GLOBAL TENDER ENQUIRY

FOR PROCUREMENT OF MEDICAL GAS PIPELINE SYSTEM

ON BEHALF OF

JANAKPURI SUPER SPECIALITY HOSPITAL

AN AUTONOMOUS INSTITUTE UNDER
DEPARTMENT OF HEALTH & FAMILY WELFARE
GOVT OF NCT OF DELHI

HLL/PCD/GNCTD/32/JSSH/15-16

BY

HLL LIFECARE LIMITED

(A GOVERNMENT OF INDIA ENTERPRISE)
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SECTION I

NIT No: HLL/PCD/GNCTD/32/JSSH/15-16 **Dated: 04.03.2016**

NOTICE INVITING TENDERS (NIT)

1. Procurement & Consultancy Services Division of HLL Lifecare Limited, for and on behalf of Janakpuri Super Speciality Hospital, an autonomous institute under, Govt. of NCT of Delhi, invites online eTenders, from eligible and qualified tenderers for supply, installation, commissioning, and maintenance of following item:

Sl. no.	Tender ID	Description of item	Est. cost (Rs.)	Qty	Tender Fee (Rs.)	EMD Amount (Rs.)	Date & time of Prebid meeting	Date & time of closing of online tender	Closing date & time for submission of physical Tender	Date & time of opening of tender
1	2016_HFWD_ 99674_1	Medical Gas Pipeline System	11,20,49,575	1	5,000	22,41,000	17-03-16 11:00 AM	06-04-16 06:00 PM	07-04-16 02:00 PM	07-04-16 02:30 PM

2. Interested tenderers may obtain further information about this requirement from this office inviting the tenders.
3. The prospective bidders who have not registered can register with E-procurement system of NIC by paying necessary registration charges. The bidders may prepare a banker Demand Draft in favour of Delhi E-governance society and deposit it at E-procurement help desk room. The details of payment can be obtained from help desk.
4. The tender shall be submitted online and in physical form (except price bid) in two parts/covers as mentioned below:
    (i) Pre-qualification and Technical compliance as per following documents (Both online and physical):
        a) Tender Fee and EMD (copy of the payment instrument to be uploaded)
        b) Manufacturer's authorization(s) in case bid is submitted by an Indian agent (A declaration must be attached here in case directly quoted by a foreign manufacturer or a document establishing the relation of the Indian office quoting on behalf of the foreign manufacturer).
        c) Tender Form as per section X
        d) Copy of PAN
        e) Certificate of Incorporation/Declaration being a proprietary firm
        f) Solvency Certificate, Profit & Loss Account and Balance sheet as desired
        g) Name, address and details of account with respect to bidder and/or beneficiary of L/C
        h) Quality Control Requirements as per Section VIII

i) Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate as per section IX

j) Affidavit as per Section XIX

k) Technical Bid along with clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications with all related brochures in the tender enquiry.

(ii) Price Bid (along with copies of latest supply orders from Institute(s) of National Importance) - (To be uploaded online only).

5. All prospective tenderers may attend the Pre Tender meeting. For the above tender IDs, Prebid meeting shall be held at Conference Room of HLL Lifecare Limited, B-14A, Sector -62, Noida, Gautam Budh Nagar, U.P. - 201 307.

6. To participate in the submission against the tender, it is mandatory for the Applicants to get digital signature and get themselves registered with e-tendering system of various hospitals under Govt. of NCT of Delhi.

7. Tenderer may download the tender enquiry documents from the web site www.lifecarehll.com or www.eprocure.gov.in/cppp or www.govtprocurement.delhi.gov.in and submit its tender online after logging in to their user ID at www.govtprocurement.delhi.gov.in.

8. Tenderers shall ensure that their tenders, complete in all respects, are submitted **online and desired hard copies in original** dropped in the Tender Box located at **HLL Lifecare Limited, Procurement and Consultancy Division, B-14A, Sector-62, Noida-201307, Uttar Pradesh** on or before the closing date and time indicated above, failing which the tenders will be treated as late and rejected.

9. In the event of any of the above mentioned dates being declared as a holiday /closed day for the purchase organisation, the physical form of tenders will be received/opened on the next working day at the appointed time.

SVP (GB)
HLL Lifecare Limited

SECTION - II

GENERAL INSTRUCTIONS TO TENDERERS (GIT)
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GENERAL INSTRUCTIONS TO TENDERERS (GIT)

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 Janakpuri Super Speciality Hospital, an autonomous institute under, Govt. of NCT of Delhi.
(ii) "Tender" means Bids / Quotation / Tender received from a Firm / Tenderer / Bidder.
(iii) "Tenderer" means Bidder/ the Individual or Firm submitting Bids / Quotation / Tender
(iii) "Supplier" means the individual or the firm supplying the goods and services as incorporated in the contract.
(iv) "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.
(v) "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.
(vi) "Earnest Money Deposit" (EMD) means Bid Security/ monetary or financial guarantee to be furnished by a tenderer along with its tender.
(vii) "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.
(viii) "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.
(ix) "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.
(x) "Specification" means the document/standard that prescribes the requirement with which goods or service has to conform.
(xi) "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.
(xii) "Day" means calendar day.

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) "H&FW" means Department of Health & Family Welfare, Government of NCT of Delhi
(xxxi) "CMC" means Comprehensive maintenance Contract (labour, spare and preventive maintenance)
(xxxii) "RT" means Re-Tender.

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 to 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

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

This invitation for tenders is open to all suppliers who fulfil the eligibility criteria specified in these documents.

6. Eligible Goods and Services

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

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 – Affidavit/Undertaking
- Section XX – Check List for the Tenderers
- Section XXI – Consignee List

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 the referred websites only.

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 on or before the pre-bid meeting.

10.2 Each prospective Tenderer can attend the Prebid meeting mentioned in para4 in Section I with maximum 2 persons duly authorized by Tenderer.

C. PREPARATION OF TENDERS

11. Documents Comprising the Tender

11.1 The tender shall be submitted online and in physical form (except price bid) in two parts/covers as mentioned below:

(i) Tender Fee, EMD, Pre-qualification as per checklist section XX and as mentioned in para A) below and Technical Bid (Both online and physical)

(ii) Price Bid (along with copies of latest supply orders from Institute(s) of National Importance) - (To be uploaded online only).

Bidders are requested not to submit the hard copy of Financial Bid along with thephysical form of tender. In case the hard copy of financial bid is submitted in physical form, the tender shall be straightway rejected. Also, uploading of the price bid in prequalification bid or technical bid will result in rejection of the tender.

A) <u>Techno – Commercial Tender (Un priced Tender)</u>

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.
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. **While giving authorization to agent, to quote on their behalf, manufacturer has to give the reasons for not quoting directly against this tender.**
v) Deleted.
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.

B) Price Tender:

1. Prices are to be quoted in the attached Price Bid format online as per the directionson the official website.

2. The price should be quoted for the accounting unit indicated on the website.

The bidder shall not submit hard copy of financial bid. Uploading the price bid in prequalification bid or technical bid will result in rejection of the tender.

Note:

It is the responsibility of tenderer to go through the TE document to ensure furnishing all required documents in addition to above, if any.

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 warrantee that he has authority to bind such other persons and if, on enquiry, it appears that the persons so signing had no authority to do so, the purchaser may, without prejudice to other civil and criminal remedies, cancel the contractand hold the signatory liable for all cost and damages

11.3 A tender, which does not fulfil any of the above requirements and/or gives evasive information/reply against any such requirement, shall be liable to be ignored and rejected.
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 way shall be treated as non-responsive and rejected.

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.

13.2 If there is more than one schedule in the List of Requirements, the tenderer has the option to submit its quotation for any one or more schedules and, also, to offer special discount for combined schedules. However, while quoting for a schedule, the tenderer shall quote for the complete requirement of goods and services as specified in that particular schedule.

13.3 The quoted prices for goods offered from within India and that for goods offered from abroad are to be indicated separately in the applicable Price Schedules attached under Section XI.

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 sales tax, CST VAT, CENVAT, Custom Duty, Excise Duty etc. 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 sales or other taxes and any duties including excise duty, 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; and

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 amount of freight and insurance

c) the price of goods quoted CIP (name port of destination) in India as indicated in the List of Requirements, Price Schedule and Consignee List;

d) Deleted

e) 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;

f) the charges for Incidental Services, as in the List of Requirements and Price Schedule;

g) the prices of Turnkey (if any), as mentioned in List of Requirements, Technical Specification and Price Schedule; and

h) the price of annual CMC, as mentioned in List of Requirements, Technical Specification and Price Schedule.

13.5 Additional information and instruction on Duties and Taxes:

13.5.1 If the Tenderer desires to ask for excise duty, sales tax/ VAT, Service Tax, Works Contract Tax 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.

13.5.2 Excise Duty:

a) If reimbursement of excise duty is intended as extra over the quoted prices, the supplier must specifically say so also indicating the rate, quantum and nature of the duty applicable. In the absence of any such stipulation it will be presumed that the prices quoted are firm and final and no claim on account of excise duty will be entertained after the opening of tenders.
b) If a Tenderer chooses to quote a price inclusive of excise duty and also desires to be reimbursed for variation, if any, in the excise duty during the time of supply, the tenderer must clearly mention the same and also indicate the rate and quantum of excise duty included in its price. Failure to indicate all such details in clear terms may result in rejection of that tender.
c) Subject to sub clauses 13.5.2 (a) & (b) above, any change in excise duty upward/downward as a result of any statutory variation in excise duty taking place within contract terms shall be allowed to the extent of actual quantum of excise duty paid by the supplier. In case of downward revision in excise duty, the actual quantum of reduction of excise duty shall 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.

13.5.3 Sales Tax:

If a tenderer asks for sales tax/ VAT, Service Tax and Works Contract Tax to be paid extra, the rate and nature of sales tax applicable should be shown separately. The sales tax / VAT, Service Tax and Works Contract Tax will be paid as per the rate at which it is liable to be assessed or has actually been assessed provided the transaction of sale is legally liable to sales tax / VAT, Service Tax and Works Contract 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.

13.5.4 Octroi Duty and Local Duties & Taxes:

Normally, goods to be supplied to government departments against government contracts are exempted from levy of town duty, Octroi duty, terminal tax and other levies of local bodies. However, on some occasions, the local bodies (like town body, municipal body etc.) as per their regulations allow such exemptions only on production of certificate to this effect from the concerned government department. Keeping this in view, the supplier shall ensure that the stores to be supplied by the supplier against the contract placed by the purchaser are exempted from levy of any such duty or tax and, wherever necessary, obtain the exemption certificate from the purchaser. The purchaser should issue the certificate to the supplier within 21 days from the date of receipt of request from the supplier.

However, if a local body still insists upon payment of such local duties and taxes, the same should be paid by the supplier to the local body to avoid delay in supplies and possible demurrage charges and obtain a receipt for the same. The supplier should forward the receipt obtained for such payment to the purchaser to enable the purchaser reimburse the supplier and take other necessary action in the matter.

13.5.5 Customs Duty:

The Purchaser will pay the Customs duty wherever applicable.

13.6 For transportation of imported goods offered from abroad, relevant instructions as incorporated under GCC Clause 10 shall be followed.

13.7 For insurance of goods to be supplied, relevant instructions as provided under GCC Clause 11 shall be followed.

13.8 Unless otherwise specifically indicated in this 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) The complete name and address of the Indian Agent and its permanent income tax account number as allotted by the Indian Income Tax authority.
b) The details of the services to be rendered by the agent for the subject requirement.
c) Details of Service outlets in India, nearest to the consignee(s), to render services during Warranty and CMC period.
d) 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).

15. Firm Price

15.1 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.

15.2 However, as regards taxes and duties, if any, chargeable on the goods and payable, the conditions stipulated in GIT clause 13 will apply.

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 Only one tenderer is permitted to quote for the same manufacturer irrespective of models

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 11.1A(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 with Directorate General of Supplies & Disposals or with National Small Industries Corporation, New Delhi for the specific goods as per tender enquiry specification shall be eligible for exemption from EMD. In case the tenderer falls in these categories, it should furnish copy of its valid registration details (with DGS&D or NSIC, as the case may be).

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) Banker's cheque and
iii) Bank Guarantee

19.4 The demand draft or banker's cheque shall be drawn on any commercial bank in India or country of the tenderer, in favour of the "HLL LifecareLimited" 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, if paid in Bank Guarantee, 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. Signing and Sealing of Tender

21.1 The tenderers shall submit their tenders as per the instructions contained in GIT Clause 11.

21.2 Deleted

21.3 The original tender shall either be typed or written in indelible ink and the same shall be signed by the tenderer or by a person(s) who has been duly authorized to bind the tenderer to the contract.

21.4 The tender shall be duly signed at the appropriate places as indicated in the TE documents and all other pages of the tender including printed literature, if any shall be initialled by the same person(s) signing the tender. The tender shall not contain any erasure or overwriting, except as necessary to correct any error made by the tenderer and, if there is any such correction; the same shall be initialled by the person(s) signing the tender.

D. SUBMISSION OF TENDERS

22. Submission of Tenders

22.1 The tender shall be submitted online and in physical form (except price bid) in two parts/covers as mentioned below:

(i) Pre-qualification and Technical compliance as per following documents (Both online and physical):

a) Tender Fee and EMD (copy of the payment instrument to be uploaded)

b) 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).

c) Tender Form as per section X.

d) Copy of PAN.

e) Certificate of Incorporation/Declaration being a proprietary firm.

f) Solvency Certificate, Profit & Loss Account and Balance sheet as desired

g) Name, address and details of account with respect to bidder and/or beneficiary of L/C.

h) Quality Control Requirements as per Section VIII

i) Performance statement along with required PO copies and its corresponding end user's satisfactory performance certificate as per section IX.

j) Affidavit as per Section XIX

k) Technical Bid along with clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications in the tender enquiry (Both online and physical)

(ii) Price Bid (along with copies of latest supply orders from Institute(s) of National Importance) - (To be uploaded online only).

Bidders are requested not to submit the hard copy of Financial Bid along with the physical form of tender. Uploading of the price bid in prequalification bid or technical bid will result in rejection of the tender.

Unless otherwise specified, the tenderers are to submit its tender online and deposit the physical form of tenders in the tender box kept for this purpose at **HLL Lifecare Limited, Procurement and Consultancy Division, B-14 A, Sector-62, Noida-201 307, Uttar Pradesh**.

22.2 The tenderers must ensure that they deposit their tenders not later than the closing time and date specified for submission of tenders. It is the responsibility of the tenderer to ensure that their Tenders whether sent by post or by courier or by person, are dropped in the Tender Box by the specified clearing date and time. In the event of the specified date for physicalsubmission of tender falls on /is subsequently declared a holiday or closed day for the purchaser, the tenders will be received up to the appointed time on the next working day.

23. Late Tender

23.1 A tender, which is received after the specified date and time for receipt of tenders will be treated as "late" tender and will be ignored.

24. Alteration and Withdrawal of Tender

24.1 The tenderer, after submitting its tender, is permitted to alter/modify its tender so long as such alterations/ modifications are received duly signed, sealed and marked like the original tender, within the deadline for submission of tenders. Alterations/ modifications to tenders received after the prescribed deadline will not be considered.

24.2 No tender should be withdrawn after the deadline for submission of tender and before expiry of the tender validity period. If a tenderer withdraws the tender during this period, it will result in forfeiture of the earnest money furnished by the tenderer in its tender.

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 The **Techno - Commercial Tenders** 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. The prices, special discount if any of the goods offered etc., as deemed fit by tender opening official(s) will be read out.

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, whether the documents have been properly signed stamped and whether the Tenders are generally in order.

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 the meet the basic requirements, are liable to be treated as non-responsive and will be rejected.

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 (Amount, validity etc.)/ exemption documents have not been provided.
(iii) Tenderer has quoted for goods manufactured by other manufacturer(s) without the required Manufacturer's Authorisation Form as per Section XIV.
(iv) 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.
(v) Tenderer has not agreed to other essential condition(s) specially incorporated in the tender enquiry like terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law.
(vi) Poor/ unsatisfactory past performance.
(vii) Tenderers who stand deregistered/banned/blacklisted by any Govt. Authorities.
(viii) Tenderer is not eligible as per GIT Clauses 5&17.1.
(ix) Tenderer has not quoted for the entire quantity as specified in the List of Requirements in the quoted schedule.
(x) Tenderer has not agreed for the delivery terms and delivery schedule.

28. Minor Infirmity/Irregularity/Non-Conformity

28.1 If during the evaluation, the purchaser find any minor informality and/or irregularity and/or non-conformity in a tender, , the purchaser will convey its observation on such 'minor' issues to the tenderer by registered/speed post/courier/e-mail/fax 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

30.1 In case any discrepancy is observed between the text etc. of the original copy and that in the other copies of the same tender set, the text etc. of the original copy shall prevail. Here also, the purchaser will convey its observation suitably to the tenderer by register / speed post and, if the tenderer does not accept the purchaser's observation, that tender will be liable to be ignored.

31. Qualification Criteria

31.1 Tenders of the tenderers, who do not meet the required Pre Qualification and/or Qualification Criteria prescribed in Section IX, will be treated as non - responsive and will not be considered further.

32. Conversion of tender currencies to Indian Rupees

32.1 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

Deleted.

34. Comparison of Tenders

34.1 Unless mentioned otherwise in Section – III – Special Instructions to Tenderers and Section – VI – 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 CMC prices will also be added for comparison/ranking purpose for evaluation. **Net Present value (NPV) of the Comprehensive Annual Maintenance charges (CMC) quoted (for required period as mentioned in the list of requirement) after the warranty period shall be added to the bid price for evaluation and will be calculated at a discounted rate of 10% per year.**

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, sales tax & other similar taxes and excise duty & other similar duties, Service Tax, Works Contract Tax etc 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.

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

38.1 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

39.1 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.

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 ofto 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 at the time of the awarding the contract, the purchaser reserves the right to increase by up to twenty five (25) per cent, the quantity of goods and services mentioned in the contract (rounded ofto 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.

42.3 The Purchaser/Consignee reserves the right to issue the Notification of Award consignee wise.

43. Non-receipt of Performance Security and Contract by the Purchaser/Consignee

43.1 Failure of the successful tenderer in providing performance security 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

44.1 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

45.1 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

46.1 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 any thing 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)

The following Special Instructions to Tenderers will apply for this purchase. These special instructions will modify/substitute/supplement the corresponding General Instructions to Tenderers (GIT) incorporated in Section II. The corresponding GIT clause numbers have also been indicated in the text below:
In case of any conflict between the provision in the GIT and that in the SIT, the provision contained in the SIT shall prevail.

(i) The following documents shall be prepared and scanned in different files (in PDF or JPEG format as prescribed) and uploaded during the on-line submission of Proposal. These documents shall also be submitted in '**ORIGINAL**' to HLL Lifecare Ltd before the prescribed date & time for submission of Proposals.

a) Demand Draft towards Tender Fee in favour of HLL Lifecare Ltd

b) EMD in the prescribed format in favour of HLL Lifecare Ltd

c) Technical Data Sheet and original technical literature/ Brochure (if any)

(ii) All document(s)/ information(s) other than above 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 prospective bidders may upload Drawing files, if any, in **".dwf"** format so that the size ofdocument is less. This is a generic format and all software supports this format.

(v) At the time of cover content creation, the prospective bidders would have to define the document type as".**rar**" format.

(vi) The prospective bidders should be asked to zip all the .dwf files to a .rar file and upload it.

SECTION - IV

GENERAL CONDITIONS OF CONTRACT (GCC)
TABLE OF CLAUSES

GENERAL CONDITIONS OF CONTRACT (GCC)

1. Application

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

All documents submitted physically or uploaded as scanned copies must be self-attested, legible and numbered.

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 sub-clause 2.1 above shall remain the property of the purchaser and, if advised by the purchaser, all copies of all such documents shall be returned to the purchaser on completion of the supplier's performance and obligations under this contract.

3. Patent Rights

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

4. Country of Origin

4.1 All goods and services to be supplied and provided for the contract shall have the origin in India or in the countries with which the Government of India has trade relations.

4.2 The word "origin" incorporated in this clause means the place from where the goods are mined, cultivated, grown, manufactured, produced or processed or from where the services are arranged.

4.3 The country of origin may be specified in the Price Schedule

5. Performance Security

5.1 Within fifteen (15) 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 sixty eight (68) 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 fifteen (15) days of issue of the amendment, furnish the corresponding amendment to the Performance Security (as necessary), rendering the same valid in all respects in terms of the contract, as amended.

5.5 The supplier shall enter into 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

6.1 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 & lodging will be borne by the purchaser and/or its nominated representative(s).

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.

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, BereauVeritas,TUV prior to despatch at the supplier's cost and furnish necessary certificate from the said agency in support of their claim.

9. Terms of Delivery

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

10. Transportation of Goods

10.1 Instructions for transportation of imported goods offered from abroad:

The supplier shall not arrange part-shipments 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:

11.1 Unless otherwise instructed in the SCC, the supplier shall make arrangements for insuring the goods against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the following manner:

i) in case of supply of domestic goods on Consignee site basis, the supplier shall be responsible till the entire stores contracted for arrival in good condition at destination. The transit risk in this respect shall be covered by the Supplier by getting the stores duly insured for an amount equal to 110% of the value of the goods from 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 3 months after the receipt of goods by the Consignee.

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

If the equipment is not commissioned and handed over to the consignee within 3 months, the insurance will have to be extended by the supplier at their cost till the successful installation, testing, commissioning and handing over of the goods to the consignee. In case the delay in the installation and commissioning is due to handing over of the site to the supplier by the consignee, 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 consumables and spares for the goods so that the same are usedduring warranty and CMC period.

13. Incidental services

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

i) Installation & commissioning, Supervision 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

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) Inspection certificate issued by the nominated Inspection agency, if any.
(iv) Certificate of origin;
(v) Insurance Certificate as per GCC Clause 11.
(vi) 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) Insurance Certificate as per GCC Clause 11.
(v) Manufacturer's/Supplier's warranty certificate;
(vi) Inspection Certificate for the despatched equipments issued by recognized/ reputed agency like SGS, Lloyd, Beaureu 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 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, manufacturing or workmanship or from any act or omission of the supplier that may develop under normal use of the supplied goods under the conditions prevailing in India.

15.2 The **warranty**shall remain valid for the period as mentioned in the list of requirement/ General Technical specification, after the goods or any portion thereof as the case may be, have been delivered, installed and commissioned at the final destination.

a. No conditional warranty will be acceptable.
b. 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
c. Replacement and repair will be under taken for the defective goods.
d. 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 G.C.C 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 to a further period of twenty four (24) months from the date such rectified / replaced goods starts functioning to the satisfaction of the purchaser.

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 equipment 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 equipment/machines/goods etc. and shall always give the most competitive price for its machines/equipment supplied to the Purchaser/Consignee.

16. Assignment

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. However, for goods directly imported shall be guided by the INCOTERM.

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 Foreign origin located within India.

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

a) On delivery:

80% payment of the contract 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;
(vi) Certificate of origin for items of foreign origin located in India.

b) On Acceptance:

Balance 20% payment would be made against 'Final Acceptance Certificate' 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.Final acceptance certificate will be released by the consignee on completion of installation, commissioning, training, successful running of equipment (at least 2-3 weeks) and handing over the equipment to the consignee.

B) Payment for Imported Goods:

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

a) On Shipment:

Eighty (80)% 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) Inspection certificate issued by the nominated inspection agency, if applicable as per contract;
(vii) Manufacturer's own factory inspection report and
(viii) Certificate of origin by the chamber of commerce of the concerned country;
(ix) Inspection Certificate for the despatched equipment issued by recognized/ reputed agency like SGS, Lloyd, Bureau Veritas, TUV, etc. prior to despatch.

b) On Acceptance:

Balance payment of 20% of net CIP price of goods would be made against 'Final Acceptance Certificate' as per Section XVIII 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.Final acceptance certificate will be released by the consignee on completion of installation, commissioning, training, successful running of equipment (at least 2-3 weeks) and handing over the equipment to the consignee.

c) 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.

d) 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.

C) Payment of Turnkey, if any:

Turnkey payment will be made as 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.

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 in the prescribed format given in Section XV 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 respective consignees. 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 respective consignees.

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 sales tax, excise duty, custom duty) 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 Inspection Note 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, excise duty, sales tax/ VAT, Service Tax and Works Contract Tax or 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, excise duty, sales tax/ VAT, Service Tax and Works Contract Tax 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 Passing of Property:

22.6.1 The property in the goods shall not pass to the purchaser unless and until the goods have been delivered to the consignee in accordance with the conditions of the contract.
22.6.2 Where there is a contract for sale of specific goods and the supplier is bound to do something to the goods for the purpose of putting them into a deliverable state the property does not pass until such thing is done.
22.6.3 Unless otherwise agreed, the goods remain at the supplier's risk until the property therein is transferred to the purchaser.

23. Liquidated damages

23.1 Subject to GCC clause 26, if the supplier fails to deliver or install /commission any or all of the goods or fails to perform the services within the time frame(s) incorporated in the contract, the Purchaser/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.

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 If the parties fail to resolve their dispute or difference by such mutual consultation within twenty-one days of its occurrence, then, unless otherwise provided in the SCC, either the Purchaser/Consignee or the supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided the applicable arbitration procedure will be as per the Arbitration and Conciliation Act, 1996 of India. 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 arbitrator appointed by the Director, Janakpuri Super Speciality Hospital. 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/-)

30.3 Venue of Arbitration: The venue of arbitration shall be the place from where the contract has been issued, i.e., New Delhi, India.

30.4 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 underthe 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 strictly as mentioned in the list of requirement (Section VI, part I) only irrespective of any other period mentioned elsewhere in the tender enquiry. Also, CMC only to be quoted after warranty period instead of AMC mentioned (if any) in the tender specification.

SECTION - VI

LIST OF REQUIREMENTS

Part I

Sl.No.	Tender ID	Name of Equipment	Qty.	Warranty Period	CMC Period
1	2016_HFWD_99674_1	Medical Gas Pipeline System	1	5 years	5 years

Part II: Required Delivery Schedule:

a) For Indigenous goods or for imported goods if supplied from India:

120 days from date of Notification of Award to delivery at consignee site. The date of delivery will be the date of delivery at consignee site (Tenderers may quote earliest delivery period).

Installation and commissioning shall be done within 180 days from the date of Notification of Award or within 60 days of handing over the site for installation after receipt of goods at site, whichever is later.

b) For Imported goods directly from foreign:

120 days from the date of opening of L/C. The date of delivery will be the date on which the consignment reaches the port of destination. (Tenderers may quote the earliest delivery period).

Installation and commissioning shall be done within 180 days from the date of opening of L/C or within 60 days of handing over the site for installation after receipt of goods at site, whichever is later.

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

Note: 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.

Part III: Scope of Incidental Services:

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

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, whichever is earlier.

Comprehensive Maintenance Contract (CMC) as per details in Technical Specification as specified in Part I above

Part VI:

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 3 months beyond date of delivery.

Destination/Consignee details are given in Section XXI

Section – VII
Technical Specification

JANAKPURI SUPER SPECIALITY HOSPITAL, JANAKPURI – NEW DELHI

TECHNICAL SPECIFICATIONS & RESPONSIBILITY OF BIDDER

(Medical Gas Pipe System)

RESPONSIBILITY OF BIDDER

Bidder shall be responsible for complete design, supply, installation, testing and commissioning including demolition and construction as applicable

The bidders are required to survey the site before furnishing the quotations.

Bidder shall execute all required Demolishing, Reconstructing, Water Proofing, Plumbing, Repainting and Replacement

Hospital will provide 3 Phase electrical supply with isolator in the plant/manifold room.

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, testing and commissioning of medical gas supply system as per NFPA 99/ HTM 02-01/DIN/ISO/EN and as per specification in coordination with JSSH authorities/Authorized person. And authorized person shall be inform and certify for complete design, supply, installation, testing and commissioning of MGPS as per standard(NFPA 99/ HTM 02-01/DIN/ISO/EN) and specification.

Bidder shall be responsible for free maintenance of Gas pipeline system, other plants and manifolds during warranty period. And will provide details of planned preventive maintenance as per NFPA 99/ HTM 02-01/DIN/ISO/EN of O2, N2O, CO2, AGSS, Vc, Compressed Air, etc. to be executed during warranty period.

All Components of Medical Gas Pipeline System from source to end shall be fully complying and meeting HTM 02-01 Standards of UK or NFPA 99 Standards of USA. No Mixing of Standards shall be allowed.

Bidder shall mention the Unit price and Country of Origin of the Items mentioned in the Technical Specification and Bill of Quantity of the Tender. The final payment will be made on as per actual consumption.

Bidder shall be responsible for certification of the installed system as per NFPA 99/ HTM 02-01/ DIN/ ISO/ EN from independent authorized and certified third party.

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TECHNICAL SPECIFICATIONS

1.0 OXYGEN MANIFOLD SUPPLY SYSTEMS

1a) Oxygen Main Manifold - 2 x 10 Cylinders size and Fully Automatic O2 Control Panel

The manifold system shall fully comply and meet NHS Health Technical Memorandum 02-01 (HTM02-01)/ NFPA-99/DIN/ISO/EN. It should be capable of delivering 1500 lpm or more at 50-60PSI. The manifold control system shall provide an uninterrupted supply of a specific medical gas from equally sized high pressure cylinder banks via a suitable arrangement of pressure regulators, providing a constant downstream nominal pipeline gauge pressure of 400 kPa at outlet, The entire system shall be 'duplexed' such that any single functional component failure will not affect the integrity of the medical gas supply. The manifold shall be supplied fully assembled and tested.

Manifold Control System Design

It should have all regulators which should be adiabatic certified. The manifold control panel shall be designed and certified for use with oxygen at 200 bar and 60°C. Auto-ignition testing shall be carried out and a copy of the test report shall be provided for review. Central regulator panel with cylinder headers each side. Headers are complete with gas specific cylinder tailpipes. Pre-wired for alarm connection to BMS outputs. Central regulator panel with cylinder headers each side. It should be fully automatic changeover control panel of 1500 lpm or more. Headers are complete with gas specific cylinder tailpipes. Pre-wired for alarm connection to BMS outputs. All components degreased for oxygen use. Mild steel powder coated enclosure with Perspex window. The manifold control system shall be powered by an extra low voltage on board supply. The controller shall include normally closed alarm connections and two sets of BMS connections for both normally open and normally closed operation. Line pressure shall be continuously monitored by an electronic pressure switch; mechanically actuated pressure switches are not acceptable. There shall be a manual changeover button to enable selection of the duty bank. Two non-return valves, one for each bank, 25µ sintered brass filter shall be provided within a line pressure manifold block and shall provide gas tight isolation of each bank during maintenance and ensure supply continuity in the event of any upstream component failure. In the event of a low line pressure condition, both solenoid valves shall open to enable both banks to deliver gas and restore normal pipeline pressure. A manifold status panel shall be provided with colour coded LED indication lights for the following operating and fault indications:

- Power On
- High Line Pressure
- Low Line Pressure
- Reserve Low
- Left Bank Running
- Left Bank Low
- Left Bank Empty
- Right Bank Running
- Right Bank Low
- Right Bank Empty

Control System Operation

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The Interface Indicator shall be provided with colour coded LED indication lights for the following operating and fault indications:

- Normal
- Duty Bank Empty
- Standby Low
- Reserve Bank Low
- Pipeline Pressure Fault
- System Fault

In the event of a power supply failure, both solenoid valves shall open to enable gas to be supplied from both cylinder banks simultaneously until restoration of the power supply.

Materials

All polymers and elastomers in the gas flow that can be subjected to working pressure greater than 3000 kPa shall be halogen-free. The use of PTFE, PCTFE, Viton and other halogenated polymers in these applications is strictly prohibited. Non-return valves fitted to header manifolds shall have a metallic seat with ceramic ball. Soft seat non-return valves utilising polymers or elastomers are not acceptable.

Modular Header Manifolds

Modular header manifolds shall provide connection points for flexible cupronickel tailpipes. They shall be available in 'primary' and 'secondary' configurations, with either single or double cylinder connection points. 'Primary' headers shall connect directly to the manifold control system with extensions for additional cylinders being provided by the addition of 'secondary' headers. Non-return valves shall be fitted to each tailpipe connection point to protect the system in the event of a tailpipe fracture. Corner connectors shall be available to enable installation of manifold headers around corners of the manifold room.

CE Marking OR Listed to UL

It shall be 'CE' marked under the Medical Devices Directiv 93/42/EEC with approval from notified body number Under this directive, the specified products are classified as Class IIb Medical Devices. or it shall Listed to UL and should have UL number.

1b) Oxygen Emergency Reserve Manifold – 2 x 2 cylinders size

The manifold system shall fully comply and meet with NHS Health Technical Memorandum 02-01 /**NFPA 99/ HTM 02-01/DIN/ISO/EN**. The manifold control system shall provide an uninterrupted supply of a specific medical gas from equally sized high pressure cylinder banks via a suitable arrangement of pressure regulators, providing a constant nominal downstream pipeline gauge pressure of 400 kPa at outlet, The Emergency reserve Manifold shall be supplied fully assembled and tested. A terminal unit test point shall be fitted, which shall be isolated from the main supply with a ball valve. The manifold shall be supplied with a non-return valve and lockable line isolation valve for connection to the distribution system, enabling a continuous supply of gas to the distribution system upon failure of the normal supply. High pressure bank isolation valves shall be supplied to enable one bank to be designated as "duty" (open in normal operation) and one bank to be designated as "stand by" (closed in normal operation). Visual indication of the open bank shall be included.

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To simplify installation the manifold shall be supplied with the primary manifold headers and non-return valves for connection of tailpipes. The complete manifold shall be fitted to a wall mounting plate attached to the wall with four screws.

Pressure Regulation

There shall be two separate stages of pressure regulation to enable high peak flow rates without a significant reduction in downstream pressure. Multistage regulators combined into a single unit are not acceptable. The inlet of the 1st stage regulator shall be protected from the particulate matter by a 25µm sintered brass filter. Sintered aluminium bronzes shall not be used. Regulators shall comply with BS EN ISO 10524-2 and shall be supplied with documented test reports upon request, confirming successful completion of the oxygen ignition tests stated therein. The manifold control system shall capable of supplying a flow of 1500 l/min or more to a nominal 400 kPa distribution system, based on a 10% reduction in flowing pressure from a static pressure set point. All regulators shall be protected from over-pressurisation by relief valves which shall be pre-piped into the manifold exhaust line stub pipe to enable the gas to be taken away and vented to atmosphere safely. Relief valves shall not be vented into the manifold room.

Materials

All polymers and elastomers in the gas flow that can be subjected to working pressure greater than 3000 kPa shall be halogen-free. The use of PTFE, PCTFE, Viton and other halogenated polymers in these applications is strictly prohibited. Non-return valves fitted to header manifolds shall have a metallic seat with ceramic ball. Soft seat non-return valves utilising polymers or elastomers are not acceptable.

Emergency Reserve Manifold Operation

Either the left or right hand of the manifold bank shall be designated as "Duty", with the other manifold bank being designated as "Standby" by use of the high pressure bank isolation valves. When the bank pressure in the "Duty" bank falls to 68 bar, a "Reserve Low" or "Reserve Fault" alarm condition shall be initiated by a contact pressure gauge, which shall be indicated on the relevant medical gas central alarm panel and/or primary supply automatic manifold panel. The "Standby" bank shall also be provided with a contact pressure gauge, such that any leakage of gas over an extended period of which causes the pressure in the standby bank to fall below 68 bar, will also initiate a "Reserve Low" or "Reserve Fault" alarm condition.

Modular Header Manifolds

Modular header manifolds shall provide connection points for flexible cupro nickel tailpipes. 'Secondary' headers shall connect directly to the manifold control system with extensions for additional cylinders being provided by the addition of further headers. Non-return valves shall be fitted to each tailpipe connection point to protect the system in the event of a tailpipe fracture. Corner connectors shall be available to enable installation of manifold headers around corners of the manifold room.

CE Marking OR Listed to UL

It shall be 'CE' marked under the Medical Devices Directiv 93/42/EEC with approval from notified body number Under this directive, the specified products are classified as Class IIb Medical Devices. or it shall Listed to UL and should have UL number.

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2.0 NITROUS OXIDE MANIFOLD SUPPLY SYSTEMS

2a) N2O Main Manifold - 2 x 4 Cylinders size and N2O Fully Automatic Control Panel

The manifold system shall fully comply and meet NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN**. It should be capable of delivering 500lpm at 50-60PSI. The manifold control system shall provide an uninterrupted supply of a specific medical gas from equally sized high pressure cylinder banks via a suitable arrangement of pressure regulators, providing a constant downstream nominal pipeline gauge pressure of 400 kPa at outlet, The entire system shall be 'duplexed' such that any single functional component failure will not affect the integrity of the medical gas supply. The manifold shall be supplied fully assembled and tested.

Manifold Control System Design

It should have all regulators which should be adiabatic certified. The manifold control panel shall be designed and certified for use with oxygen at 200 bar and 60°C. Auto-ignition testing shall be carried out and a copy of the test report shall be provided for review. Central regulator panel with cylinder headers each side. Headers are complete with gas specific cylinder tailpipes. Pre-wired for alarm connection to BMS outputs. Central regulator panel with cylinder headers each side. It should be fully automatic changeover control panel of 500lpm. Headers are complete with gas specific cylinder tailpipes. Pre-wired for alarm connection to BMS outputs. All components degreased for oxygen use. Mild steel powder coated enclosure with Perspex window. The manifold control system shall be powered by an extra low voltage on board supply. The controller shall include normally closed alarm connections and two sets of BMS connections for both normally open and normally closed operation. Line pressure shall be continuously monitored by an electronic pressure switch; mechanically actuated pressure switches are not acceptable. There shall be a manual changeover button to enable selection of the duty bank. 50 W cartridge heaters with thermostat control: N2O manifolds. Two non-return valves, one for each bank, and shall be provided within a line pressure manifold block and shall provide gas tight isolation of each bank during maintenance and ensure supply continuity in the event of any upstream component failure. In the event of a low line pressure condition, both solenoid valves shall open to enable both banks to deliver gas and restore normal pipeline pressure. A manifold status panel shall be provided with colour coded LED indication lights for the following operating and fault indications:

- Power On
- High Line Pressure
- Low Line Pressure
- Reserve Low
- Left Bank Running
- Left Bank Low
- Left Bank Empty
- Right Bank Running
- Right Bank Low
- Right Bank Empty

Control System Operation

The Interface Indicator shall be provided with colour coded LED indication lights for the following operating and fault indications:

- Normal

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- Duty Bank Empty
- Standby Low
- Reserve Bank Low
- Pipeline Pressure Fault
- System Fault

In the event of a power supply failure, both solenoid valves shall open to enable gas to be supplied from both cylinder banks simultaneously until restoration of the power supply.

Materials

All polymers and elastomers in the gas flow that can be subjected to working pressure greater than 3000 kPa shall be halogen-free. The use of PTFE, PCTFE, Viton and other halogenated polymers in these applications is strictly prohibited. Non-return valves fitted to header manifolds shall have a metallic seat with ceramic ball. Soft seat non-return valves utilising polymers or elastomers are not acceptable.

CE Marking OR Listed to UL

It shall be 'CE' marked under the Medical Devices Directiv 93/42/EEC with approval from notified body number Under this directive, the specified products are classified as Class IIb Medical Devices. or it shall Listed to UL and should have UL number.

2b) Nitrous Oxide Emergency Reserve Manifold - 2 x 2 cylinders

The manifold system shall fully comply and meet with NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN**. The manifold control system shall provide an uninterrupted supply of a specific medical gas from equally sized high pressure cylinder banks via a suitable arrangement of pressure regulators, providing a constant nominal downstream pipeline gauge pressure of 400 kPa at outlet. The Emergency reserve Manifold shall be supplied fully assembled and tested. A terminal unit test point shall be fitted, which shall be isolated from the main supply with a ball valve. The manifold shall be supplied with a non-return valve and lockable line isolation valve for connection to the distribution system, enabling a continuous supply of gas to the distribution system upon failure of the normal supply. High pressure bank isolation valves shall be supplied to enable one bank to be designated as "duty" (open in normal operation) and one bank to be designated as "stand by" (closed in normal operation). Visual indication of the open bank shall be included. To simplify installation the manifold shall be supplied with the primary manifold headers and non-return valves for connection of tailpipes. The complete manifold shall be fitted to a wall mounting plate attached to the wall with four screws.

Pressure Regulation

There shall be two separate stages of pressure regulation to enable high peak flow rates without a significant reduction in downstream pressure. Multistage regulators combined into a single unit are not acceptable. The inlet of the 1st stage regulator shall be protected from the particulate matter by a 25µm sintered brass filter. Sintered aluminium bronzes shall not be used. Regulators shall comply with BS EN ISO 10524-2 and shall be supplied with documented test reports upon request, confirming successful completion of the oxygen ignition tests stated therein. The manifold control system shall capable of supplying a flow of 500 l/min to a nominal 400 kPa distribution system, based on a 10% reduction in flowing pressure from a static pressure set point. All regulators shall be protected from over-pressurisation by relief valves which shall be pre-piped into the manifold exhaust line

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stub pipe to enable the gas to be taken away and vented to atmosphere safely. Relief valves shall not be vented into the manifold room.

Materials

All polymers and elastomers in the gas flow that can be subjected to working pressure greater than 3000 kPa shall be halogen-free. The use of PTFE, PCTFE, Viton and other halogenated polymers in these applications is strictly prohibited. Non-return valves fitted to header manifolds shall have a metallic seat with ceramic ball. Soft seat non-return valves utilising polymers or elastomers are not acceptable.

Emergency Reserve Manifold Operation

Either the left or right hand of the manifold bank shall be designated as "Duty", with the other manif old bank being designated as "Standby" by use of the high pressure bank isolation valves. When the bank pressure in the "Duty" bank falls to 14 bar a "Reserve Low" or "Reserve Fault" alarm condition sh all be initiated by a contact pressure gauge, which shall be indicated on the relevant medical gas central alarm panel and/or primary supply automatic manifold panel. The "Standby" bank shall also be provided with a contact pressure gauge, such that any leakage of gas over an extended period of which causes the pressure in the standby bank to fall below 14 bar will also initiate a "Reserve Low" or "Reserve Fault" alarm condition.

Modular Header Manifolds

Modular header manifolds shall provide connection points for flexible cupro nickel tailpipes. Pin indexed tailpipes shall 'Secondary' headers shall connect directly to the manifold control system with extensions for additional cylinders being provided by the addition of further headers. Non-return valves shall be fitted to each tailpipe connection point to protect the system in the event of a tailpipe fracture. Corner connectors shall be available to enable installation of manifold headers around corners of the manifold room.

CE Marking OR Listed to UL

It shall be 'CE' marked under the Medical Devices Directiv 93/42/EEC with approval from notified body number Under this directive, the specified products are classified as Class IIb Medical Devices. or it shall Listed to UL and should have UL number.

3.0 CO2 MANIFOLD SUPPLY SYSTEMS(Separate manifold in OT)

3a) CO2 Main Manifold - 2 x 4 Cylinders size and CO2 Fully Automatic Control Panel

The manifold system shall fully comply and meet NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN**. It should be capable of delivering 500lpm at 60PSI. The manifold control system shall provide an uninterrupted supply of a specific medical gas from equally sized high pressure cylinder banks via a suitable arrangement of pressure regulators, providing a constant downstream nominal pipeline gauge pressure of 400 kPa at outlet, The entire system shall be 'duplexed' such that any single functional component failure will not affect the integrity of the medical gas supply. The manifold shall be supplied fully assembled and tested.

Manifold Control System Design

It should have all regulators which should be adiabatic certified. The manifold control panel shall be designed and certified for use with oxygen at 200 bar and 60°C. Auto-ignition testing shall be carried out and a copy of the test report shall be provided for review. Central regulator panel with cylinder headers each side. Headers are complete with gas

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specific cylinder tailpipes. Pre-wired for alarm connection to BMS outputs. Central regulator panel with cylinder headers each side. It should be fully automatic changeover control panel of 500lpm. Headers are complete with gas specific cylinder tailpipes. Pre-wired for alarm connection to BMS outputs. All components degreased for oxygen use. Mild steel powder coated enclosure with Perspex window. The manifold control system shall be powered by an extra low voltage on board supply. The controller shall include normally closed alarm connections and two sets of BMS connections for both normally open and normally closed operation. Line pressure shall be continuously monitored by an electronic pressure switch; mechanically actuated pressure switches are not acceptable. There shall be a manual changeover button to enable selection of the duty bank. Two non-return valves, one for each bank, shall be provided within a line pressure manifold block and shall provide gas tight isolation of each bank during maintenance and ensure supply continuity in the event of any upstream component failure. In the event of a low line pressure condition, both solenoid valves shall open to enable both banks to deliver gas and restore normal pipeline pressure. A manifold status panel shall be provided with colour coded LED indication lights for the following operating and fault indications:

- Power On
- High Line Pressure
- Low Line Pressure
- Reserve Low
- Left Bank Running
- Left Bank Low
- Left Bank Empty
- Right Bank Running
- Right Bank Low
- Right Bank Empty

Control System Operation

The Interface Indicator shall be provided with colour coded LED indication lights for the following operating and fault indications:

- Normal
- Duty Bank Empty
- Standby Low
- Reserve Bank Low
- Pipeline Pressure Fault
- System Fault

In the event of a power supply failure, both solenoid valves shall open to enable gas to be supplied from both cylinder banks simultaneously until restoration of the power supply.

Materials

All polymers and elastomers in the gas flow that can be subjected to working pressure greater than 3000 kPa shall be halogen-free. The use of PTFE, PCTFE, Viton and other halogenated polymers in these applications is strictly prohibited. Non-return valves fitted to header manifolds shall have a metallic seat with ceramic ball. Soft seat non-return valves utilising polymers or elastomers are not acceptable.

CE Marking OR Listed to UL

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3b) CO2 Emergency Reserve Manifold - 2 x 2 cylinders

The manifold system shall fully comply and meet with NHS Health Technical Memorandum 02-01 (HTM02-01)/ NFPA-99. The manifold control system shall provide an uninterrupted supply of a specific medical gas from equally sized high pressure cylinder banks via a suitable arrangement of pressure regulators, providing a constant nominal downstream pipeline gauge pressure of 400 kPa at outlet. The Emergency reserve Manifold shall be supplied fully assembled and tested. A terminal unit test point shall be fitted, which shall be isolated from the main supply with a ball valve. The manifold shall be supplied with a non-return valve and lockable line isolation valve for connection to the distribution system, enabling a continuous supply of gas to the distribution system upon failure of the normal supply. High pressure bank isolation valves shall be supplied to enable one bank to be designated as "duty" (open in normal operation) and one bank to be designated as "stand by" (closed in normal operation). Visual indication of the open bank shall be included. To simplify installation the manifold shall be supplied with the primary manifold headers and non-return valves for connection of tailpipes. The complete manifold shall be fitted to a wall mounting plate attached to the wall with four screws.

Pressure Regulation

There shall be two separate stages of pressure regulation to enable high peak flow rates without a significant reduction in downstream pressure. Multistage regulators combined into a single unit are not acceptable. The inlet of the 1st stage regulator shall be protected from the particulate matter by a 25µm sintered brass filter. Sintered aluminium bronzes shall not be used. Regulators shall comply with BS EN ISO 10524-2 and shall be supplied with documented test reports upon request, confirming successful completion of the oxygen ignition tests stated therein. The manifold control system shall capable of supplying a flow of 500 l/min to a nominal 400 kPa distribution system, based on a 10% reduction in flowing pressure from a static pressure set point. All regulators shall be protected from over-pressurisation by relief valves which shall be pre-piped into the manifold exhaust line stub pipe to enable the gas to be taken away and vented to atmosphere safely. Relief valves shall not be vented into the manifold room.

Materials

All polymers and elastomers in the gas flow that can be subjected to working pressure greater than 3000 kPa shall be halogen-free. The use of PTFE, PCTFE, Viton and other halogenated polymers in these applications is strictly prohibited. Non-return valves fitted to header manifolds shall have a metallic seat with ceramic ball. Soft seat non-return valves utilising polymers or elastomers are not acceptable.

Emergency Reserve Manifold Operation

Either the left or right hand of the manifold bank shall be designated as "Duty", with the other manif old bank being designated as "Standby" by use of the high pressure bank isolation valves. When the bank pressure in the "Duty" bank falls to 14 bar, a "Reserve Low" or "Reserve Fault" alarm condition sh all be initiated by a contact pressure gauge, which shall be indicated on the relevant medical gas central alarm panel and/or primary supply automatic manifold panel. The "Standby" bank shall also be provided with a contact pressure gauge, such that any leakage of gas over an extended period of which causes the

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pressure in the standby bank to fall below14 bar, will also initiate a "Reserve Low" or "Reserve Fault" alarm condition.

Modular Header Manifolds

Modular header manifolds shall provide connection points for flexible cupro nickel tailpipes. Pin indexed tailpipes shall as required. 'Secondary' headers shall connect directly to the manifold control system with extensions for additional cylinders being provided by the addition of further headers. Non-return valves shall be fitted to each tailpipe connection point to protect the system in the event of a tailpipe fracture. Corner connectors shall be available to enable installation of manifold headers around corners of the manifold room.

CE Marking OR Listed to UL

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4.0 MEDICAL COMPRESSED AIR COMBINED AIR PLANT

Medical Air 4 Bar and Surgical Air 7 bar supply – 5500 LPM or more

QUADUPLEX SYSTEM 11 Bar, 50 Hz 3 Phase (Package Unit)

The medical air system shall fully meets and complies with NHS Health Technical Memorandum 02-01 /**NFPA 99/ HTM 02-01/DIN/ISO/EN**. Medical quality air to the European Pharmacopoeia monograph shall be delivered at pressures of 400kPa (4 bar) gauge for supply of the hospital medical and surgical air at pressure of 700kPa (7Bar) going for supply of hospital surgical air systems. The entire system shall be 'Quaduplex" such that any single functional component failure will not affect the integrity of the medical compressed air supply.

Sources Of Supply - HTM02-01/EN ISO 7396-1/NFPA 99

Medical Air Plant of 11bar for both 4bar MA4 Air & SA7 Air supply.

Quadruplex compressor configurations, two identical air compressors should run to produce 5800lpm flow and 2 identical air compressors should be as stand by.

* 2 x 2800-3000 lpm each oil-injected rotary screw air compressors/Oil Free Scroll Compressors will run to produce 5500lpm or more of air flow.
* 4 x 22-25kw Oil-Injected Rotary Screw Compressors, with duplex air drier and air filtration,
* 3 x 2000 liters capacity vertical air receiver.
* Should be EMC Certified, EMC Certificate must be submitted

Control System

The central control system shall provide an intelligent human machine interface incorporating on board flash memory and real-time clock for recording operational parameters in the inbuilt event log. The central control system shall operate at low voltage and include BMS connection for plant fault, plant emergency, reserve fault and pressure fault. Visualization of plant inputs, outputs and status through a web browser, using a simple Ethernet connection shall be available. The central control unit shall incorporate a user friendly 5" or more high-definition color display with clear pictograms and LED indicators, providing easy access to system operational information. A mechanical back-up facility shall ensure continued operation in the event of a control system malfunction. The control system shall normally employ automatic rotation of the lead compressor to maximise life and ensure even wear.

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Medical Air Compressors

Compressors shall be oil injected rotary screw / scroll compressors suitable for both continuous and frequent start/stop operation at a nominal outlet pressure of 1100 or 1300 kPa (11bar or 13bar) gauge. Compressors shall be supplied with a block and fin style after cooler with a dedicated quiet running fan to maximize cooling and efficiency. A multistage oil separator capable of achieving 2ppm oil carry over shall be fitted to minimize contamination and maintenance. EFF1 (CEMEP) rated TEFC, IP55 class F electric motors shall be used and incorporate maintenance-free greased for life bearings. Motors with lower efficiency ratings are not acceptable.

Dryer/Filter/Regulator System

The duplexed filter and dryer module shall incorporate high efficiency water separators, oil filters, heatless regenerative desiccant dryer, dust/activated carbon filters, hopcolite filters and bacterial filters with autoclavable element. Electrical contacts shall be installed on the filters to provide warning alarms on the dryer controller in the event of high pressure drop (ie blockage) and shall also include connections for BMS. Contaminants in the delivered air downstream of the bacterial filters shall be maintained at levels below those shown in the following table:

Contaminant	Threshold
H2O	67 ppm v/v
Dry particulates	Free from visible particulates in a 75 litre sample
Oil (droplet or mist)	0.1 mg/m^3
CO	5 ppm v/v
CO2	500 ppm v/v
SO2	1 ppm v/v
NO	2 ppm v/v
NO2	2 ppm v/v

Dryer Purge Control

The dryer control system shall incorporate a Purge Saver Energy Management system that freezes the regeneration of the desiccant once adequate dew point is reached in the inactive tower. Only when the dew point level in the active tower deteriorates to an unacceptable level will the intelligent controller switch towers. This shall be achieved by including an additional dew point sensor and associated software in the dryer controller to effectively manage the system as well as providing on screen measurements of purge savings.

Dew Point Monitoring

The dryer shall incorporate a ceramic dew point hygrometer with an accuracy of ±10C in

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the range -20 to -80®C atmospheric dew point and 4-20mA analogue output. Aluminium oxide or palladium wire sensors are not acceptable. An alarm condition shall trigger on the dryer control panel if the dew point exceeds a -46®C atmospheric set point. The plant control unit shall incorporate a multifunctional LCD displaying, amongst other things, the dew point of the delivered air to enable monitoring of the air quality by the hospitals estates department. Volt free contacts shall be included to enable the dew point alarm signal to be connected to a central medical gas alarm system and/or building management system (BMS). To enable periodic calibration of the dew point sensor element, the hygrometer shall be remotely connected downstream of the dryer via a micro-bore tube. It is not acceptable to install the sensor directly into the medical air supply pipeline.

Receiver Assembly

Air receivers shall comply with BS EN 286-1, supplied with relevant test certificates. Each air receiver shall be hot dip galvanised inside and out and fitted with a zero loss electronic drain valve. Float type drain valves are not acceptable. The receiver assembly shall be fitted with a pressure safety valve capable of passing the maximum flow output of the compressor at 10% receiver overpressure. The receiver shall be further protected by a safety pressure relief valve and include a pressure gauge. The system shall consist of total receiver vessel shall be of 6000 litres. (3 x 2000 ltrs each)

CE Marking OR Listed to UL

It shall be 'CE' marked under the Medical Devices Directiv 93/42/EEC with approval from notified body number. Under this directive, the specified products are classified as Class IIb Medical Devices or it shall Listed to UL and should have UL number.

5.0 MEDICAL VACUUM PLANT – 5000 Lpm or more
PENTAPLEX SYSTEM 50 Hz 3 Phase (Package Unit)

Medical Vacuum

The medical vacuum system shall fully comply and meet with the NHS Health Technical Memorandum 02-01 (HTM02-01)/ NFPA-99. The Medical Vacuum System shall ensure the minimum pipeline vacuum level of 450mmHg is maintained at the plant service connection point at the rated volumetric 'free air' flow rate with two pumps in standby. The bacteria filtration system shall be 'duplexed' such that each filter can be isolated for replacement of the filter cartridge. It Should be EMC Certified, EMC Certificate must be submitted.

Vacuum Pumps

Five 5 Kw or more Identical Vacuum pumps shall be air-cooled, oil lubricated rotary vane type suitable for both continuous and frequent start/stop operation at nominal inlet vacuum levels of between 578mmHg and 728mmHg. Three 5 Kw or more identical vacuum pump should be working and Two identical 5kw or more vacuum pumps should be as standby. Three (1600 lpm or more) each vacuum pump will run to produce 5000 lpm or more. Composite carbon fibre rotor blades shall be fitted to minimize the cost of maintenance. Rotors shall be driven by directly coupled TEFV electric motors. 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 have an integral separator filter to ensure a virtually oil-free exhaust. Each pump shall be fitted with anti-vibration pads between the pump foot and mounting frame.

Bacteria Filters

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The quaduplex bacteria filter system shall incorporate high efficiency filter elements. A differential vacuum indicator shall be installed across the filter to indicate blockage. Additional pressure sensors shall be installed at the inlet and outlet of the filter to measure the pressure drop across the filters. Each filter shall be designed and sized to carry the full plant design flow capacity with a pressure drop not exceeding 33mbar (25mmHg). Bacteria Filter elements shall have penetration levels not exceeding 0.005% when tested by the sodium flame method in accordance with BS 3928:1969 and utilizing particles in the 0.02 to 2 micron size range. Drain flasks shall be connected to each filter. Drain flasks shall be manufactured from transparent Pyrex® with a polymer coating on the inner and outer surfaces in order to maintain a seal in the event of inadvertent breakage of the Pyrex® flask. All drain flasks shall be suitable for sterilization and be connected via a manual isolating valve.

Control System

The central control system shall provide an intelligent human machine interface incorporating on board flash memory and real-time clock for recording operational parameters in the inbuilt event log. The central control system shall operate at low voltage and include BMS connection for common fault. Visualization of plant inputs, outputs and status through a web browser, using a simple Ethernet connection shall be available. The central control unit shall incorporate a user friendly 5" or more high-definition color display with clear pictograms and LED indicators, providing easy access to system operational information. Cascading of vacuum pumps shall be achieved by measuring the vacuum level at the plant inlet with a pressure transducer. A mechanical back-up facility shall ensure continued operation in the event of a control system malfunction. The control system shall normally employ automatic rotation of the lead pump to maximise pump life and ensure even wear.

Vacuum Receiver(s)

Vacuum receiver(s) shall be supplied with relevant test certificates and have a total volume of at least 100% of the plant output in 1 minute in terms of free air aspired at normal working pressure. Each vacuum receiver shall be hot dip galvanised inside and out. Two receiver tanks of total 2500 liters or more capacity each (Total 5000ltrs or more).

CE Marking OR Listed to UL

It shall be 'CE' marked under the Medical Devices Directiv 93/42/EEC with approval from notified body number Under this directive, the specified products are classified as Class IIb Medical Devices or it shall Listed to UL and should have UL number.

6.0 LINE BALL VALVE ASSEMBLIES

Line Ball Valve

It shall fully comply and meet with NHS Health Technical Memorandum 02-01 (HTM02-01)/ NFPA-99./DIN/ISO/EN

Medical gas line ball valves complete with connections and blanking spade shall be provided as a means of isolation on medical gas pipelines at positions specified in the medical gas pipeline system design. Valves shall operate from the fully open to the fully closed position by manual operation of a lever through 900. Valve nominal bores shall be equal to the nominal pipe work size. All line ball valves shall be cleaned for oxygen service. Smaller type V assemblies (15 to 54mm inclusive) shall have flat-face connectors with 'O'

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ring seals. The larger VF type(76 to 108mm inclusive) shall be flanged and installed with stainless steel bolts, nuts and spring washers with 3mm Viton sealing gaskets. PTFE tape or any other thread sealing media is not acceptable. Each Medical gas line ball valve assembly shall terminate in copper stub pipes to enable brazing direct into the distribution system using the flux less brazing technique. Valve assemblies shall incorporate a sliding lock mechanism on the handle, which can be locked in either the open or closed position using a standard padlock with a 6mm (1/4") diameter shackle.

Materials

Medical gas line ball valve assemblies shall be constructed in a two-piece full-bore design with brass body, Teflon® ball seals, stem packing seal, stem 'O' ring seal and a hard-chrome plated brass ball. Vales shall be designed to have a tight shut-off and blow out proof stem for protection against pressure surges. Copper stub pipes shall be manufactured from medical grade copper pipe to BS EN 13348:2001. Copper stub pipes shall be of sufficient length to enable brazing directly into the distribution system without the need for disassembly on site.

Testing

All ball valve assemblies shall be pressure tested for valve tightness and leakage prior to packing and shipping.

Performance

Nominal Dia DIM 'A' (mm)	Torque (Nm)	Working Pressure (bar)
15mm	5.4	55
22mm	8	50
28mm	10	40
35mm	14	40
42mm	20	35
54mm	33	27
76mm	-	16
108mm	-	16

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7.0 AREA VALVE SERVICE UNITS

Single Service Area Valve Service Unit

It shall fully comply and meet with NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN** It shall provide a zone isolation facility, for use either in an emergency or for maintenance purposes. It shall also provide a physical breakpoint to allow work to be safely carried out on the pipeline. A red colored physical barrier (spade) shall be capable of insertion when required on either side of the valve, without the need to totally dismantle the line valve. During normal service, full-flow gaskets with an 'O' ring groove on one side shall be colored white and provide sealing between the flat face connector and ball valve. The line valve shall be brass 22mm ball valve with PTFE seals/seats, operated by a quarter turn handle with over-travel prevention in both directions. The ball valve shall connect by 22mm copper stub pipes to the distribution system. The assembly shall be housed in a valve box, which shall be capable of both surface and concealed installation. The box shall made from extruded aluminium with die-cast aluminium end caps to prevent corrosion, offer high strength, and resist high temperatures from brazing in close proximity. A hinged door shall lock in the closed position and AVSU installed adjacent to each other shall be operated by different key/lock combinations. The AVSU door shall open through a minimum of 160° to provide maximum access, and provide for natural ventilation to prevent build-up of gas within the valve box. A blank zone identification label shall be provided with each AVSU 2nd fix assembly. Each AVSU assembly shall be factory tested for gas tightness.

Materials

The second fix assembly shall be manufactured from ABS. All wetted parts (except seals and gaskets) shall be brass or copper. Copper stubs pipes shall be manufactured from phosphorous de-oxidised non-arsenical copper to EN 1412:1996 grade CW024A, manufactured to metric outside diameters in accordance with BS EN 13348:2008 R250 (half hard). Rubber pipe grommets shall be provided to ensure any leaking gas does not escape from the box into a wall cavity.

Gas Specific Connections

The AVSU shall be fully gas specific and labeled to identify the medical gas service. The gas specific shrouds shall clearly show the gas service and use colour coding to BS EN ISO 5359. Shrouds shall be pin indexed such that the only the correct shroud can be fitted to each 1st fix. Gas specific NIST connections to BS EN 15908 shall be incorporated on each side of the line valve and include a permanently fitted gas identification label. Pressure gas service (not vacuum) NIST connections shall incorporate 100% self-sealing valves which, held closed by gas pressure until insertion of the appropriate gas specific male NIST fitting.

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8.0 MEDICAL TERMINAL UNITS /GAS OUTLETS

Terminal Unit

It shall fully comply and meet with NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN.**

Terminal units shall be capable of single-handed insertion and removal of the medical gas

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probe. The anesthetic gas scavenging (AGS) terminal unit shall conform to BS6834: 1987. The wall mounted first fix assembly shall consist of brass pipeline termination block with copper stub pipe secured between a back plate and a gas specific plate to allow limited radial movement of the copper stub to align with the pipeline. The gas specific plate shall be fixed to the back plate by means of a tamperproof clip-fit mechanism. The first fix shall incorporate a maintenance valve (except for vacuum) and a test plug. The test plug shall provide an effective blank to enable carcass pressure testing. The second fix plastic components shall be manufactured with the pin index permanently molded into the gas specific socket. The socket assembly shall retain a capsule assembly, containing the check valve and probe 'O' ring seals. The replaceable capsule assembly shall enable all working parts subject to wear through usage to be replaced as a factory tested assembly, thereby reducing maintenance time. Each termination block assembly shall be pressure tested by the pressure decay method.

Gas Specificity

Terminal units shall be gas specific and only accept the correct medical gas probe. Gas specific components shall be pin-indexed to ensure that a correct gas specific assembly is achieved so that in normal course of dismantling for repair or maintenance, parts from other gases cannot inadvertently be used. Wall mounted terminal units shall incorporate an anti-rotation pin to engage with connected downstream medical equipment ensuring correct orientation.

Pipeline Connections

Terminal units installed in walls, bed head panels, headwalls or fixed pendants shall be connected to the pipeline with a copper stub pipe. Pressure gases and vacuum shall incorporate a 12mm copper stub pipe with a swaged end for direct connection to a 12mm O/D copper tube without the need for an extra fitting, thereby requiring only a single brazed joint to be made. Terminal units for anaesthetic gas scavenging shall incorporate a 15mm O/D copper stub pipe.

CE Marking OR Listed to UL

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9.0 CENTRAL (PLANT) MAIN ALARM SYSTEM

Medical Gas Central Main Alarm System

It shall fully comply and meet with NHS Health Technical Memorandum 02-01 (HTM02-01)/ NFPA-99.

The Central Alarm shall be Antimicrobial, flexible, customizable medical gas central alarm system. The Alarm system is capable of carrying up to fifteen gas services, and can consist of up to thirty-two panels, including any relay interfaces. A single tamperproof fastener shall be used to gain access to the hinged door.

System Operation

Configuration of the Alarm shall be done via switches on the panel, allowing easy and flexible configuration. Each panel shall display and / or input up to five gas services or up to twenty point alarms. Each gas service shall consist of a bank of five dual-circuit LED indicators, one green (for a "Normal" indication) and three yellow and one red (for four

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input conditions) as standard, although panels shall be customizable for individual requirements. The gas service inputs shall be connected to a five way connector block. The alarm shall monitor the cable connection from the source equipment, and provide a fault alarm in the event of a short circuit or open circuit fault. This shall be distinguishable from a source equipment fault. There shall be a test facility to check the integrity of all the LED indicators on the panel, and the audible alarm. The test facility shall also provide diagnostic information to aid in fault finding. An adjustable volume audible alarm shall be fitted to the panel to allow installation in all environments, and there shall be a facility to connect the alarm to a remote sounding unit to repeat the audible alarm at other locations, for example a nurse base at the other end of a ward.

There shall be a mute facility which silences the audible alarm for a period of fifteen minutes, or until another alarm condition occurs. There shall be a selectable option to indicate to other repeater panels around the system that an alarm condition has been acknowledged and appropriate action is being taken. A volt free contact shall be provided to output normal/fault status for the panel.

Panel Operation

Each panel shall be wired on to a dedicated data transmission cable and shall be permanently connected to the "Essential Supply" within the hospital via a 3A double pole switched fused spur. Each gas service will display a green "Normal" indication when all four conditions are not in a fault condition. When an input condition faults, the respective LED shall indicate the type of failure. Any data communication errors shall cause a "System Fault" alarm. A rechargeable battery shall provide a "System Fault" alarm in the event of a power failure. Source equipment shall connect directly to the input alarm panel. It is not acceptable to install a separate connection box to convert switch signals to a data signal.

CE Marking OR Listed to UL

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10.0 MEDICAL GAS AREA ALARM SYSTEMS

Medical Gas Area Alarm

It shall fully comply and meet with NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN.**

Each medical gas area alarm panel shall be Antimicrobial and capable of monitoring 6 medical gas services by means of pressure sensors, which detect deviations from the normal operating limits of either pressure or medical vacuum. The medical gas area alarm shall fully comply with the requirements of BS EN 60601-1 and BS EN 60601-1-2 and BS EN ISO 7396-1. A single tamperproof fastener shall be used to gain access to the hinged door.

System Operation

Each gas service shall be displayed by coloured LED's to show 'Normal' (green), 'Low' and 'High Pressure' (red) conditions. Medical vacuum systems shall be displayed in the 'Normal' (green) and 'Low Vacuum' (red) conditions only. Failure indicators shall be displayed by flashing lights and normal indications shall be steady. Each LED block indicator shall be a plug-in component with individual long life LED's connected in parallel in two banks to provide duplex circuits.

An audible warning shall sound simultaneously with any failure indication and a mute facility shall be provided. Following a mute selection the audible will resound after

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approximately 15 minutes, or shall operate simultaneously should a further alarm condition occur. A "Mute" switch shall be provided inside the panel for use during any maintenance resulting in prolonged pipeline or plant shutdown. This facility shall automatically reset when the gas service returns to normal. The alarm panel shall have a 'Test' facility to prove the integrity of the internal circuits, LED's and audible warning. The alarm panel shall incorporate a volt free normally closed relay to allow for interconnection to either a medical gas central alarm system or an event recording circuit of a building management system. Each alarm shall provide a green LED to indicate that electrical power is available at the panel and a red LED to indicate 'System Alarm'. In the event of an electrical powersupply failure the 'System Alarm' LED shall illuminate (flashing) and the audible warning shall be delayed for 30 seconds to enable standby generator tests.

Line contact monitoring circuits shall be provided to constantly monitor the integrity of the input sensors and interconnecting wiring. In the event of any fault the line contact monitoring circuits shall initiate the specific gas service failure indication, a 'System Alarm' indication and an audible warning. Further aids to fault diagnosis shall be provided by means of varying flashing rates whilst operating the 'Test' switch.

A simple data connection shall be provided to allow connection of up to 5 repeater panels, enabling the visual and audible alarm signals to be repeated at other locations within a department.

Pressure and Vacuum Switches

Pressure and vacuum switches shall be manufactured with brass wetted parts and house a PCB with line contact monitoring resistors. Electrical connectors shall be designed for frequent disassembly. Spade connectors are not acceptable. Pressure switches shall include both high and low pressure settings in the same switch, using only a single ¼" BSPP threaded pipeline connection to minimise the number of sealed joints. The body and housing of the pressure switch shall be manufactured from impact resistance, rigid and inherently corrosion proof materials. Elastomers and plated or coated mild steel are not acceptable materials. Pressure switches shall connect directly to the area alarm panel. It is not acceptable to install a separate connection box to convert switch signals to a data signal.

CE Marking OR Listed to UL

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11.0 ANAESTHETIC GAS SCAVENGING DISPOSAL SYSTEM – 2900 Liters per minute

Anaesthetic Gas Scavenging System

The Anaesthetic Gas Scavenging (AGS) System It shall fully comply and meet with NHS Health Technical Memorandum 02-01 / **NFPA 99/ HTM 02-01/DIN/ISO/EN**. The AGS system shall be a dedicated, specifically designed active extraction and disposal system for waste anaesthetic gas. Duplex AGSS System - Twin stand alone AGSS pumps of 3 phase 2900l/min capacity each with built in flow indication and pressure regulation valve. Mounted on single frame with control panel and separate warning label. One pump will be standby with the other in operation. • 2 x 3KW Nominal Motar per blower. 1 x DOl starter. • 54mm service connection.

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Anaesthetic Gas Scavenging (AGS) Plants are intended to provide a continuous low level vacuum supply to pipeline systems in healthcare facilities for the removal of waste anaesthetic gases captured from patient breathing circuits via AGS receivers. The plant shall be a duplex configuration such that the vacuum supply is maintained in single fault condition. The stated volumetric flow rate shall be delivered with one blower on standby. AGS Plants shall comply with BS EN ISO 7396-2 and United Kingdom Department of Health (DoH) publications HTM 02-01, HTM 2022 and NHS Model Engineering Specification C11. The entire AGS Plant shall be skid mounted, fully assembled and factory tested as a complete system. A test certificate shall be provided showing the results of all tests, which shall include the free-air flow rate obtained with the system delivering a working pressure of -125 mbar gauge. Type testing or testing in component form is not acceptable.

Regenerative Blowers : Two equally sized regenerative blowers shall be provided. Blowers shall be oil-less, air cooled side channel regenerative type, suitable for both continuous operation and frequent start/stop. The motor shall be directly coupled to a fully enclosed impeller with contact free operation. All bearings shall be sealed and greased for life, requiring no further lubrication in service. Each pump shall be provided with a 'Mode Select' switch incorporated into the plant control unit to enable the pump to be run continuously (in hand operation) or automatically as and when required by the plant control unit. Each motor shall also be afforded protection by means of a thermal overload relay with a manually reset function.

Plant Control Unit : The plant control unit shall incorporate a transformer to provide a nominal 24 V a.c. electrical supply to all internal controls and remote start switches and an interlock isolator shall be integrated into control panel door. The plant control unit shall be provided with neon indicator lights for the following operating and fault conditions:

1. Power On
2. Standby Run
3. Pump Failed

The plant control panel shall include a switch to enable manual selection of the duty pump; the other thereby being designated as standby. Pressure at the pipeline interface shall be continuously monitored by a pressure switch with diaphragm sensing element and shall be adjustable between -25 and -100 mbar gauge pressure and shall be factory set to -65 mbar gauge pressure. If the duty blower fails or is unable to cope with the system demand, the standby blower shall be called to operate and a 'Standby Run/Duty Failed' indication shall illuminate on the plant control panel and each remote start switch. If both blowers fail or the system is otherwise unable to maintain a pipeline vacuum level above the pressure switch set point, a 'System Failed' indication shall be initiated. The vacuum level at the plant inlet shall be displayed on 63 mm nominal diameter pressure gauge mounted on the plant control unit. The pressure gauge shall have a scale range of 0 to -400 mbar gauge pressure and have an accuracy of +/-2% or better across the middle half of the scale range. Swing type check valves shall be installed in the pipes connected to the blower inlet ports. At the pump outlets, each exhaust pipe shall be provided with a polymer coated autoclavable Pyrex drain flask at the lowest point. Venturi type AGSS is not acceptable.

CE Marking OR Listed to UL

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12.0 AGSS Remote Indicator :

It shall fully comply and meet with NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN**.It should be flush mounted, white ABS 24 volt on/off room controller indicating 'red' plant failed, 'amber' duty pump failed and 'green' mains airflow on.

13.0 AGSS Reservoir

It shall fully comply and meet with NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN** The AGSS Receiver is the practical solution for waste anaesthetic gas discharges and is designed as an integral part of any waste anaesthetic gas system..The receiver comes complete with a transfer system, outlet hose assembly, and user instructions, making it ready for immediate use. Transfer system- connects to the patient circuit or anaesthetic machine and comprises a 1.5 metre length of 30 mm clear disposable tube with a male 30 mm taper for connection to the side of the receiver, and a 30 mm female tapered breathing circuit connector. It should have air break which prevents suction from the disposal system being transferred to the patient -flow indicator. Under normal operating conditions the indicator should be visible. -gauze filter built into the top of the vessel to prevent gown fluff and other solid material from reaching and blocking the fixed extraction system. Receiver vessel for active anaesthetic gas scavenging systems body - anodised aluminium, powder coated Collar and Cap - anodised aluminium Indicator Window - clear acrylic Indicator Float - low density polyethylene. It should have flow indicator.

14.0 AGSS outlet hose assembly

It shall fully comply and meet with NHS Health Technical Memorandum 02-01 **/NFPA 99/ HTM 02-01/DIN/ISO/EN**. It conducts the waste gases to the fixed system outlet point and comprises a 4 metre length of reinforced clear tube (colour coded yellow and blue as per the standard). This is fixed to the top of the vessel allowing the tube unimpaired 360o motion to reduce strain on the unit, and tube occlusion. The other end of the tube terminates in an AGSS probe.

15.0 BSi Kite Mark Certified COPPER PIPES

Medical Gas Pipes

The piped distribution system shall use copper pipes manufactured from phosphorous de-oxidised non-arsenical copper to BS EN 1412:1996 grade CW024A (Cu-DHP), manufactured to metric outside diameters and having mechanical properties in accordance with BS EN 13348:2008- R250 (half hard) for sizes up to 54mm or BS EN 13348:2008 – R290 for larger sizes. Pipes shall be degreased suitable for oxygen use and cleanliness is to be maintained by filling each pipe with dry, clean, oil and oxygen free nitrogen, fitting suitable end caps and protectively wrapping. All pipework materials shall be manufactured by BS EN ISO 9001:2001 registered companies. All Copper Pipes should be Lloyds/TUV certified.

Degreasing of pipe shall be such that there is less than 20mg/m2 (0.002mg/cm2) of hydrocarbons on the degreased surface when tested by the method specified BS EN 13348:2008. As per NHS C11 section 05 all copper tube suppliers to have mandatory BSI kitemark and certificate number. Hence copy of BSi kite mark certificate must be submitted.

Copper Fittings should be for medical use. As per NHS C11 section 05 all copper fittings suppliers to have mandatory BSI kitemark and certificate number. Hence copy of BSi kite mark certificate must be submitted.

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Marking

For sizes 12mm up to 54mm, copper pipes shall be permanently and durably marked at regular intervals along its length with the following information:

a) The harmonised standard number EN 13348;
b) Nominal dimensions, diameter x wall thickness;
c) Inspection stamp with Lot no.
d) BSI Kite Mark identification;

Medical Gas Pipeline Fittings

Fittings shall be end feed type, manufactured from the same grade of copper as the pipes and be in accordance with the requirements of BS EN 1254-1:1998 Part 1. Fittings shall be degreased suitable for oxygen use and be supplied individually sealed in protective polythene bags.

Component Cleanliness

Degreasing of pipe shall be such that there is less than 20mg/m2 (0.002mg/cm2) of hydrocarbons on the degreased surface when tested by the method specified in EN 723. The degreasing of fittings shall be such that there is less than 100mg/m2 (0.01mg/cm2) of hydrocarbons on the degreased surface when tested by the afore mentioned method. All pipeline components shall also be free of any visible liquid detergent washing or solvent degreasing. Other methods may be used if they are proven and can be guaranteed to achieve acceptable results without degradation of the component or the environment.

16.0 PENDANTS AND BED HEAD UNITS

16a) Bed Head Vertical Panel

It shall fully comply and meet with NHS Health Technical Memorandum 02-01/ **NFPA 99/ HTM 02-01/DIN/ISO/EN** The Vertical bedhead wall panel shall be constructed from custom designed extruded aluminium sections with customer specified powder coated panels.
It shall be duly CE marked and comply with 93/42/EEC Medical Devices: General & shall have CE No. It shall be constructed from high quality anodized aluminum profiles with a maximum length of 2100mm length in one piece with integrated double support rail at both the sides. Pre Piped and Pre Wired. 2/3/4/5/6 customer choice of Gas Outlet Points. (Gas outlet will be free issue for fixing in the bed head panel by the hospitalor contractor). It shall have following: 1 No.RJ45 Data Socket + 1 No. RJ 15 Sockets with Frame, 8 Nos. multi-pin 6/16 amp electrical switch +sockets and frame for normal supply. 8Nos. potential sockets for earthling. It should complete through piping to the central connection point by means of medical grade copper pipes complies to EN 13348 standards. Gas outlet points will be paid as per gas outlet rates. Medical unit cost does not include cost of gas outlets. NIST connection for each gas.

16b) Ceiling Double Arm Anaesthesia Pendants

It shall be duly CE marked and comply with 93/42/EEC Medical Devices: General. Country of Origin must be mentioned. The pendant should be double arm motorized high degree of flexibility due to expandability in terms of equipment options. The pneumatic break should be used to secure system and prevent any accidental movement of the ceiling pendant. Variable placement of shelves to ensure adaptability of various requirements in OT. Double arm motorized pendant should be installed depending on the given conditions and the individual requirements in the operating theatre. A ceiling supply system with one part arm

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can not only move along a circular curve and rotate on its own axis, but may also be flexibly positioned at any point of a circular area.

Configuration : Rated for maximum 125 kg load.
There should be 3 nos. equipment loading shelves.
Out of Three shelves, two shelves should be variable height flexibility.
It should have Two column of 950mm length.
Double Arm Pivot range minimum 800mm X 800mm or above.
Height of concrete ceiling: 3400-4000 mm
Height finished ceiling: 2400 mm
Type of Mediabase: Twin
Height of Mediabase: 950 mm
Theoretical payload: 125 kg
Maximum payload: 125 kg
Dimensions of Instrument Platform = 560mm x 490mm
RAL9002, with medical rail 25x10mm at both sides, max load 40Kg, max load rails 10Kg,
Weight of shelf 11,7 Kg
1x Hand Held Remote Unit with cable connection
Range of Rotation 330"Degree
Maximum height adjustment 600mm
Maximum swivel radius on dual arm system is 2000mm
Pre Piped and Pre Wired.
It shall have following:
1 No. RGB Luminaries on both the arms of the pendants with controller.
Gas Outlets as mentioned in the Design Matrix.
Gas Outlet shall be pre fitted from the factory. Price of the outlet has to be quoted separately.
It should have following
1x Pneumatic brake system with control unit.
1 each of color coded antistatic high pressure piping with NON INTER CHANGEABLE SCREW THREADS fittings for Oxygen, N2O, MA4 Air, Vacuum and AGSS as per site requirement.
6 Nos. Indian Origin multi-pin 6/16 amp electrical sockets and frame for normal supply.
6 Nos. Indian Origin multi-pin 6/16 amp electrical sockets and frame for UPS supply: 12 Nos. potential earthing sockets.
4 Nos. Indian Origin RJ45 Data Socket with Frame.

16c) Ceiling Double Arm Surgeon Pendants

It shall be duly CE marked and comply with 93/42/EEC Medical Devices: General. Country of Origin must be mentioned . The pendant should be double arm motorized high degree of flexibility due to expandability in terms of equipment options. The pneumatic break should be used to secure system and prevent any accidental movement of the ceiling pendant. Variable placement of shelves to ensure adaptability of various requirements in OT. Double arm motorized pendant should be installed depending on the given conditions and the individual requirements in the operating theatre. A ceiling supply system with one part arm can not only move along a circular curve and rotate on its own axis, but may also be flexibly positioned at any point of a circular area.

Configuration : Rated for maximum 125 kg load.
There should be 3 nos. equipment loading shelves.

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Out of Three shelves, two shelves should be variable height flexibility.
It should have Two column of 950mm length.
Double Arm Pivot range minimum 800mm X 800mm or above.
Height of concrete ceiling: 3400-4000 mm
Height finished ceiling: 2400 mm
Type of Mediabase: Twin
Height of Mediabase: 950 mm
Theoretical payload: 125 kg
Maximum payload: 125 kg
Dimensions of Instrument Platform = 560mm x 490mm
RAL9002, with medical rail 25x10mm at both sides, max load 40Kg, max load rails 10Kg,
Weight of shelf 11,7 Kg
1x Hand Held Remote Unit with cable connection
Range of Rotation 330"Degree
Maximum height adjustment 600mm
Maximum swivel radius on dual arm system is 2000mm
Pre Piped and Pre Wired.

It shall have following:
1 No. RGB Luminaries on both the arms of the pendants with controller.
Gas Outlets as mentioned in the Design Matrix.
Gas Outlet shall be pre fitted from the factory. Price of the outlet has to be quoted separately.

It should have following
1x Pneumatic brake system with control unit.
1 each of color coded antistatic high pressure piping with NON INTER CHANGEABLE SCREW THREADS fittings for Oxygen, N2O, MA4 Air, Vacuum and AGSS as per site requirement.
6 Nos. Indian Origin multi-pin 6/16 amp electrical sockets and frame for normal supply.
6 Nos. Indian Origin multi-pin 6/16 amp electrical sockets and frame for UPS supply: 12 Nos. potential earthing sockets.
4 Nos. Indian Origin RJ45 Data Socket with Frame.

17.0 Oxygen Flow Meter with Humidifier Bottle

It shall fully comply and meets with active medical device of class IIa and in compliance with the EN ISO 15002: 2008 standard. It should be duly CE marked and comply with 93/42/EEC Medical Devices: General. It shall be CE marked with the notified body number specified. It shall be provided with a copy of the certificate of origin. Pressure compensated to prevent back pressure build up on flow indicator. Expanded scale providing higher reading accuracy. Durable polycarbonate flow tube with cover. Flow meter should be placed in the vertical position. It should be light weight of 200 g. The flow meters should be of 0-15 LPM range for oxygen and with inlet pressure 50-60psi. (4.5 bar). The closing of the knob should be without any leakage. Polysulphone 250cc Humidifier bottle should be unbreakable, reusable to disinfectants and complements.

18.0 Vacuum Unit

It shall fully comply and meets with active medical device of class IIa and in compliance with the EN ISO 10079-3: 2009 standard. It should be duly CE marked and comply with 93/42/EEC

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Medical Devices: General. It shall be CE marked with the notified body number specified. Vacuum Regulator: It should be continuous vacuum regulator, compact, strong and ergonomic device. It should have manual adjustment of the vacuum gauge from -45degree to +45degree for a better visibility. Vacuum gauge should be protected by a plastic housing. It should have on/off switch-button providing a quick restoration of the pre-adjusted vacuum level. It should have central regulation knob with a free rotation at the end of the course (impossible blocking). It should have quick adjustment :2.5turns are enough to reach the maximum vacuum level. It should have vacuum levels : 0-1000 mbar/hPa. The vacuum regulator should be 3-in-1 system. It should have a device with a metal outlet tubing nipple integrated in the body of the regulator for a better safety, emergency suctions can even be processed. It should be supplied with a 100ml safety jar equipped with a mechanical anti-over flow safety valve and single use antibacterial plastic filter upfront. The safety jar should be made of polycarbonate, autoclavable up to 134degree C and unbreakable. The safety jar should be fixed by an easy-click rotation. The safety jar should be able to rotate to avoid any pinch of the tubing. It should have a unit serial number laser engraved on the body of each vacuum regulator ensuring its identifications and traceability. It should be light weight 490g and dimensions (height230mm X Width 70mm X Depth 90mm). Polysulphone collection jar of 2 litres with lid : it should be unbreakable and autoclavable upto 134º C must be fitted with an extremely simple anti overflow safety device, thereby ensuring easy maintenance. Should be totally transparent, they ensure perfect sucked liquid visibility.

19.0 Theatre Vacuum Unit

It shall fully comply and meets with active medical device of class IIa and in compliance with the EN ISO 10079-3: 2009 standard. It should be duly CE marked and comply with 93/42/EEC Medical Devices: General. It shall be CE marked with the notified body number specified. Vacuum Regulator : It should be continuous vacuum regulator, compact, strong and ergonomic device. It should have manual adjustment of the vacuum gauge from -45degree to +45degree for a better visibility. Vacuum gauge should be protected by a plastic housing. It should have on/off switch-button providing a quick restoration of the pre-adjusted vacuum level. It should have central regulation knob with a free rotation at the end of the course (impossible blocking). It should have quick adjustment :2.5turns are enough to reach the maximum vacuum level. It should have vacuum levels : 0-1000 mbar/hPa. The vacuum regulator should be 3-in-1 system. It should have a device with a metal outlet tubing nipple integrated in the body of the regulator for a better safety, emergency suctions can even be processed. It should be supplied with a 100ml safety jar equipped with a mechanical anti-over flow safety valve and single use antibacterial plastic filter upfront. The safety jar should be made of polycarbonate, autoclavable up to 134degree C and unbreakable. The safety jar should be fixed by an easy-click rotation. The safety jar should be able to rotate to avoid any pinch of the tubing. It should have a unit serial number laser engraved on the body of each vacuum regulator ensuring its identifications and traceability. It should be light weight 490g and dimensions (height230mm X Width 70mm X Depth 90mm). Polysulphone collection Jar of 2litres with lid : it should be unbreakable and autoclavable upto 134º C must be fitted with an extremely simple anti overflow safety device, thereby ensuring easy maintenance. Should be totally transparent, they ensure perfect sucked liquid visibility.

20.0.Medical Gas Hose Assemblies

Medical gas hose assemblies shall comply with BS EN ISO 5359
PVC hoses and hoses containing phthalates are not acceptable.

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Hoses shall be color coded throughout their length as specified in BS EN 5359 as follows:
Medical oxygen - white
Nitrous oxide - blue
Medical and surgical air - black & white
Vacuum - yellow
All hoses shall incorporate an anti-static inner core. Hose shall be permanently secured to all fittings with stainless steel crimped ferrules, and shall incorporate a window to enable verification that the hose is fully secured onto the hose barb.

21.0 Probe / Adaptor for Medical Gas Outlet Points –
Matching probes with one end suitable for Medical Gas Outlet Point & other end suitable for hose. The probe should comply with NFPA-99 or HTM02-01, BS 5682:1998 for gases & Vacuum & BS 6834:1987 for AGS.

22.0. Electrical Wiring inside the gas manifold and plant room

Hospital will supply 3 phase cable with distribution board and at one point inside the plant room. Electric cable with fixtures and fittings for manifold room will be done by the hospital. All switch-gear and motor control centre e.g. switches statement etc. volt and ampere meters. All switch gear motor etc. shall be of the same make for interchangeability. All electrical equipment shall be earthed in an approved manner as per I.E.E. rules and acceptable to the local authority. Earthing station shall be provided by the contractor. No medical gases pipe shall be used for electrical earthing. Entire installation shall be done taking care to follow all safety regulations for electrical installation of piped medical gases system. Two main supply of the required KW shall be provided up to the electrical control panel. The wiring after the control panel has to be provided by the supplier as per IEE regulations. Following material must be inside the plant room. 1.Cables , 2.G.I Earth Wire, 3.Saddling, 3a.Thumbling,4.Gland, 5.Control Cable.

23.0 Electrical Wiring for AGSS from each OT to AGSS Plant Room.

24.0. Electrical Control Panel with Phase Preventer inside the gas manifold and plant room.

25.0 Demolishing, Reconstructing, Water Proofing, Plumbing, Repainting and Replacement

Any demolition, reconstruction, water proofing, necessary plumbing, painting or replacement required for SITC of Medical Gas Pipeline System shall be done by the Bidder. The Bidder must visit the site.

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BILL OF QUANTITY (BOQ) FOR MEDICAL GAS PIPELINE SYSTEM

.No.	Description of work	Quantity	Unit
1	Oxygen System (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)		
A	Main oxygen manifold of size 10 + 10 Cylinder (without cylinders) As per technical specifications	1	Set
B	Electronic Fully Automatic Control Panel 1500lpm, as per technical specifications etc. as required.	1	Set
C	Emergency oxygen manifold of size 2x4 Cylinder, as per technical specifications	1	Set
D	Oxygen flow meter with humidifier bottle, as per technical specifications	315	Nos.
2	Nitrous Oxide System (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)		
A	Main nitrous oxide manifold of size 4 + 4 Cylinder (without cylinders) As per technical specifications	1	Set
B	Electronic Fully Automatic Control Panel 500lpm, as per technical specifications etc. as required.	1	Set
C	Emergency nitrous oxide manifold of size 2x2 Cylinder, as per technical specifications	1	Set
3	CO2 System (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)		
A	Main CO2 manifold of size 4 + 4 Cylinder (without cylinders) As per technical specifications	1	Set
B	Electronic Fully Automatic Control Panel 500lpm, as per technical specifications etc. as required.	1	Set
C	Emergency CO2 manifold of size 2x2 Cylinder, as per technical specifications.	1	Set
4	Vacuum System - 5000LPM or more (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)		

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A	Pentaplex (5000lpm or more) Medical Vacuum Plant System 50Hz 3 Phase (Package Unit). Three identical (5Kw or more) rotary vane vacuum pump should be working and 2 identical (5Kw or more) rotary vane should be stand-by with quadruple vacuum bacterial filter with 2x 2500l or more tank. As per Tender Technical Specifications	1	Set
B	Ward Vacuum Unit consist of 0-1000m/bar vacuum regulator, vacuum filter and 1000ml polysulphone vacuum collection jar with basket. As per Tender Technical Specifications	315	Nos.
C	Low Flow Vacuum Unit consist of 0-250m/bar vacuum regulator, vacuum filter and 1000ml polysulphane vacuum collection jar with basket As per Tender Technical Specifications	85	Nos.
D	High Suction Theater Vacuum Unit consist of 0-1000m/bar vacuum regulator, vacuum filter and twin 2000ml polysulphone vacuum collection jar with basket.. As per Tender Technical Specifications	26	Nos.
5	**Medical Air Plant Package Unit (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)**		
A	Quadruplex 5500lpm or more Medical Air Plant System 11Bar, 50Hz 3 Phase (Package Unit). To provide 7 Bar surgical air supply and 4 Bar medical air supply from same plant. Two identical 22-25Kw oil injected screw air compressors should be working and 2 22-25Kw identical screw air compressors should stand by. with duplex air dryer and air filteration system with 3x2000l tank. As per Tender Technical Specifications	1	Set
B	Duplex Pressure Reducing Station for 7 Bar Supply As per Tender Technical Specifications	1	Set
C	Duplex Pressure Reducing Station for 4 Bar Supply As per Tender Technical Specifications	1	Set
6	**Anaesthesia Gas Scavenging System (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)**		
A	Duplex AGSS Plant 2900lpm. As per Tender Specifications	1	Set

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B	AGSS Remote Indicator. As per Tender specifications	8	Nos.
C	AGSS Hose Assembly. As per Tender Specifications	7	Nos.
D	AGSS Reservior Transducer Kit. As per Tender Specifications	7	Nos.
7	**Gas Outlet Points (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)**		
	Gas Outlet Points As per Tender Technical Specifications		
A	Oxygen Gas Outlet Points	503	Nos.
B	N2O Gas Outlet Points	36	Nos.
C	MA4 Air 4 Bar Gas Outlet Points	237	Nos.
D	SA7 Air 7 Bar Gas Outlet Points	38	Nos.
E	Vacuum Gas Outlet Points	505	Nos.
F	CO2 Gas Outlet Points	15	Nos.
G	AGSS Gas Outlet Points	29	Nos.
8	**Probes (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)**		
	Probe Matching to Gas Outlet Points As per Tender Technical Specifications		
A	Oxygen Probe	503	Nos.
B	N2O Probe	36	Nos.
C	MA4 Air 4 Bar Probe	237	Nos.
D	SA7 Air 7 Bar Probe	38	Nos.
E	Vacuum Probe	505	Nos.
F	CO2 Probe	15	Nos.
G	AGSS Probe	29	Nos.
9	**Antimicrobial Medical Gas Area Line Pressure Alarm (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)**		
	Antimicrobial Medical Gas Area Alarm Units. As per Tender Technical Specifications		
A	2 Gas Area Alarm (Oxygen and Vacuum)	20	Nos.
B	3 Gas Area Alarm (Oxygen, MA4 Air and Vacuum)	16	Nos.
C	5 Gas Area Alarm (Oxygen, N2O, MA4 Air, SA7 Air and Vacuum)	15	Nos.

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D	6 Gas Area Alarm (Oxygen, N2O, MA4 Air, SA7 Air, CO2 and Vacuum)	7	Nos.
E	Main Master Alarm 6 Gas (Oxygen, N2O, MA4 Air, SA7 Air, CO2 and Vacuum)	1	Nos.
10	**High Pressure Tubing (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)**		
	High Pressure Antistatic Rubber Tubing. As per Tender Technical Specifications		
A	Oxygen White Color	80	Mtrs
B	N2O Blue Color	80	Mtrs
C	Air Black Color	160	Mtrs
D	Vacuum Yellow Color	600	Mtrs
11	**Low Pressure Rubber Vacuum Tubing**	1200	Mtrs
12	**Double Arm Pendants for Surgeon and Anaesthesist (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)**		
A	Double Arm Surgeon Pendant As per Tender Technical Specifications	5	Nos.
B	Double Arm Anaesthesia Pendant As per Tender Technical Specifications	5	Nos.
13	**Vertical Bed Head Panel (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)**		
A	Vertical Bed Head 2100mm Panel with NIST. (Imported). As per Tender Technical Specifications	73	Nos.
14	**Medical Grade Copper Pipes BSi Kite Mark certified. EN 13348:2008**		
	Medical Grade Copper Pipes. Copper pipes manufactured from phosphorous de-oxidised non-arsenical copper to BS EN 1412:1996 grade CW024A (Cu-DHP), manufactured to metric outside diameters and having mechanical properties in accordance with BS EN 13348:2008- R250 (half hard) for sizes up to 54mm or BS EN 13348:2008 – R290 for larger sizes. As per Tender Technical Specifications		

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A	54mm OD x 1.2 mm thick	195	Mtr.
B	42mm OD x 1.2 mm thick	690	Mtr.
C	35mm OD x 1mm thick	1125	Mtr.
D	28mm OD x 1mm thick	2930	Mtr.
E	22 mm OD x 1mm thick	6720	Mtr.
F	15 mm OD x 1mm thick	5700	Mtr.
G	12 mm OD x 1mm thick	1790	Mtr.
15	Line Lockable Valves (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)		
	Line Lockable Valves. As per Tender Technical Specifications.		
A	54 mm Dia Line Valve	4	Nos.
B	42 mm Dia Line Valve	6	Nos.
C	35 mm Dia Line Valve	4	Nos.
D	28 mm Dia Line Valve	20	Nos.
E	22 mm Dia Line Valve	30	Nos.
F	15 mm Dia Line Valve	60	Nos.
16	Area Valve Service Unit (Should fully comply with the requirements of NFPA-99C, UL Listed or HTM 02-01, C11 Standards)		
A	Single Service Area Valve Service Unit. 22mm single service unit for each gases with NIST. Oxygen, N2O, MA4 Air, SA7 Air and Vacuum. (Imported). As per Tender Technical Specifications	263	Nos.
17	Demolition, reconstruction,water proofing,plumbing,repainting and replacement as per tender specifications	1	Lot
18	Electrical Control Panel	1	Nos.
19	Electrical wiring for AGSS (from each OT to AGSS Pump)	1	Lot
20	Electrical wiring inside gas manifold and plant room Note: Hospital will provide at one point 3 phase and single phase power supply with cable	1	Lot

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GENERAL TECHNICAL SPECIFICATIONS

GENERAL POINTS:

1. Warranty:

   a) Five years Comprehensive Warranty as per Conditions of Contract of the TE documentfor 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:

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.

The Turnkey Work should completely comply with AERB requirement, if any.

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 equipment for carrying out routine and preventive maintenance wherever asked for and should make sure that Electrical Safety Analyzer/ Tester for Medical equipment 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 equipment. If the Electrical Safety Analyzer/Tester is not available they should provide a commitment to get the equipment 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: OPTIONAL ITEMS: Bidders are requested to quote for all the available options as asked in the bidding document with reasonable pricing. However the pricing for optional items will not be considered for price comparison for ranking purpose. If the firm has not quoted for any optional item (except the items of turnkey) their offer will be treated as TECHNICALLY RESPONSIVE if otherwise meeting the specification.

Note 4: Supplier should provide adequate training of personnel and supply only non-locked open software and standard interface interoperability conditions for networked equipment in hospital management information system (HMIS)

Note 5: Training shall be given to the doctors, nurses, operators with proper training material, adequate operating manual & preliminary troubleshooting.

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

07 Test certificate held
- a . type test
- b . BIS/ISO certification
- c . any other

08 Details of staff
- a. technical
- b skilled
- c unskilled

Signature and seal of the Tenderer

Section – IX
Qualification Criteria

01. Status: The Bidder should be a Manufacturer or its authorized Agent.

02. Turnover: Eligible bidders should have an average annual financial turnover in the consequetive past three financial years (2012-13, 2013-14, 2014-15) should be at least 30% of the estimated cost**.**

03. Minimum Work of Similar Nature:
Eligible bidders should have successfully executed globally in last five years from the date of tender opening, similar project of value, equivalent to exceeding 50% of the estimated tender value. Out of total 50% value, at least one single order similar work of minimum 10% value should have been excecuted globally. 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 applications for tenders.

Example/Clarification: Similar Project means Supply, Installation and commissioning of Medical Gas Pipeline System meeting major technical parameters of the current BOQ floated in this tender enquiry document.

04. Solvency Certificate: Eligible bidders should submit a solvency certificate of not less than 30% of the estimated value of work from a Nationalized/Scheduled bank. In case of a foreign bidder the solvency certificate can be submitted from a branch of a foreign bank having banking operations in India. The certificate should not be more than one year old.

05. Office in India:- The bidder must have office(s) in India at the time of submitting bid. Proof of having office(s) in India must be submitted along wih 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 if the contract is awarded and also should 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 atleast 10 years to ensure required standard of service delivery with respect to warrwnty, operations and maintenance of the equipments supplied and installed.

06. Financial Status: Eligible Bidders should not have incurred any loss in more than 2 years during the last five years ending 31st March 2015. 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.

07. Manufacturer Authorization: Eligible bidders should submit a mandatory letter of authority from the Foreign Principal / Manufacturer, mentioning country of origin with name of manufacturing company for major products quoted by them in the following format:

a. For the following major items, Manufacturer's Authorization as per Section XIV- A should be submitted:

1) Fully Automatic Oxygen Control Panel
2) Oxygen Flow meter
3) Fully Automatic Nitrous Oxide Control Panel
4) Fully Automatic Control panel for CO2 System
5) Vacuum systems
6) Medical and surgical air system
7) Alarm system
8) Area valve service unit
9) Bed head panels
10) Gas outlets
11) AGSS (Anesthetic Gas Scavenging System)

b. For the other items in the BOQ, Manufacturer's Authorization as per Section XIV- B should be submitted.

08. 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.

Note:

1. In support of clause 03 above, the bidder shall furnish Performance Statement in the enclosed Proforma 'A'.

   The bidder shall furnish Satisfactory Performance Certificate in respect of above, in case not from India, duly translated in English and duly endorsed by country's Embassy present in India, along with the tender.

2. 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.

3. Notwithstanding anything stated above, the Purchaser reserves the right to assess the Tenderer's capability and capacity to perform the contractsatisfactorily before deciding on award of Contract, should circumstances warrant such an assessment in the overall interest of the Purchaser.

4. 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 address of Purchaser/ Consignee)	Order number and date	Description and quantity of ordered goods and services	Value of order (Rs.)	Date of completion of Contract		Remarks indicating reasons for delay if any	Have the goods been functioning Satisfactorily (attach documentary proof)**
				As per contract	Actual		
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.**

\# The bidders 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.

Section – X
TENDER FORM

Date_____

To
SVP (GB), HLL Lifecare 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 mentioned in the price bid uploaded online, 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

SECTION – XI PRICE SCHEDULE

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

1	2	3	4	5							6
				Price per unit (Rs.)							
Sl. No.	Brief Description of Goods	Country of Origin	Quantity (Nos.)	Ex - factory/ Ex - warehouse /Ex-showroom /Off - the shelf (a)	Packing and Forwarding charges (b)	Excise Duty (if any) [%age & value] (c)	Sales Tax/ VAT(if any) [%age & value] (d)	Transportation, Insurance for a period including 3 months beyond date of delivery, loading/ unloading and Incidental costs till consignee's site (e)	Incidental Services (including Installation & Commissioning, Supervision, Demonstration and Training) at the Consignee's site (f)	Unit Price (at Consignee Site) basis (g) =a+b+c+d+e+f	Total Price (at Consignee Site) basis (Rs.) 4 x 5(g)

Total Tender price in Rupees: _____

In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C

Name_____

Business Address_____

Place: _____ **Signature of Tenderer**_____

Date: _____ **Seal of the Tenderer**_____

B) PRICE SCHEDULE FOR GOODS TO BE IMPORTED FROM ABROAD

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

** To be paid in Indian Currency (Rs.)
Total Tender price in foreign currency: _____
In words: _____

Note: -

1. If there is a discrepancy between the unit price and total price THE UNIT PRICE shall prevail.
2. The charges for Annual CMC after warranty shall be quoted separately as per Section – XI – Price Schedule C
3. The Tenderer will be fully responsible for the safe arrival of the goods at the named port of entry in good condition as per terms of CIP as per INCOTERMS, if applicable
4. Rate of Custom duty prevailing on the date of price bid opening and C&F charges @2% will be added to the CIP price to arrive at the DDP price for evaluation purpose. **Bidders are required to specify the HS code for the items to be imported and quoted on CIP basis**.

Indian Agent:
Indian Agency Commission (included in FOB price) - ___% of FOB
Signature of Tenderer_____

Name_____
Business Address_____
Signature of Tenderer_____

Place: _____

Date: _____ **Seal of the Tenderer_____**

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

1	2	3	4					5
Sl. No.	BRIEF DESCRIPTION OF GOODS	Qty. (Nos.)	Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.					Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]
			1st	2nd	3rd	4th	5th	
			a	b	c	d	e	

*** After completion of Warranty period**

NOTE:-

1. In case of discrepancy between unit price and total prices, THE UNIT PRICE shall prevail.
2. The cost of Comprehensive Maintenance Contract (CMC) which includes preventive maintenance including testing & calibration as per technical/ service /operational manual, labour and spares, after satisfactory completion of Warranty period may be quoted for next 5 years on yearly basis for complete equipment and Turnkey (if any).
3. 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.
4. Cost of CMC offered will be added (at a discounted rate of 10% per year) for Ranking/Evaluation purpose.
5. The payment of CMC will be made as per clause GCC clause 21.1 (D).
6. The uptime warranty will be 95% on 24 (hrs) X 7 (days) X 365 (days) basis or as stated in Technical Specification of the TE document.
7. All software updates should be provided free of cost during CMC period.
8. The stipulations in Technical Specification will supersede above provisions
9. The supplier shall keep sufficient stock of spares required during Annual Comprehensive Maintenance Contract period. In case the spares are required to be imported, it would be the responsibility of the supplier to import and get them custom cleared and pay all necessary duties.

Name_____

Business Address_____

Place: _____ **Signature of Tenderer_____**

Date: _____ **Seal of the Tenderer_____**

D)PRICE SCHEDULE FOR TURNKEY

Sl. No.	BRIEF TURNKEY DESCRIPTION OF GOODS	CONSIGNEE CODE	Turnkey price

Note: -

1. The cost of Turnkey as per Technical Specification (Section VII) may be quoted on lump sum 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.
2. Cost of Turnkey will be added for Ranking/Evaluation purpose.
3. The payment of Turnkey will be made as per clause GCC clause 21.1 (c).
4. The stipulations in Technical Specification will supersede above provisions

Name_____

Business Address_____

Place: _____ **Signature of Tenderer**_____

Date: _____ **Seal of the Tenderer**_____

SECTION – XII
QUESTIONNAIRE

Fill up the Section XX – Check List for Tenderers and enclose with the Tender

1. The tenderer should furnish specific answers to all the questions/issues mentioned in the Checklist. 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 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 mentioned in the Checklist, its tender will be liable to be ignored.

SECTION – XIII

BANK GUARANTEE FORM FOR EMD

Whereas _____ (hereinafter called the "Tenderer") has submitted its quotation dated _____ for the supply of _____ (hereinafter called the "tender") against the purchaser's tender enquiry No. _____ Know all persons by these presents that we _____ of _____ (Hereinafter called the "Bank") having our registered office at _____ are bound unto _____ (hereinafter called the "Purchaser) in the sum of _____ for which payment will and truly to be made to the said Purchaser, the Bank binds itself, its successors and assigns by these presents. Sealed with the Common Seal of the said Bank this _____day of _____ 20____. The conditions of this obligation are:

1) If the 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).

This guarantee will remain in force for a period of forty-five days after the period of tender validity and any demand in respect thereof should reach the Bank not later than the above date.

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

SECTION – XIV-A

MANUFACTURER'S AUTHORISATION FORM

SVP (GB),
HLL Lifecare 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 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.
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. Original letter may be sent.

SECTION – XIV-B

MANUFACTURER'S AUTHORISATION FORM

SVP (GB),
HLL Lifecare 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. Original letter may be sent.

SECTION – XV

BANK GUARANTEE FORM FOR PERFORMANCE SECURITY/ CMC SECURITY

The Dean/ Director/ Medical Superintendent
(in the name of concerned Institution with its address)

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

SECTION – XVI

CONTRACT FORM - A

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

(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	Total price	Terms of delivery

Any other additional services (if applicable) and cost thereof: _____

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

(ii) Delivery schedule

(iii) Details of Performance Security

(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

(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: _____

CONTRACT FORM – B

CONTRACT FORM FOR ANNUAL COMPREHENSIVE MAINTENANCE CONTRACT

Annual CM Contract No._____ dated_____
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: -

1	2	3	4					5
Schedule No.	**BRIEF DESCRIPTION OF GOODS**	**QUANTITY. (Nos.)**	**Annual Comprehensive Maintenance Contract Cost for Each Unit year wise*.**					**Total Annual Comprehensive Maintenance Contract Cost for 5 Years [3 x (4a+4b+4c+4d+4e)]**
			1st	**2nd**	**3rd**	**4th**	**5th**	
			a	**b**	**c**	**d**	**e**	

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 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.

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. Hospitalauthorised official)

_____

(Signature, name and address of Hospitalauthorised 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
CONSIGNEE RECEIPT CERTIFICATE
(To be given by consignee's authorized representative)

The following store(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) Counter Signed by Director/MS/Dean of the concerned Hospital/Institute :_____

10) Seal of the Consignee :_____

SECTION – XVIII
Proforma of Final Acceptance Certificate by the Consignee

No_____ **Date_____**

To

M/s _____
_____
_____

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 _____

(f) Name of the vessel/Transporters:_____

(g) Name of the Consignee:_____

(h) 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)

(Counter Signed by Director/MS/Dean of the concerned Hospital/Institute)

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.

SECTION – XIX

AFFIDAVIT/UNDERTAKING

I/We have read and understood the instructions and the terms and conditions contained in the document. I/We accordingly accept all terms and conditions of the tender enquiry document including the essential conditions specially incorporated in the tender enquiry like terms of terms of payment, liquidated damages clause, warranty clause, dispute resolution mechanism applicable law. I/We confirm that we do not stand deregistered/banned/blacklisted by any Govt. Authorities. I/We do hereby declare that the information furnished/ uploaded is correct to the best of my/our knowledge and belief.I/We hereby certify thatthe prices offered by us in this tender is not higher than the prices we had offered to any other Govt. of India Organisation(s)/PSU(s) during the last one year and shall provide the justification for reasonableness of our offered price whenever asked during evaluation of our submitted bid. I/We also hereby certify that if at any time, information furnished by us is proved to be false or incorrect; I/We are liable for any action as deemed fit by the purchaser in addition to forfeiture of the earnest money.

Date: **(Signature of the bidder)**

NAME & ADDRESS OF THE BIDDER

NOTE: To be submitted on non-judicial stamp paper of Rs. 10/- duly certified by Public Notary

SECTION – XX
CHECKLIST

Sl No.	Description
1. a.	Have you enclosed EMD of required amount for the quoted schedules?
b.	In case EMD is furnished in the form of Bank Guarantee, has it been furnished as per Section XIII?
c.	In case Bank Guarantee is furnished, have you kept its validity of 165 days from Techno Commercial Tender Opening date as per clause 19 of GIT?
2.	Have you enclosed duly filled Tender Form as per format in Section X?
3.	Are you a SSI unit, if yes have you enclosed certificate of registration issued by Directorate of Industries/NSIC
4. a.	Have you enclosed clause-by-clause technical compliance statement for the quoted goods vis-à-vis the Technical specifications?
b.	In case of Technical deviations in the compliance statement, have you identified and marked the deviations?
5. a.	Have you submitted satisfactory performance certificate as per the Proforma for performance statement in Sec. IX of TE document in respect of all orders?
b.	Have you submitted copy of the order(s) and end user certificate?
6.	Have you submitted manufacturer's authorization as per Section XIV-A & B?
7.	Have you submitted prices of goods, turnkey (if any), CMC etc. in the Price Schedule as per Section XI?
8.	Have you kept validity of 120 days from the Techno Commercial Tender Opening date as per the TE document?
9. a.	In case of Indian Tenderer, have you furnished Income Tax Account No. as allotted by the Income Tax Department of Government of India?
b.	In case of Foreign Tenderer, have you furnished Income Tax Account No. of your Indian Agent as allotted by the Income Tax Department of Government of India?
10.	Have you intimated the name an full address of your Banker (s) along with your Account Number
11.	Have you fully accepted payment terms as per TE document?
12.	Have you fully accepted delivery period as per TE document?
13.	Have you submitted the certificate of incorporation?
14.	Have you accepted the warranty and CMC as per TE document?

Sl No.	Description
15.	Have you accepted terms and conditions of TE document?
16.	Have you furnished 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) in your technical bid?
17.	Have you furnished documents establishing your eligibility & qualification criteria as per TE documents?
18.	Have you furnished a Solvency certificate from your (Nationalized/ Scheduled) Bank as per requirement of the Qualification Criteria at section-IX
19.	Have you furnished Audited Profit & Loss account and Balance Sheet (duly notarized copies) for the immediate last five consecutive financial years prior to the date of Tender opening?
20.	In case you are a foreign bidder, have you submitted the proof for having office(s) in India?
21.	Have you enclosed the latest purchase order copies supplied to AIIMS, PGIMER, JIPMER or Institute of National importance for the specific model quoted along with the price bid?
22.	Have you enclosed an affidavit/Undertaking as per Section-XIX?

N.B.

(i) The Tenderer may go through the checklist and ensure that all the documents/confirmations listed above are enclosed in the tender.

(ii)It is the responsibility of tendered to go through the TE document to ensure furnishing all required documents in addition to above, if any.

Section – XXI

Consignee

Consignee Code	Medical Institutions	Contact Address.	AirPort	Sea Port / Dry Port
JSSH	Janakpuri Super Speciality Hospital Society	The Director/Medical Superintendent Janakpuri Super Specialty Hospital Society C-2B, Janakpuri New Delhi – 58	NEW DELHI	NEW DELHI

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