)
	Bidders	S	Sch. 01	Sch. 02	Sch. 03	Sch. 04	Sch. 05	Sch. 06
	Qualified in No. of schedules	L1 for sites (Nos.)	Rs. Cr					
А	1	1	14	15	16.5	19	18	12
В	3	2	12	13	18	18	15	14
С	1	1	16	14	17.5	16.5	13	18
D	1	2	18	17	14	15	16	13
Е	1	-	15	20	17	21	19	16
F	3	-	13	14	16	16	14	15
L1b	idder and cos	t Sch. Wise	B(12)	B(13)	D(14)	D(15)	C(13)	A(12)
	Award to B (based on lea		B(12)	B(13)	D(14)	F(16)	C(13)	A(12)

Bidder D is eligible for only one site. However, D is L1 for two sites, i.e. Sch. 03 and Sch. 04.

Case 1: D(L1) for Sch. 03 and F(L2) for Sch. 04 =(14+16)=30.

Case 2: D(L1) for Sch. 04 and F(L2) for Sch. 03 =(15+16)=31.

Thus, by least cost method, D will be awarded Sch. 03 and F will be awarded Sch. 04.

	Example	No.3	(I)	(II)	(111)	(IV)	(V)	(VI)
	Bidder	S	Sch. 01	Sch. 02	Sch. 03	Sch. 04	Sch. 05	Sch. 06
	Qualified in No. of schedules	L1 for sites (Nos)	Rs. Cr					
А	1	1	14	15	16.5	19	18	12
В	3	2	12	13	18	18.5	15	14
С	1	1	16	14	15	15.5	13	18
D	1	2	18	17	14	15	16	13
Е	1	-	15	20	17	21	19	16
F	3	-	13	14	16	18	14	15
L1t	oidder and cos	t Sch. Wise	B(12)	B(13)	D(14)	D(15)	C(13)	A(12)
	Award to B (based on lea		B(12)	B(13)	D(14)	C(15.5)	F(14)	A(12)

Bidder D is eligible for only one site. However, D is L1 for two sites, i.e. Sch. 03 and Sch. 04.

Case 1: D(L1) for Sch. 03, C(L2) for Sch. 04 and F(L2) for Sch. 05 = (14+15.5+14) = 43.5.

Case 2: C(L2) for Sch. 03, D(L1) for Sch. 04 and F(L2) for Sch. 05 = (15+15+14) = 44.

Case 3: D(L1) for Sch. 03, F(L3) for Sch. 04 and C(L1) for Sch. 05=(14+18+13) = 45.

Case 4: F(L3) for Sch. 03, D (L1) for Sch. 04 and C (L1) for Sch. 05 = (16+15+13) = 44

Thus, by least cost method, D will be awarded Sch. 03, C will be awarded Sch. 04 and F will be awarded Sch. 05.

The above are only sample examples and do not cover all situations. In any and all situations the method and principle of least cost to the purchaser will be followed.

Notes:

In support of 3, the bidder shall furnish Performance statement in the enclosed Proforma 'A'.

The bidder shall furnish Satisfactory Performance Certificate in respect of above (i.e. Section IX, Qualification Criteria of TED) in case not from India, duly translated in English and duly endorsed by country's Embassy present in India, along with the tender.

- 1. The bidder shall furnish a brief write-up, along with adequate data explaining and establishing his available capacity/capability (both technical and financial) to perform the Contract (if awarded) within the stipulated time period, after meeting all its current/present commitments. The Tenderer shall also furnish details of Equipment and Quality Control in the enclosed Section VIII.
- 2. Notwithstanding anything stated above, the Purchaser reserves the right to assess the Tenderer's capability and capacity to perform the contract satisfactorily before deciding on award of Contract, should circumstances warrant such an assessment in the overall interest of the Purchaser.
- 3. The Purchaser reserves the right to ask for a free demonstration of the quoted equipment at a pre determined place acceptable to the purchaser for technical acceptability as per the tender specifications, before the opening of the Price Tender.

PROFORMA 'A' PROFORMA FOR PERFORMANCE STATEMENT

(For the period of last five years)

Tender Reference No.	:
Date of opening	:
Time	:
Name and address of the Tenderer	:
	·

Name and address of the manufacturer

Order placed by (full	Order number and date	Description and quantity of ordered	Value of order	Date of completio Contract	n of	Remarks indicating reasons for	Have the goods been functioning
address of Purchaser/ Consignee)		goods and services	(Rs.)	As per contract	Actual	delay if any	Satisfactorily (attach documentary proof)**
1	2	3	4	5	6	7	8

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 purchser in addition to forfeiture of the earnest money.

Signature and seal of the Tenderer

- ** The documentary proof will be a certificate from the consignee/end user with cross reference of order no. and date in the certificate along with a notarized certification authenticating the correctness of the information furnished. In case the end user certificate from a private hospsital, it should be supported with a proof for receipt of payment/LC document/ TDS certificate.
- ** The biders are requested to submit the latest purchase order copies supplied to AIIMS, PGIMER, JIPMER, Institute of National importance for the specific model quoted along with the price bid.
- ** Bidder may submit performance certificate duly linked mentioning order number, date of delivery, installation, commissioning and value by the end user.

HITES/PCD/AIIMS-IV/14/MGPS/18-19

Section – X TENDER FORM

То

Date_____

CEO, HLL Infra Tech Services Limited, Procurement and Consultancy Division, B-14 A, Sector -62, Noida -201307, Uttar Pradesh

Ref. Your TE document No. _____dated _____

We, the undersigned have examined the above mentioned TE document, including amendment/corrigendum No. ______, dated ______ (*if any*), the receipt of which is hereby confirmed. We now offer to supply and deliver______ (*Description of goods and services*) in conformity with your above referred document for the sum as shown in the price schedules attached herewith and made part of this tender. If our tender is accepted, we undertake to supply the goods and perform the services as mentioned above, in accordance with the delivery schedule specified in the List of Requirements.

We further confirm that, if our tender is accepted, we shall provide you with a 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.

We agree to keep our tender valid for acceptance as required in the GIT clause 20, read with modification, if any in Section - III – "Special Instructions to Tenderers" or for subsequently extended period, if any, agreed to by us. We also accordingly confirm to abide by this tender up to the aforesaid period and this tender may be accepted any time before the expiry of the aforesaid period. We further confirm that, until a formal contract is executed, this tender 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 tender you may receive against your above-referred tender enquiry.

We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities.

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

(Signature with date)

(Name and designation) Duly authorised to sign tender for and on behalf of

$\underline{SECTION-XI}$

PRICE SCHEDULE

Price to be filled in the relevant field of Price Format in Excel provided available in the e-tendering portal.

SECTION – XII

QUESTIONNAIRE

Fill up the Techno-Commercial Compliance Sheet Bid provided in spreadsheet (Excel file) and upload in the C-Folder

- The tenderer should furnish specific answers to all the questions/issues mentioned in the Techno-Commercial Compliance Sheet. In case a question/issue does not apply to a tenderer, the same should be answered with the remark "not applicable".
- 2. Wherever necessary and applicable, the tenderer shall enclose certified scanned copy as documentary proof/ evidence to substantiate the corresponding statement.
- 3. In case a tenderer furnishes a wrong or evasive answer against any of the question/issues, their tender is liable to be ignored.
- Note: The documents like Priced Proforma Invoice (Single Proforma Invoice from Manufacturer's indicating uniform unit rates) and List of Consumables with prices can be uploaded in the Notes & Attachment under Rfx information (<u>Please note, in</u> <u>the separate Notes & Attachment provided under Rfx information and not in the C-Folder Notes & Attachments</u>).

SECTION – XIII

BANK GUARANTEE FORM FOR EMD

Whereas	(hereinafter calle	d the "Te	endere	er") has submit	ted it	s quota	ation d	lated
for the s	supply of			(hereinafte	r cal	led the	e "tend	der")
against the purchaser's tender end	quiry No			Know all pers	sons	by thes	se pres	sents
that we	of			(Hereinaf	ter ca	alled th	ie "Ba	nk")
having our registered office at						are be	ound	unto
	(hereinafter	called	the	"Purchaser)	in	the	sum	of
fo	r which payment	will and	truly	to be made to t	the sa	uid Pur	chaser	the
Bank binds itself, its successors a said Bank thisday of		-					Seal of	f the

- 1) If the Tenderer withdraws or amends, impairs or derogates from the tender in any respect within the period of validity of this tender.
- 2) If the Tenderer having been notified of the acceptance of his tender by the Purchaser during the period of its validity:-

fails or refuses to furnish the performance security for the due performance of the contract or fails or refuses to accept/execute the contract or if it comes to notice that the information/documents furnished in its tender is incorrect, false, 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 both the two conditions, specifying the occurred condition(s).

(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

To be enclosed with Techno-Commercial Bid

ANNEXURE-A

BIDDER PARTICULARS

- 1. Name of the Bidder
- 2. Address of the Bidder :
- 3. Name of the Manufacturer (s) :
- 4. Address(es) of the Manufacturer :

:

5. Name and address of the person: To whom all references shall be made regarding this tender inquiry.

Telephone: Telex : Fax : E-mail address : Witness:

Signature

Name Address Designation Company Date Company Seal To be enclosed with Techno-Commercial Bid

ANNEXURE-B

UNDERTAKING

То,

Sir,

Having examined the Bidding Documents of Tender No._____undersigned offers to supply, install, commission, operate maintain_____and we undertake, if our bid is accepted, to complete delivery of all the items specified in the contract within_____weeks calculated from the date of receipt of your Notification of Award and to complete the installation, testing & commissioning.

Signature and Seal

(In the capacity of)

Only Authorized to sign bid for and on behalf of

To be enclosed with Techno-Commercial Bid

ANNEXURE-C

BIDDER PROFILE

A. General Information:

(i) Location of Corporate Headquarters : (ii) Date and Country of Incorporation : (iii) Manufacturing Facility (S) Location Size Capacity (iv) No. of Service Facility(S) in India Location Strength Area Covered (v) Average yearly turnover for last three years: (vi) Geographical Distribution of the Supplier : No. of Offices Locations Staff strength (vii) Total No. of installations of the system offered. (viii) No. of Employees Total No. Manufacturing R&D (If any) Hardware Maintenance Software

B. Reference of Major installation with similar products (attach documents in support, if available) ______S. No. Customer Name, Address Product Description

Telephone Fax Number (No. of Machines installation year wise).

Date.....

Signature and seal of bidder

SECTION – XIV - A MANUFACTURER'S AUTHORISATION FORM

CEO,

HLL Infra Tech Services Limited, Procurement and Consultancy Division B-14 A, Sector -62, Noida -201307, Uttar Pradesh

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 tender) having factories at ______, hereby authorise Messrs ______ (name and address of the agent) to submit a tender, 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 tender for the following reason(s):

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 tender, 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.

_____(please provide reason

We also hereby extend our full warranty, CMC 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 authorised agent

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: 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.

SECTION – XIV - B MANUFACTURER'S AUTHORISATION FORM

CEO,

HLL Infra Tech Services Limited, Procurement and Consultancy Division B-14 A, Sector -62, Noida -201307, Uttar Pradesh

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 tender) having

factories at_____, hereby authorise Messrs_____(name and

address

of the agent) to submit a tender, 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 tender for the following reason(s):

______(please provide reason

here).

We also hereby extend our full warranty, CMC 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 authorised agent

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.Orginal Letter may be sent. Photocopy not acceptable

SECTION – XV BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

CEO,

HLL Infra Tech Services Limited, Procurement and Consultancy Division B-14 A, Sector -62, Noida -201307, Uttar Pradesh

WHEREAS ______ (Name and address of the supplier) (Hereinafter called "the supplier") has undertaken, in pursuance of contract no ______ dated to supply (description of goods and services) (herein after 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 recognised 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. ______ (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 shall be valid up to 66 (sixty six) months from the date of Notification of Award i.e. up to ----- (indicate 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

To be enclosed with Techno-Commercial

ANNEXURE

PROFORMA OF GUARANTEE FOR SUPPLY OF SPARES DURING POST WARRANTY PERIOD

To,

			ĺ																																
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	

Sub: Tender No.....

Dear Sir,

In consideration of the (hereinafter referred to as "Purchaser" which expression shall unless repugnant to the thereof include its context or meaning successors. administrators and assignees) having awarded to M/s.... with its Registered/Head office at to the context or meaning thereof, include its successors, administrators, executors and assignees), a contract by issue of the Purchaser's letter of Award no...... dated entering into a formal contract referred to as the contract).

We the supplier hereby give a guarantee for the supply of all necessary spares demanded for the routine and emergency maintenance of being supplied by us to for a period of not less than 5 years after the warranty period of 5 years and life time spares thereafter in case asked for by the purchaser.

We further clarify that for the first 5 years i.e. warranty period of 5 years, we are covered by the warranty clause as mentioned. For the remaining period of 5 Years and thereafter for the life time, a detailed list of spares will be supplied to the purchaser for the purpose of enabling him to decide spares needed for routine and emergency maintenance.

(Signature) Name: For & on behalf of M/s....

SECTION – XVI CONTRACT FORM - A

<u>CONTRACT FORM FOR SUPPLY, INSTALLATION, COMMISSIONING, HANDING</u> <u>OVER, TRIAL RUN, TRAINING OF OPERATORS & WARRANTY OF GOODS</u>

(Address of the Purchaser's/Consignee's office issuing the contract)

Contract No_____ dated___

This is in continuation to this office's Notification of Award No_____ dated _____

1. Name & address of the Supplier: _____

2. Purchaser's TE document No_____ dated_____ and subsequent Amendment No______, dated______ (if any), issued by the purchaser

3. Supplier's Tender No_____ dated_____ and subsequent communication(s)

No_____ dated _____ (if any), exchanged between the supplier and the purchaser in connection with this tender.

- 4. In addition to this Contract Form, the following documents etc, which are included in the 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) Tender Form furnished by the supplier;
 - (vii) Price Schedule(s) furnished by the supplier in its tender;
 - (viii) Manufacturers' Authorisation Form (if applicable for this tender);
 - (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 Tenderers' of the Purchaser's TE 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 goods/services	Accounting unit	Quantity to be supplied	Unit 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
- (iv) Quality Control

- (a) Mode(s), stage(s) and place(s) of conducting inspections and tests.
- (b) Designation and address of purchaser's inspecting officer
- (v) Destination and despatch instructions
- (vi) Consignee, including port consignee, if any
- 6. Warranty clause
- 7. Payment terms
- 8. Paying authority

(Signature, name and address of the Purchaser's/Consignee's authorised official) For and on behalf of_____

Received and accepted this contract

(Seal of the supplier) Date:

Place:	
1 1400.	

CONTRACT FORM – B

CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

Annual CM Contract No._____ Between

(Address of Head of Hospital) And

(Name & Address of the Supplier)

Ref: Contract No_____ dated_____ (Contract No. & date of Contract for supply, installation, commissioning, handing over, Trial run, Training of operators & warranty of goods)

In continuation to the above referred contract

2. The Contract of Annual Comprehensive Maintenance is hereby concluded as under:

dated

1	2	3		4		5	6		
Sche dule No.	BRIEF DESCRIPTION OF GOODS	QUANTITY. (Nos.)	Ma	Comp inten Cost fo	ance	ensive Cont ch U1	ract	Total annual comprehensive maintenance contract for 5 years for each unit for 5 years	Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]
								4a+4b+4c+4d+4e	(3*5(4a+4b+4c+4d+4e))

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

- b) The CMC 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 CMC)
- c) The cost of Annual Comprehensive Maintenance Contract (CMC) which includes preventive maintenance, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years as contained in the above referred contract on yearly basis for complete equipment (including X ray tubes, Helium for MRI, Batteries for UPS, other vacuumatic parts, _____ & ____) and Turnkey (if any).
- d) There will be 98% uptime warranty during CMC period on 24 (hrs) X 7 (days) X 365 (days) basis, with penalty, to extend CMC period by double the downtime period.
- e) During CMC 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 6 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 CMC.
- g) The bank guarantee valid till _____ [(fill the date) 2 months after expiry of entire CMC 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 XV of the TE document, along with the signed copy of Annual CMC within a period of

21 (twenty one) days of issue of Annual CMC failing which the proceeds of Performance Security shall be payable to the Purchaser/Consignee.

- h) If there is any lapse in the performance of the CMC as per contract, the proceeds Annual CMC bank guarantee for an amount of Rs. _____ (equivalent to 2.5 % of the cost of the equipment as per contract) shall be payable to the Consignee.
- i) **Payment terms:** The payment of Annual CMC will be made against the bills raised to the consignee by the supplier on six monthly basis after satisfactory completion of said period, duly certified by the HOD concerned. The payment will be made in Indian Rupees.
- j) **Paying authority:** ______ (name of the consignee i.e. Hospital authorised official)

(Signature, name and address of Hospital authorised official) For and on behalf of

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 ______ (Name and address of the supplier)

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

SECTION – XVII <u>CONSIGNEE RECEIPT CERTIFICATE</u> (To be given by consignee's authorized representative)

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

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

SECTION – XVIII Proforma of Final Acceptance Certificate by the Consignee

No	Date
То	
M/s	
Subject:	Certificate of commissioning of equipment/plant.
Subject.	Certificate of commissioning of equipment/plant.

This is to certify that the equipment(s)/plant(s) as detailed below has/have been received in good conditions along with all the standard and special accessories and a set of spares (subject to remarks in Para no.02) in accordance with the contract/technical specifications. The same has been installed and commissioned.

(a)	Contract No	dated
(b)	Description of the equipment(s)/plants:	
(c)	Equipment(s)/ plant(s) nos.:	
(d)	Quantity:	
(e)	Bill of Loading/Air Way Bill/Railway Receipt/ Goods Consignment Note no	dated
(g)	Name of the vessel/Transporters: Name of the Consignee: Date of site hand-over to the supplier by consignee: _	
	Date of commissioning and proving test:	

Details of accessories/spares not yet supplied and recoveries to be made on that account.

Sl. No.	Description of Item	Quantity	Amount to be recovered

The proving test has been done to our entire satisfaction and operators have been trained to operate the equipment(s)/plant(s).

The supplier has fulfilled its contractual obligations satisfactorily ## or

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

a) He has not adhered to the time schedule specified in the contract in dispatching the documents/ drawings pursuant to 'Technical Specifications'.

- b) He has not supervised the commissioning of the equipment(s)/plant(s)in time, i.e. within the period specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).
- c) The supplier as specified in the contract has not done training of personnel.

The extent of delay for each of the activities to be performed by the supplier in terms of the contract is

The amount of recovery on account of non-supply of accessories and spares is given under Para no.02.

The amount of recovery on account of failure of the supplier to meet his contractual obligations is______ (here indicate the amount).

(Signature) (Name) (Designation with stamp)

Explanatory notes for filling up the certificate:

- i) He has adhered to the time schedule specified in the contract in dispatching the documents/drawings pursuant to 'Technical Specification'.
- ii) He has supervised the commissioning of the equipment(s)/plant(s) in time, i.e. within the time specified in the contract from date of intimation by the Purchaser/Consignee in respect of the installation of the equipment(s)/plant(s).
- iii) Training of personnel has been done by the supplier as specified in the contract.
- iv) In the event of documents/drawings having not been supplied or installation and commissioning of the equipment(s)/plant(s) having been delayed on account of the supplier, the extent of delay should always be mentioned in clear terms.

	Consignee List										
Sl. No.	Name of Hospital and Address	State	Airport	Dry Port/ Seaport							
1.	AIIMS, Gorakhpur	Uttar Pradesh	New Delhi	ICD Tughlaqabad, New Delhi							
2.	AIIMS, Bhatinda	Punjab	New Delhi	ICD Tughlaqabad, New Delhi							

Section – XIX Consignee List

NB: The consignee will ensure timely issue of NMIC, CDEC, Octroi Exemption Certificates, Road Permits & Entry Tax Exemption Certificates, wherever applicable, to the suppliers.

Appendix-A

No. P-45021/2/2017-PP (BE-II) Government of India Ministry of Commerce and Industry Department of Industrial Policy and Promotion (Public Procurement Section)

> Dated 28th May, 2018 Udyog Bhawan, New Delhi

То

All Central Ministries/Departments/CPSUs/All concerned

ORDER

Subject: Public Procurement (Preference to Make in India), Order 2017 – Revision; regarding.

Department of Industrial Policy and Promotion, in partial modification of Order No.P-45021/2/2017-B.E.-II dated 15.6.2017, hereby issues the revised 'Public Procurement (Preference to Make in India), Order 2017" with immediate effect:-

Whereas it is the policy of the Government of India to encourage 'Make in India' and promote manufacturing and production of goods and services in India with a view to enhancing income and employment, and

Whereas procurement by the Government is substantial in amount and can contribute towards this policy objective, and

Whereas local content can be increased through partnerships, cooperation with local companies, establishing production units in India or Joint Ventures (JV) with Indian suppliers, increasing the participation of local employees in services and training them,

Now therefore the following Order is issued :

- 1. This Order is issued pursuant to Rule 153 (iii) of the General Financial Rules 2017.
- 2. Definitions: For the purposes of this Order:

'Local content' means the amount of value added in India which shall, unless otherwise prescribed by the Nodal Ministry, be the total value of the item procured (excluding net domestic indirect taxes) minus the value of imported content in the item (including all customs duties) as a proportion of the total value, in percent.

'Local supplier' means a supplier or service provider whose product or service offered for procurement meets the minimum local content as prescribed under this Order or by the competent Ministries / Departments in pursuance of this order.

'L1' means the lowest tender or lowest bid or the lowest quotation received in a tender, bidding process or other procurement solicitation as adjudged in the evaluation process as per the tender or other procurement solicitation.

'margin of purchase preference' means the maximum extent to which the price quoted by a local supplier may be above the L1 for the purpose of purchase preference.

'*Nodal Ministry*' means the Ministry or Department identified pursuant to this order in respect of a particular item of goods or services or works.

2 -

'Procuring entity' means a Ministry or department or attached or subordinate office of, or autonomous body controlled by, the Government of India and includes Government companies as defined in the Companies Act.

'Works' means all works as per Rule 130 of GFR- 2017, and will also include 'turnkey works'.

- 3. Requirement of Purchase Preference : Subject to the provisions of this Order and to any specific instructions issued by the Nodal Ministry or in pursuance of this Order, purchase preference shall be given to local suppliers in all procurements undertaken by procuring entities in the manner specified hereunder"
 - a. "In procurement of goods, services or works in respect of which the Nodal Ministry has communicated that there is sufficient local capacity and local competition, and where the estimated value of procurement is Rs. 50 lakhs or less, only local suppliers shall be eligible. If the estimated value of procurement of such goods or services or works is more than Rs. 50 lakhs, the provisions of sub-paragraph b or c, as the case may be, shall apply";
 - b. "In the procurements of goods or works which are not covered by paragraph 3a and which are divisible in nature, the following procedure shall be followed";
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract for full quantity will be awarded to L1.
 - ii. If L1 bid is not from a local supplier, 50% of the order quantity shall be awarded to L1. Thereafter, the lowest bidder among the local suppliers, will be invited to match the L1 price for the remaining 50% quantity subject to the local supplier's quoted price falling within the margin of purchase preference, and contract for that quantity shall be awarded to such local supplier subject to matching the L1 price. In case such lowest eligible local supplier fails to match the L1 price or accepts less than the offered quantity, the next higher local supplier within the margin of purchase preference shall be invited to match the L1 price for remaining quantity and so on, and contract shall be awarded accordingly. In case some quantity is still left uncovered on local suppliers, then such balance quantity may also be ordered on the L1 bidder.
 - c. "In procurements of goods or works not covered by sub-paragraph 3a and which are not divisible, and in procurement of services where the bid is evaluated on price alone, the following procedure shall be followed":
 - i. Among all qualified bids, the lowest bid will be termed as L1. If L1 is from a local supplier, the contract will be awarded to L1.

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- ii. If L1 is not from a local supplier, the lowest bidder among the local suppliers, will be invited to match the L1 price subject to local supplier's quoted price falling within the margin of purchase preference, and the contract shall be awarded to such local supplier subject to matching the L1 price.
- iii. In case such lowest eligible local supplier fails to match the L1 price, the local supplier with the next higher bid within the margin of purchase preference shall be invited to match the L1 price and so on and contract shall be awarded accordingly. In case none of the local suppliers within the margin of purchase preference matches the L1 price, then the contract may be awarded to the L1 bidder.
- 4. Exemption of small purchases: Notwithstanding anything contained in paragraph 3, procurements where the estimated value to be procured is less than Rs. 5 lakhs shall be exempt from this Order. However, it shall be ensured by procuring entities that procurement is not split for the purpose of avoiding the provisions of this Order.
- 5. **Minimum local content**: The minimum local content shall ordinarily be 50%. The Nodal Ministry may prescribe a higher or lower percentage in respect of any particular item and may also prescribe the manner of calculation of local content.
- 6. Margin of Purchase Preference: The margin of purchase preference shall be 20% .
- 7. Requirement for specification in advance: The minimum local content, the margin of purchase preference and the procedure for preference to Make in India shall be specified in the notice inviting tenders or other form of procurement solicitation and shall not be varied during a particular procurement transaction.
- 8. **Government E-marketplace**: In respect of procurement through the Government Emarketplace (GeM) shall, as far as possible, specifically mark the items which meet the minimum local content while registering the item for display, and shall, wherever feasible, make provision for automated comparison with purchase preference and without purchase preference and for obtaining consent of the local supplier in those cases where purchase preference is to be exercised.
- 9. Verification of local content:
 - a. The local supplier at the time of tender, bidding or solicitation shall be required to provide self-certification that the item offered meets the minimum local content and shall give details of the location(s) at which the local value addition is made.
 - b. In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
 - c. Decisions on complaints relating to implementation of this Order shall be taken by the competent authority which is empowered to look into procurement-related complaints relating to the procuring entity.

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- d. Nodal Ministries may constitute committees with internal and external experts for independent verification of self-declarations and auditor's/ accountant's certificates on random basis and in the case of complaints.
- e. Nodal Ministries and procuring entities may prescribe fees for such complaints.
- f. False declarations will be in breach of the Code of Integrity under Rule 175(1)(i)(h) of the General Financial Rules for which a bidder or its successors can be debarred for up to two years as per Rule 151 (iii) of the General Financial Rules along with such other actions as may be permissible under law.
- g. A supplier who has been debarred by any procuring entity for violation of this Order shall not be eligible for preference under this Order for procurement by any other procuring entity for the duration of the debarment. The debarment for such other procuring entities shall take effect prospectively from the date on which it comes to the notice of other procurement entities, in the manner prescribed under paragraph 9h below.
- h. The Department of Expenditure shall issue suitable instructions for the effective and smooth operation of this process, so that:
 - i. The fact and duration of debarment for violation of this Order by any procuring entity are promptly brought to the notice of the Member-Convenor of the Standing Committee and the Department of Expenditure through the concerned Ministry /Department or in some other manner;
 - ii. on a periodical basis such cases are consolidated and a centralized list or decentralized lists of such suppliers with the period of debarment is maintained and displayed on website(s);
 - iii. in respect of procuring entities other than the one which has carried out the debarment, the debarment takes effect prospectively from the date of uploading on the website(s) in the such a manner that ongoing procurements are not disrupted.

10. Specifications in Tenders and other procurement solicitations:

- a. Every procuring entity shall ensure that the eligibility conditions in respect of previous experience fixed in any tender or solicitation do not require proof of supply in other countries or proof of exports.
- b. Procuring entities shall endeavour to see that eligibility conditions, including on matters like turnover, production capability and financial strength do not result in unreasonable exclusion of local suppliers who would otherwise be eligible, beyond what is essential for ensuring quality or creditworthiness of the supplier.
- c. Procuring entities shall, within 2 months of the issue of this Order review all existing eligibility norms and conditions with reference to sub-paragraphs 'a' and 'b' above.
- d. If a Nodal Ministry is satisfied that Indian suppliers of an item are not allowed to participate and/ or compete in procurement by any foreign government, it may, if it deems appropriate, restrict or exclude bidders from that country from eligibility for procurement of that item and/ or other items relating to that Nodal Ministry. A copy of every instruction or decision taken in this regard shall be sent to the Chairman of the Standing Committee.

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- e. For the purpose of sub-paragraph 10 d above, a supplier or bidder shall be considered to be from a country if (i) the entity is incorporated in that country, or ii) a majority of its shareholding or effective control of the entity is exercised from that country; or (iii) more that 50% of the value of the item being supplied has been added in that country. Indian suppliers shall mean those entities which meet any of these tests with respect to India."
- 11. Assessment of supply base by Nodal Ministries: The Nodal Ministry shall keep in view the domestic manufacturing / supply base and assess the available capacity and the extent of local competition while identifying items and prescribing minimum local content or the manner of its calculation, with a view to avoiding cost increase from the operation of this Order.
- 12. Increase in minimum local content: The Nodal Ministry may annually review the local content requirements with a view to increasing them, subject to availability of sufficient local competition with adequate quality.
- 13. Manufacture under license/ technology collaboration agreements with phased indigenization: While notifying the minimum local content, Nodal Ministries may make special provisions for exempting suppliers from meeting the stipulated local content if the product is being manufactured in India under a license from a foreign manufacturer who holds intellectual property rights and where there is a technology collaboration agreement / transfer of technology agreement for indigenous manufacture of a product developed abroad with clear phasing of increase in local content.
- 14. Powers to grant exemption and to reduce minimum local content: Ministries /Departments of Government of India and the Boards of Directors of Government companies or autonomous bodies may, by written order,
 - a. reduce the minimum local content below the prescribed level;
 - b. reduce the margin of purchase preference below 20% ;
 - c. exempt any particular item or procuring or supplying entities or class or classes of items or procuring or supplying entities from the operation of this Order or any part of the Order.

A copy of every such order shall be marked to the Member-Convenor of the Standing Committee constituted under this Order.

- 15. Directions to Government companies: In respect of Government companies and other procuring entities not governed by the General Financial Rules, the administrative Ministry or Department shall issue policy directions requiring compliance with this Order.
- 16. Standing Committee: A standing committee is hereby constituted with the following membership:

Secretary, Department of Industrial Policy and Promotion—Chairman Secretary, Commerce—Member Secretary, Ministry of Electronics and Information Technology—Member Joint Secretary (Public Procurement), Department of Expenditure—Member Joint Secretary (DIPP)—Member-Convenor

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The Secretary of the Department concerned with a particular item shall be a member in respect of issues relating to such item. The Chairman of the Committee may co-opt technical experts as relevant to any issue or class of issues under its consideration.

- 17. Functions of the Standing Committee: The Standing Committee shall meet as often as necessary but not less than once in six months. The Committee
 - a. shall oversee the implementation of this order and issues arising therefrom, and make recommendations to Nodal Ministries and procuring entities.
 - b. shall annually assess and periodically monitor compliance with this Order
 - c. shall identify Nodal Ministries and the allocation of items among them for issue of notifications on minimum local content
 - d. may require furnishing of details or returns regarding compliance with this Order and related matters
 - e. may, during the annual review or otherwise, assess issues, if any, where it is felt that the manner of implementation of the order results in any restrictive practices, cartelization or increase in public expenditure and suggest remedial measures
 - f. may examine cases covered by paragraph 13 above relating to manufacture under license/ technology transfer agreements with a view to satisfying itself that adequate mechanisms exist for enforcement of such agreements and for attaining the underlying objective of progressive indigenization
 - g. may consider any other issue relating to this Order which may arise.
- 18. Removal of difficulties: Ministries /Departments and the Boards of Directors of Government companies may issue such clarifications and instructions as may be necessary for the removal of any difficulties arising in the implementation of this Order.
- 19. Ministries having existing policies: Where any Ministry or Department has its own policy for preference to local content approved by the Cabinet after 1st January 2015, such policies will prevail over the provisions of this Order. All other existing orders on preference to local content shall be reviewed by the Nodal Ministries and revised as needed to conform to this Order, within two months of the issue of this Order.
- 20. **Transitional provision**: This Order shall not apply to any tender or procurement for which notice inviting tender or other form of procurement solicitation has been issued before the issue of this Order.

(B. S. Navak) Under Secretary to Government of India Ph. 23061257

F.No.31026/36/ 2016-MD Ministry of Chemicals & Fertilizers Government of India Department of Pharmaceuticals

Dated / May, 2018 Janpath Bhawan, New Delhi

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Subject: Guidelines for implementing the provisions of Public Procurement (Preference to Make in India) Order (PPO), 2017, related to procurement of Goods & Services in Medical Devices - reg.

No. 31026/36/2016-MD: Whereas Department of Industrial Policy and Promotion (DIPP), pursuant to Rule 153(iii) of the General Financial Rules 2017, has issued Public Procurement(Preference to Make in India) Order (PPO), 2017 vide no. P-4502/2/2017-B.E.-II dated 15.06.2017.

Whereas DIPP, in order to facilitate the implementation of the PPO, 2017, vide D.O. No. P-45021/2/2017-BE-II dated 14.08.2017 has identified Department of Pharmaceuticals (DoP) as the Nodal Department for implementing the provisions of the PPO 2017 relating to goods & services related to Pharmaceuticals Sector. DIPP vide Office Memorandum no. P-45021/13/2017-PP Section BE-II dated 23.03.2018 has decided that the Nodal Ministry for product category Medical Devices shall be Department of Pharmaceuticals.

Whereas Para 3 of PPO, 2017 makes it mandatory for procuring entities to give purchase preference to local suppliers, Para 5 of PPO, 2017 empowers Nodal Ministry to prescribe percentage and the manner of calculation of minimum local content in respect of any particular item relating to deals with verification of local content.

Now, therefore, DoP issues the following guidelines for implementation of the provisions of PPO, 2017 with respect to public procurement of Goods & Services in Medical Devices:

 Percentage of Minimum Local Content: Medical Device Industry (MDI) is a multi-product industry responsible for provisioning of wide variety of crucial medical products ranging from simple tongue depressors & glucometer strips to large radiology & electronic medical equipment. The medical devices industry can be broadly classified as consisting of (a) medical disposables and consumables; (b) medical electronics, hospital equipment, surgical instruments; (c) Implants; and (d) In-Vitro Devices/Diagnostic Reagents. Individually there are around 5000 different kinds of medical devices and it is not practical to prescribe the local content and percentage of preference in domestic procurement for each medical device.

Moreover, DoP needs accurate and reliable data regarding total capacity and production of various categories of medical devices in India, regarding the level

of competition in the market in different segment of medical devices and regarding the processes involved in the manufacture of medical devices for prescribing the percentage of minimum local content for each category of medical devices, for determining the manner of calculation of local content in the medical devices and for determining the purchase preference to be given to local suppliers in the procurement by the public agencies. The percentage of local content, the manner of calculation of the local content and the provision of supplies to be procured from local suppliers may be revised after relevant data in this regard becomes available.

However for the time being, based on the present level of understanding of the medical device market in India and discussion with various industry representatives, DoP in accordance with Para 5 of PPO, 2017 prescribes the following percentages of minimum local content for various categories of medical devices for preference in public procurement:

Category of Medical Devices	% of Minimum Local Content	% of Local Content proposed to be increased in phased manner over next three years	
Medical disposables and consumables	50%	50% to 75%	
Medical electronics, hospital equipment, surgical instruments	25%	25% to 45%	
Implants	40%	40% to 60%	
Diagnostic Reagents/IVDs	25%	25% to 45%	

2) Manner of calculation of Local Content: DoP in accordance with Para 5 of PPO, 2017 prescribes the following manner of calculation of local content:

i. Local content of Medical Device shall be computed on the basis of the cost of domestic components in the device/service compared to the total cost of the device/service. The total cost of product shall be the cost incurred for the production of the medical device including direct component i.e. material cost, manpower cost and overhead costs including profit but excluding taxes and duties.

ii. The determination of local content cost shall be based on the following:

a) In the case of direct component (material), based on the country of originb) In the case of manpower, based on domestic manpower

The calculation of local content of the combination of several kinds of goods shall be based on the ratio of the sum of multiplication of local content of each goods with the acquisition price of each goods to the acquisition price of combination of goods.

Format of calculation of local content shall be as contained in Enclosure-I.

iii.

iv.

3) Requirement of Purchase Preference: Purchase preference shall be given to local suppliers by all procuring entities as per provisions laid down in para 3 of PPO, 2017. Further, as per provisions of Para 3(a) of the PPO 2017 i.e. in procurement of goods where sufficient local capacity and local competition exists and estimated value of procurement is Rs 50 Lakhs or less, a list of goods will be issued by this Department in due course. Till the time such a list is issued, provisions of para 3(b) or para 3(c) of PPO, 2017, as applicable, shall apply for all procurements without regard to value of procurement.

4) Verification of Local Content:

- a) The local supplier at the time of tender, bidding or solicitation shall be required to furnish self-certification of local content in the format as contained in **Enclosure-II**.
- b) In cases of procurement for a value in excess of Rs. 10 crores, the local supplier shall be required to provide a certificate from the statutory auditor or cost auditor of the company (in the case of companies) or from a practicing cost accountant or practicing chartered accountant (in respect of suppliers other than companies) giving the percentage of local content.
- c) In each tender, procuring entity shall clearly mention the details of its competent authority which is empowered to look into procurement related complaints and the fees for such complaints, relating to implementation of PPO, 2017.
- d) In case a complaint is received by the procuring entity against the claim of a bidder regarding domestic value addition in medical device, the procuring entity shall have full rights to inspect and examine all the related documents and take a decision. In case any clarification is needed, matter may be referred to DoP to the Grievance Redressal Committee consisting of the following:
 - 1. Chairman Joint Secretary (Medical Device) in DoP
 - 2. Member Director / Deputy Secretary (Medical Devices) in DoP
 - 3. Member Representative (not below the rank of Deputy Secretary) from M/o Health & Family Welfare / CDSCO
- e) Any complaint referred to the procuring entity shall be submitted along with all necessary documentation in support of the complaint regarding domestic value addition claimed in medical device and shall be disposed of within 4 weeks of the reference by the procuring entity.
- f) In case, the complaint is referred to DoP by a bidder or procuring entity, the grievance redressal committee shall dispose of the complaint within 4 weeks of its reference and receipt of all documents from the bidder after taking in consideration, the view of the procuring entity. The bidder shall be required to furnish the necessary documentation in support of the local content claimed in medical devices to the grievance redressal committee under DoP within 2 weeks of the reference of the matter. If no information is furnished by the bidder, the grievance redressal committee may take further necessary action, in consultation with procuring entity to establish the bonafides of the claim.
 - (subject to a maximum of Rs. 5 Lakh), whichever is higher, to be paid by way of a Demand Draft to be deposited with the procuring entity, along with the



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complaints by the complainant. In case, the complaint is found to be incorrect, the complaint fee shall be forfeited. In case, the complaint is upheld and found to be substantially correct, deposited fee of the complainant would be refunded without any interest. 5) All other provisions of PPO, 2017 shall be applicable as such and shall be adhered to by all procuring agencies for procurement of any medical device. 6) These guidelines shall remain applicable for one year or until further orders from the date of its issuance. (Dinesh Kapila Economic Adviser Ph. 23381927 T. S. 15 2 2 44 2

Enclosure-I

Calculation of Local Content

Name of manufacturer	Calculation by Manufacturer (Cost per unit of product)			
Cost Component	Cost (Domestic Component)	Total Cost	Percentage of Local Content	
	a	b	c=(a/b)*100	
I II III. Total Cost (Excluding tax and duties)				

Note:

I. <u>Cost (Domestic Component)</u>: Cost of domestic component may be calculated based on one of the followings depending on data available. Each of these calculations should provide consistent result.

a. Sum of the costs of all inputs which go into the product (including duties and taxes levied on procurement of inputs except those for which credit/ set-off can be taken) and which have not been imported directly or through a domestic trader or an intermediary.

b. Ex-Factory Price of product minus profit after tax minus sum of imported Bill of Material used (directly or indirectly) as inputs in producing the product (including duties and taxes levied on procurement of inputs except those for which credit/ set-off can be taken) minus warranty costs.

c. Market price minus post-production freight, insurance and other handling costs minus profit after tax minus warranty costs minus sum of Imported Bill of Material used as inputs in producing the product (including duties and taxes levied on procurement of inputs except those for which credit / set-off can be taken) minus sales and marketing expenses.

II. <u>Total Cost</u>: Total cost may be calculated based on one of the following depending on data available. Each of these calculations should provide consistent result.

a. Sum of the costs of all inputs which go into the product (including duties and taxes levied on procurement of inputs except those for which credit / set-off can be taken).

b. Ex-Factory Price of product minus profit after tax, minus warranty costs.

C. Market price minus post-production freight, insurance and other handling costs minus profit after tax, minus warranty costs minus sales and marketing expenses.

13-7-1		
	Enclosure-11	j.
	Format for Affidavit of Self Certification regarding Local Content in a Medical Device	
	to be provided on Rs. 100/- Stamp Paper	
	Date:	
	IS/0,D/0,W/0, Resident	
	do hereby solemnly affirm and declare as under:	
	That I will agree to abide by the terms and conditions of the policy of Government of India issued vide Notification No:	
	That the information furnished hereinafter is correct to best of my knowledge and belief and I undertake to produce relevant records before the procuring entity or any authority so nominated by the Department of Pharmaceuticals, Government of India for the purpose of assessing the local content.	
	That the local content for all inputs which constitute the said medical device has been verified by me and I am responsible for the correctness of the claims made therein.	
	That in the event of the domestic value addition of the product mentioned herein is found to be incorrect and not meeting the prescribed value-addition norms, based on the assessment of an authority so nominated by the Department of Pharmaceuticals, Government of India for the purpose of assessing the local content, action will be taken against me as per Order No. P- 45021/2/2017-B.EII dated 15.06.2017 and Guidelines issued vide letter no. 31026/36/2016- MD dated $1.8r.2.5.2018$.	
	 I agree to maintain the following information in the Company's record for a period of 8 years and shall make this available for verification to any statutory authority: i) Name and details of the Domestic Manufacturer (Registered Office, Manufacturing unit 	
	location, nature of legal entity)	
	 ii) Date on which this certificate is issued iii) Medical devices for which the certificate is produced 	
1	iv) Procuring entity to whom the certificate is furnished	
	 v) Percentage of local content claimed vi) Name and contact details of the unit of the manufacturer 	
	vii) Sale Price of the product	
	viii) Ex-Factory Price of the product ix) Freight, insurance and handling	
	x) Total Bill of Material	
	 xi) List and total cost value of inputs used for manufacture of the medical device xii) List and total cost of inputs which are domestically sourced. Value addition 	
	xii) List and total cost of inputs which are domestically sourced. Value addition certificates from suppliers, if the input is not in- house to be attached.	
x.	xiii) List and cost of inputs which are imported, directly or indirectly	
Malar	apple	
	For and on behalf of (Name of firm/entity)	
	Authorized signatory (To be duly authorized by the Board of Director)	

<u>APPENDIX-B</u> INTEGRITY PACT

PRE-CONTRACT INTEGRITY PACT

This Pre-Contract Integrity Pact (herein after called the Integrity Pact) is made on ____31ST _____ day of the month of ___MAY 2018_____

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 ______, Chief Executive Officer (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.
- 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 BIDDERs 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/integrator/authorized government sponsored export entity of the defense stores 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 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.