REPUBLIC OF KENYA

COUNCIL OF GOVERNORS

MINISTRY OF HEALTH
STATE DEPARTMENT FOR MEDICAL SERVICES

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TENDER DOCUMENT

PROVISION OF MEDICAL EQUIPMENT ON LEASE IN PUBLIC HEALTH FACILITIES

TENDER NO: MOH/SDMS/HI/OT/002/2023-2024

OPEN TENDER

CLOSING/OPENING DATE:2ND JULY 2024 AT 11:00 AM

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PART 1 - TENDERING PROCEDURES

SECTION I - INSTRUCTIONS TO TENDERERS

A General Provisions

1. Scope of Tender and Definitions

1.1 The Procuring Entity as define in the Appendix to Conditions of Contract invites tenders for leasing of the real estate facilities, plant/equipment or vehicles and, if applicable, any related services incidental thereto, as specified in Section VII, Schedule of Requirements. The name, identification, and number of lots (contracts) of this Tender Document are **specified in the TDS.**

1.2 Throughout this tendering document:

a) The term "in writing" means communicated in written form (e.g. by mail, e-mail, fax, including if **specified in the TDS**, distributed or received through the electronic-procurement system used by the Procuring Entity) with proof of receipt;

b) If the context so requires, "singular" means "plural" and vice versa;

c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of the Procuring Entity. It excludes official public holidays.

2 Fraud and Corruption

2.1 The Procuring Entity requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 "Declaration not to engage in corruption". The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub- contractors are not debarred from participating in public procurement proceedings.

2.2 The Procuring Entity requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.

2.3 Unfair Competitive Advantage - Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, the Procuring Entity shall indicate in the **Data Sheet** and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.

2.4 Tenderers shall permit and shall cause their agents (where declared or not), subcontractors, sub-consultants, service providers, suppliers, and their personnel, to permit the Procuring Entity to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, tender submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by the Procuring Entity.

3 Eligible Tenderers

3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 4.6, or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the Tendering process and, in the event the JV is awarded the Contract, during contract execution. A firm that is a Tenderer (either individually or as a JV member) may participate in more than one Tender, offering different items that meet the requirements of the Lease. A firm that is not a Tenderer or a JV member, may participate as a subcontractor in more than one Tender. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender. The maximum number members shall be specified in the **TDS.**

3.2 Public Officers of the Procuring Entity, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers are

also not allowed to participate in any procurement proceedings.

3.3 A Tenderer shall not have a conflict of interest. Any Tenderer found to have a conflict of interest shall be disqualified. A Tenderer may be considered to have a conflict of interest for the purpose of this Tendering process, if the Tenderer:

a Directly or indirectly controls, is controlled by or is under common control with another Tenderer; or

b Receives or has received any direct or indirect subsidy from another Tenderer; or

c Has the same legal representative as another Tenderer; or

d Has a relationship with another Tenderer, directly or through common third parties, that puts it in a position to influence the Tender of another Tenderer, or influence the decisions of the Procuring Entity regarding this Tendering process; or

e Or any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the Tender; or

f Or any of its affiliates has been hired (or is proposed to be hired) by the Procuring Entity or Procuring Entity for the Contract implementation; or

g would be providing Lease Items, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the project specified in the TDS ITT 2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or

h has a close business or family relationship with a professional staff of the Procuring Entity who:

i are directly or indirectly involved in the preparation of the tendering document or specifications of the Contract, and/or the Tender evaluation process of such Contract; or

j would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship p has been resolved in a manner acceptable to the Procuring Entity throughout the Tendering process and execution of the Contract.

3.4 A Tenderer shall not be involved in corrupt, coercive, obstructive, collusive, or fraudulent practice. A tenderer that is proven to have been involved in any of these practices shall be automatically disqualified and would not be awarded a contract.

3.5 A firm that is a Tenderer (either individually or as a JV member) may participate in more than one Tender, offering different items that meet the requirements of the Lease. A firm that is not a Tenderer or a JV member, may participate as a subcontract or in more than one Tender.

3.6 A Tenderer may have the nationality of any country, subjecttotherestrictionspursuanttoITT4.9.ATenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub- consultants for any part of the Contract including related Services.

3.7 A Tenderer that has been debarred by the PPRA from participating in public procurement shall be ineligible to be prequalified for a tender or be awarded a contract. The list of debarred firms and individuals is available from the website of PPRA www.ppra.go.ke.

3.8 Tenderers that are state-owned enterprises or institutions may be eligible to compete and be awarded a Contract(s) only if they are (i) a legal public entity of the state Government and/or public administration, (ii) financiallyautonomousandnotreceivinganysignificantsubsidiesorbudget support from any public entity or Government, and (iii) operating under commercial law and vested with legal rights and liabilities similar to any commercial enterprise to enable it compete with firms in the private sector on an equal basis.

3.9 Firms and individuals may be ineligible if their countries of origin (a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country, or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of Lease Items or contracting for supply of Lease Items or services from that country, or any payments to any country, person, or entity in that country. A tenderer shall provide such documentary evidence of eligibility satisfactory to the Procuring Entity, as the Procuring Entity shall reasonably request.

3.10 For purposes of granting a margin of preference, a tender is considered a national tenderer if it is registered in Kenya, has more than 51 percent ownership by nationals of Kenya and if it does not subcontract foreign

contractors more than 10 percent of the contract price, excluding provisional sums. JVs are considered as national tenderers and eligible for national preference only if the individual member firms are registered in Kenya or have more than 51percent ownership by nationals of Kenya, and the JV shall be registered in Kenya. The JV shall not subcontract to foreign firms more than10 percent of the contract price, excluding provisional sums.

3.11 Tenderers shall provide the qualification information statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring entity to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the Leases under this Invitation for tenders.

3.12 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from thewebsitewww.cak.go.ke.

3.13 A Kenyan tenderer shall provide evidence of having fulfilled his/her tax obligations by producing a valid tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

4 Eligible Lease Items and Related Services

4.1 All the Lease Items and Related Services to be supplied under the Contract and financed by the Procuring Entity shall have their origin from Eligible Countries in accordance with ITT 3.8.

4.2 For purposes of this ITT, the term "Lease Items" includes, landed properties, buildings and related accommodations, vessels (land, air and sea), vehicles, machinery, plant and equipment, "related services" including services such as insurance, installation, training, and maintenance.

4.3 The term "origin" means the country where the Lease Items have been sourced from, manufactured, processed, or assembled.

4.4 A lease item may be considered ineligible it has items, works and production processes with characteristics that have been declared by the relevant national environmental protection agency or by other competent authority as harmful to human beings and to the environment shall not be eligible for procurement.

B. Contents of Tendering Document

5 Sections of Tendering Document

5.1 The tendering document consist of Parts1, 2, and 3, which include all the sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITT 10.

PART 1 Tendering Procedures

i) Section I- Instructions to Tenderers (ITT)

ii) Section II - Tendering Data Sheet (TDS)

iii) Section III – Evaluation and Qualification Criteria

iv) Section IV- Tendering Forms

PART 2 Supply Requirements

v) Section V - Schedule of Requirements

PART 3 Contract

vi) Section VI-General Conditions of Contract (GCC)

vii) Section VII-Special Conditions of Contract (SCC)

viii) Section VIII-Contract Forms

5.2 The Specific Procurement Notice, Invitation to Tenders Notice, issued by the Procuring Entity is not part of this

tendering document.

5.3 Unless obtained directly from the Procuring Entity, the Procuring Entity is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Tender meeting (if any), or Addenda to the tendering document in accordance with ITT 10. In case of any contradiction, documents obtained directly from the Procuring Entity shall prevail.

5.4 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tendering document and to furnish with its Tender all information or documentation as is required by the tendering document.

6 Clarification of Tendering Document

A Tenderer requiring any clarification of the tendering document shall contact the Procuring Entity in writing at the Procuring Entity's address specified in the **TDS**. The Procuring Entity will respond in writing to any request for clarification, provided that such request is received prior to the deadline for submission of Tenders within a period specified in the **TDS.** The Procuring Entity shall forward copies of its response to all Tenderers who have acquired the tendering document in accordance with ITT 6.3, including a description of the inquiry but without identifying its source. If so specified in the **TDS**, the Procuring Entity shall also promptly publish its response at the web page identified in the **TDS**. Should the clarification result in changes to the essential elements of the tendering document, the Procuring Entity shall amend the tendering document following the procedure under ITT8 and ITT 22.2.

7 Amendment of Tendering Document

7.1 At any time prior to the deadline for submission of Tenders, the Procuring Entity may amend the tendering document by issuing addenda.

7.2 Any addendum issued shall bepartofthetenderingdocumentandshallbecommunicatedinwritingtoallwho have obtained the tendering document from the Procuring Entity in accordance with ITT 6.3. The Procuring Entity shall also promptly publish the addendum on the Procuring Entity's webpage in accordance with ITT 7.1.

7.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, the Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders, pursuant to ITT 22.2.

C. Preparation of Tenders

8 Cost of Tendering

8.1 The Tenderer shall bear all costs associated with the preparation and submission of its Tender, and the Procuring Entity shall not be responsible or liable for those costs, regardless of the conduct or outcome of the Tendering process.

9 Language of Tender

10.4 The Tender, as well as all correspondence and documents relating to the Tender exchanged by the Tenderer and the Procuring Entity, shall be written in English Language**.** Supporting documents and printed literature that are part of the Tender may be in another language provided they are accompanied by an accurate translation of the relevant passages into the English Language**,** in which case, for purposes of interpretation of the Tender, such translation shall govern.

10 Documents Comprising the Tender

10.1 The Tender shall comprise the following:

a **Form of Tender** prepared in accordance with ITT 11;

b **Price Schedules**: completed in accordance with ITT 11 and ITT 13;

c **Tender Security** or **Tender – Securing Declaration**, in accordance with ITT 18.1;

d **Alternative Tender**: if permissible, in accordance with ITT 12;

e **Authorization**: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT 29.3;

f **Qualifications**: documentary evidence in accordance with ITT 16 establishing the Tenderer

qualifications to perform the Contract if its Tender is accepted;

g **Tenderer Eligibility**: documentary evidence in accordance with ITT 16 establishing the Tenderer eligibility to tender;

h **Eligibility of Lease Items and Related Services:** documentary evidence in accordance with ITT 15, establishing the eligibility of the Lease Items and Related Services to be supplied by the Tenderer;

i **Conformity**: documentary evidence in accordance with ITT 15 and 28, that the Lease Items and Related Services conform to the tendering document; and

j Any other document required **in the TDS.**

10.2 In addition to the requirements under ITT 13.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Tender shall be signed by all members and submitted with the Tender, together with a copy of the proposed Agreement.

10.3 The Tenderer shall furnish in the Form of Tender information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Tender.

11 Form of Tender and Price Schedules

11.1 The Form of Tender and Price Schedules shall be prepared using the relevant forms furnished in Section IV, Tendering Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITT 20.3. All blank spaces shall be filled in with the information requested. The Tenderer shall chronologically serialize pages of all tender documents submitted.

11.2 Each item on the Schedule of Requirements must be priced separately in the Price Schedules and for full quantities required. Items not priced for full quantity on the Schedule of Requirements will be rejected. TENDERERS MAY QUOTE FOR ONE OR MORE OF THE ITEMS ON THE SCHEDULE OF REQUIREMENTS. Tenders will be evaluated and awarded on basis of each item.

11.3 Where tenders are being invited for individual Items/lots (contracts) or for any combination of lots (packages), tenderers wishing to offer discounts for the award of more than one Contract shall specify so in their Tender the price reductions applicable to each Item or alternatively, to individual items. Discounts shall be submitted in accordance with ITT 13.1, provided the Tenders for all lots (contracts) are opened at the same time.

11.4 All duties, taxes, and other levies payable by the Contract or under the Contract, or for any other cause, as of the date 28 days prior to the deadline for submission of Tenders, shall be included in the rates and prices and the total Tender Price submitted by the Tenderer.

12 Alternative Tenders

12.1 Unless otherwise specified **in the TDS,** alternative Tenders shall not be considered.

13 Tender Prices and Discounts

13.1 The prices and discounts quoted by the Tenderer in the Form of Tender and in the Price Schedules shall conform to the requirements specified below.

13.2 The price to be quoted in the Form of Tender in accordance with ITT 14.1 shall be the total price of all the items but the attachment of the Schedule of prices, excluding any discounts offered.

13.3 The Tenderer shall quote any discounts and indicate the methodology for their application in the Form of Tender, in accordance with ITT 14.1.

13.4 Prices quoted by the Tenderer shall be fixed during the time of the Lease under the Contract and not subject to variation on any account, unless otherwise specified **in the TDS.** A Tender submitted with an adjustable price quotation shall be treated as non-responsive and shall be rejected, pursuant to ITT 29. However, if in accordance with **the TDS**, prices quoted by the Tenderer shall be subject to adjustment during the Lease under the Contract, a Tender submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.

13.5 If so specified in ITT 1.1, Tenders are being invited for individual lots (contracts) or for any combination of lots (packages). Prices quoted shall correspond to 100 % of the items specified for each lot and to 100% of the

quantities specified for each item of a lot. Tenderers wishing to offer discounts for the award of more than one Contract shall specify in their Tender the price reductions applicable to each package, or alternatively, to individual Contracts with in the package. Discounts shall be submitted in accordance with ITT 14.4 provided the Tenders for all lots (contracts) are opened at the same time.

13.6 Prices shall be quoted as specified in each Price Schedule included in Section IV, Tendering Forms. The disaggregation of price components is required solely for the purpose of facilitating the comparison of Tenders by the Procuring Entity. This shall not in any way limit the Procuring Entity's right to contract on any of the terms offered. The Tenderer may obtain insurance services from any eligible country in accordance with ITT 3, Eligible Tenders. The tender shall include Related Services required to maintain the leased item as specified in the Schedule of Requirements (inclusive of any applicable taxes).

14 Currencies of Tender and Payment

14.1 The currency(ies) of the Tender and the currency(ies) of payments shall be the same. The Tenderer shall quote in Kenya shillings unless otherwise specified **in the TDS.**

15 Documents Establishing the Eligibility and Conformity of the Lease Items and Related Services.

15.1 To establish the eligibility of the lease items and Related Services in accordance with ITT 5, Tenderers shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Tendering Forms.

15.2 To establish the conformity of the Lease items and Related Services to the tendering document, the Tenderer shall furnish as part of its Tender the documentary evidence that the Lease Items conform to the technical specifications and standards specified in Section VII, Schedule of Requirements.

15.3 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Lease Items and Related Services, demonstrating substantial responsiveness of the Lease Items and Related Services to the technical specification, and if applicable, a statement of deviations and exceptions to the provisions of the Section VII, Schedule of Requirements.

15.4 The Tenderer shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Lease Items during the period **specified in the TDS** following commencement of the use of the Lease Items by the Procuring Entity.

15.5 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Procuring Entity in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Tenderer may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Procuring Entity's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Schedule of Requirements.

16. Documents Establishing the Eligibility and Qualifications of the Tenderer

16.1 To establish Tenderer eligibility in accordance with ITT 4, Tenderers shall complete the Form of Tender, included in Section IV, Tendering Forms.

16.2 The documentary evidence of the Tenderer qualifications to perform the Contract if its Tender is accepted shall establish to the Procuring Entity's satisfaction:

(a) that, if required **in the TDS**, a Tenderer that does not own the Lease Items it offers shall submit the Owner's Authorization using the form included in Section IV, Tendering Forms to demonstrate that it has been duly authorized by the Owner of the Lease Items.

(b) that, if required **in the TDS**, in case of a Tenderer not doing business within Kenya, the Tenderer is or will be (if awarded the Contract) represented by an Agent in the country equipped and able to carry out the related services of the leased items as obligations prescribed in the Conditions of Contract and/or Technical Specifications; and

(c) that the Tenderer meets each of the qualification criterion specified in Section III, Evaluation and Qualification Criteria.

16.3 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by the

Procuring Entity, a particular lessor or group of lessors qualifies for a margin of preference. Further the information will enable the Procuring Entity identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.

16.4 The purpose of the information described in ITT 16.3 above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be accepted by the Procuring Entity as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.

16.5 The Tenderer shall provide further documentary proof, information or authorizations that the Procuring Entity may request in relation to ownership and control which in formation on any changes to the information which was provided by the tenderer under ITT 16.3. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.

16.6 All information provided by the tenderer pursuant to these requirements must be complete, current and accurate as at the date of provision to the Procuring Entity. In submitting the information required pursuant to these requirements, the Tenderer shall warrant that the information submitted is complete, current and accurate as at the date of submission to the Procuring Entity.

16.7 If a tenderer fails to submit the information required by these requirements, its tenderer will be rejected. Similarly, if the Procuring Entity is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tenderer pursuant to these requirements, then the tender will be rejected.

16.8 If information submitted by a tenderer pursuant to these requirements, or obtained by the Procuring Entity (whether through its own enquiries, through notification by the public or otherwise), shows any conflict of interest which could materially and improperly benefit the tenderer in relation to the procurement or contract management process, then:

i) If the procurement process is still ongoing, the tenderer will be disqualified from the procurement process.
ii) If the contract has been awarded to that tenderer, the contract award will be set aside.
iii) the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other persons have committed any criminal offence.

16.9 If a tenderer submits information pursuant to these requirements that is incomplete, in accurate or out-of-date, or attempts to obstruct the verification process, then the consequences ITT 16.8 will ensue unless the tenderer can show to the reasonable satisfaction of the Procuring Entity that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tenderer.

17 Period of Validity of Tenders

17.1 Tenders shall remain valid for the Tender Validity period specified **in the TDS**. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by the Procuring Entity in accordance with ITT 22.1). A Tender valid for a shorter period shall be rejected by the Procuring Entity as non-responsive.

17.2 In exceptional circumstances, prior to the expiration of the Tender validity period, the Procuring Entity may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 19, it shall also be extended for a corresponding period. A Tenderer may refuse the request without forfeiting its Tender Security. A Tenderer granting the request shall not be required or permitted to modify its Tender, except as provided in ITT 18.3.

18 Tender Security

18.1 The Tenderer shall furnish as part of its Tender, either a Tender-Securing Declaration or a Tender Security, as specified **in the TDS,** in original form and, in the case of a Tender Security**,** in the amount and currency specified **in the TDS.** In this case a Tender-Securing Declaration or a Tender Security shall be for each item. Alternatively, a tenderer may aggregate all the Items tendered for and provide one Tender-Securing Declaration or a Tender Security in the required amounts, as the case may be.

18.2 A Tender Securing Declaration shall use the form included in Section IV, Tendering Forms.

18.3 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security shall be a demand bank guarantee in any of the following forms at the Tenderer option:

i. cash;

ii. a bank guarantee;

iii. a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority; or

iv. a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya.

v. Any other form specified in the **TDS.**

18.4 If an unconditional guarantee is issued by a non-Bank financial institution located outside Kenya, the issuing non-Bank financial institution shall have a correspondent financial institution located in Kenya to make it enforceable unless the Procuring Entity has agreed in writing, prior to Tender submission, that a correspondent financial institution is not required. In the case of a bank guarantee, the Tender Security shall be submitted either using the Tender Security Form included in Section IV, Tendering Forms, or in another substantially similar format approved by the Procuring Entity prior to Tender submission. The Tender Security shall be valid for twenty-eight (28) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 18.2.

18.5 If a Tender Security is specified pursuant to ITT 19.1, any Tender not accompanied by a substantially responsive Tender Security shall be rejected by the Procuring Entity as non-responsive.

18.6 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer signing the Contract and furnishing the Performance Security pursuant to ITT 46.

18.7 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract. The Procurement Entity shall also return tender security to the tenderers where;

a. The procurement proceedings are terminated

b. All tenders were determined non-responsive and

c. Where a bidder decline to extent the tender validity period.

18.8 The Tender Security may be forfeited or the Tender Securing Declaration executed:

a) If a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer in the Form of Tender, or any extension thereto provided by the Tenderer; or

i) If the successful Tenderer fails to sign the Contract in accordance with ITT 45; or

ii) Furnish or make available the Leased items.

18.9 The Tender Security or Tender- Securing Declaration of a JV must be in the name of the JV that submits the Tender. If the JV has not been legally constituted into a legally enforceable JV at the time of Tendering, the Tender Security or Tender-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITT 4.1 and ITT 11.2.

18.10 Where the Tender-Securing Declaration is executed the Procuring Entity will recommend to the PPRA that PPRA debars the Tenderer from participating in public procurement as provided in the law.

18.11 A tenderer shall not issue a tender security to guarantee itself.

19 Format and Signing of Tender

19.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 11 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 13, shall be clearly marked "ALTERNATIVE." In addition, the Tenderer shall submit copies of the Tender, in the number **specified in the TDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.

19.2 Tenderers shall mark as "CONFIDENTIAL" information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.

19.3 The original and all copies of the Tender shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Tenderer. This authorization shall consist of a written confirmation **as specified in the TDS** and shall be attached to the Tender. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Tender where entries or amendments have been made shall be signed or initialed by the person signing the Tender.

19.4 In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.

19.5 Any inter-lineation, erasures, or over writing shall be valid only if they are signed or initialed by the person signing the Tender.

D. Submission and Opening of Tenders

20 Sealing and Marking of Tenders

20.1 The Tenderer shall deliver the Tender in a single sealed envelope, or in a single sealed package, or in a single sealed container bearing the name and Reference number of the Tender, addressed to the Procuring Entity and a warning not to open before the time and date for Tender opening date. Within the single envelope, package or container, the Tenderer shall place the following separate, sealed envelopes:

a in an envelope or package or container marked "ORIGINAL", all documents comprising the Tender, as described in ITT11; and

b in an envelope or package or container marked "COPIES", all required copies of the Tender; and

c if alternative Tenders are permitted in accordance with ITT 13, and if relevant:

i. in an envelope or package or container marked "ORIGINAL –ALTERNATIVE TENDER", the alternative Tender; and

ii. in the envelope or package or container marked "COPIES- ALTERNATIVE TENDER", all required copies of the alternative Tender.

The inner envelopes or packages or containers shall:

a) bear the name and address of the Procuring Entity.

b) Bear the name and address of the Tenderer; and

c) Bear the name and Reference number of the Tender.

20.2 If an envelope or package or container is not sealed and marked as required, the *Procuring Entity* will assume no responsibility for the misplacement or premature opening of the Tender. Tenders that are misplaced or opened prematurely will not be accepted.

21 Deadline for Submission of Tenders

21.1 Tenders must be received by the Procuring Entity at the address and no later than the date and time specified **in the TDS. When so specified in the TDS**, Tenderers shall have the option of submitting their Tenders electronically. Tenderers submitting Tenders electronically shall follow the electronic Tender submission procedures **specified in the TDS**.

21.2 The Procuring Entity may, at its discretion, extend the deadline for the submission of Tenders by amending the tendering document in accordance with ITT 8, in which case all rights and obligations of the Procuring Entity and Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

22 Late Tenders

22.1 The Procuring Entity shall not consider any Tender that arrives after the deadline for submission of Tenders, in accordance with ITT 22. Any Tender received by the Procuring Entity after the deadline for submission of Tenders shall be declared late, rejected, and returned unopened to the Tenderer.

23 Withdrawal, Substitution, and Modification of Tenders

23.1 A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization (the power

of attorney) in accordance with ITT 20.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:

a prepared and submitted in accordance with ITT 20 and 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or "MODIFICATION;" and

b received by the Procuring Entity prior to the deadline prescribed for submission of Tenders, in accordance with ITT 22.

23.2 Tenders requested to be withdrawn in accordance with ITT 24.1 shall be returned unopened to the Tenderers.

23.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender or any extension thereof.

24 Tender Opening

24.1 Except as in the cases specified in ITT 23 and ITT 24.2, the Procuring Entity shall, at the Tender opening, publicly open and read out all Tenders received by the deadline at the date, time and place specified **in the TDS** in the presence of Tenderers' designated representatives and anyone who chooses to attend Any specific electronic Tender opening procedures required if electronic tendering is permitted in accordance with ITT 22.1, shall be as specified **in the TDS.**

24.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding Tender shall not be opened, but returned to the Tenderer. If the withdrawal envelope does not contain a copy of the "power of attorney" confirming the signature as a person duly authorized to sign on behalf of the Tenderer, the corresponding Tender will be opened. No Tender withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Tender opening.

24.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Tender being substituted, and the substituted Tender shall not be opened, but returned to the Tenderer. No Tender substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at Tender opening.

24.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender. No Tender modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Tender opening.

24.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Prices, per lot (contract) if applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security, if required; and any other details as the Procuring Entity may consider appropriate.

24.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further in the evaluation. The Form of Tender and the Price Schedules are to be initialed by representatives of the Procuring Entity attending Tender opening in the manner specified **in the TDS.**

24.7 The Procuring Entity shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 23.1).

24.8 The Procuring Entity shall prepare a record of the Tender opening that shall include, as a minimum:

a The name of the Tenderer and whether there is a withdrawal, substitution, or modification;

b The Tender Price, per lot (contract) if applicable, including any discounts;

c Any alternative Tenders;

d The presence or absence of a Tender Security or Tender-Securing Declaration, if one was required.

24.9 The Tenderers' representatives who are present shall be requested to sign the record. The omission of a Tenderer signature on the record shall not invalidate the contents and effect of the record. A copy of the opening register shall be distributed to all Tenderers upon request.

E. Evaluation and Comparison of Tenders

25 Confidentiality

25.1 Information relating to the evaluation of Tenders and recommendation of contract award, shall not be disclosed to Tenderers or any other persons not officially concerned with the Tendering process until the information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 40.

25.2 Any effort by a Tenderer to influence the Procuring Entity in the evaluation or contract award decisions may result in the rejection of its Tender.

25.3 Notwithstanding ITT 26.2, from the time of Tender opening to the time of Contract Award, if any Tenderer wishes to contact the Procuring Entity on any matter related to the Tendering process, it should do so in writing.

26 Clarification of Tenders

26.1 To assist in the examination, evaluation, comparison of the Tenders, and qualification of the Tenderers, the Procuring Entity may, at its discretion, ask any Tenderer for a clarification of its Tender. Any clarification submitted by a Tenderer in respect to its Tender and that is not in response to a request by the Procuring Entity shall not be considered. The Procuring Entity's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Tender shall besought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Procuring Entity in the Evaluation of the Tenders, in accordance with ITT 31.

26.2 If a Tenderer does not provide clarifications of its Tender by the date and time set in the Procuring Entity's request for clarification, its Tender may be rejected.

27 Deviations, Reservations, and Omissions

27.1 During the evaluation of Tenders, the following definitions apply:

a "Deviation" is a departure from the requirements specified in the Tendering document;

b "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the tendering document; and

c "Omission" is the failure to submit part or all of the information or documentation required in the tendering document.

28 Determination of Responsiveness

28.1 The Procuring Entity's determination of a Tender's responsiveness is to be based on the contents of the Tender itself, as defined in ITT 11.

28.2 A substantially responsive Tender is one that meets the requirements of the tendering document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that:

a If accepted, would:

i. Affect in any substantial way the scope, quality, or performance of the Lease Items and Related Services specified in the Contract; or

ii. Limit in any substantial way, in consistent with the tendering document, the Procuring Entity's rights or the Tenderer obligations under the Contract; or

b if rectified, would unfairly affect the competitive position of other Tenderers presenting substantially responsive Tenders.

28.3 The Procuring Entity shall examine the technical aspects of the Tender submitted in accordance with ITT 16 and ITT 17, in particular, to confirm that all requirements of Section VII, Schedule of Requirements have been met without any material deviation or reservation, or omission.

28.4 If a Tender is not substantially responsive to the requirements of tendering document, it shall be rejected by the Procuring Entity and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

29 Non-conformities, Errors and Omissions

29.1 Provided that a Tender is substantially responsive, the Procuring Entity may waive any non-conformities in the Tender.

29.2 Provided that a Tender is substantially responsive, the Procuring Entity may request that the Tenderer submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial non-conformities or omissions in the Tender related to documentation requirements. Such omission shall not be related to any aspect of the price of the Tender. Failure of the Tenderer to comply with the request may result in the rejection of its Tender.

29.3 Provided that a Tender is substantially responsive, the Procuring Entity shall rectify quantifiable nonmaterial non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified in the **TDS**.

30 Correction of Arithmetical Errors

30.1 The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in anyway by any person or entity.

30.2 Provided that the Tender is substantially responsive, the Procuring Entity shall handle errors on the following basis:

a Any error detected if considered a major deviation that affects the substance of the tender, shall lead to disqualification of the tender as non-responsive.

b Any errors in the submitted tender arising from a miscalculation of unit price, quantity, subtotal and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive. and

c If there is a discrepancy between words and figures, the amount in words shall prevail, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail

31 Conversion to Single Currency

31.1 No conversion to single currency is expected since all tenders will be in Kenya shillings.

32 Margin of Preference and reservations

32.1 No Margin of Preference and Reservations shall be allowed in this tender.

33 Evaluation of Tenders

33.1 The Procuring Entity shall use the criteria and methodologies listed in this ITT and Section III, Evaluation and Qualification criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies, the Procuring Entity shall determine the Most Advantageous Tender. This is the Tender of the Tenderer that meets the qualification criteria and whose Tender has been determined to be:

a Substantially responsive to the tendering document; and

b The lowest evaluated cost.

33.2 To evaluate a Tender, the Procuring Entity shall consider the following:

a Price adjustment due to discounts offered in accordance with ITT 14.4;

b Price adjustment due to quantifiable non material non-conformities in accordance with ITT 30.3; and

c The additional evaluation factors are specified in Section III, Evaluation and Qualification Criteria.

33.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of the Lease Contract, shall not be considered in Tender evaluation.

33.4 In the case of multiple contracts or lots, Tenderers are allowed to tender for one or more lots and the methodology to determine the lowest evaluated cost of the lot (contract) and for combinations, including any discounts offered in the Form of Tender, is specified in Section III, Evaluation and Qualification Criteria.

33.5 The Procuring Entity's evaluation of a Tender will include and consider:

a taxes, which will be payable on the Lease Items if a contract is awarded to the Tenderer;

b any allowance for price adjustment during the period of the Lease contract, if provided in the Tender.

33.6 The Procuring Entity's evaluation of a Tender may require the consideration of other factors, in addition to the Tender Price quoted in accordance with ITT 14. These factors may be related to the characteristics, performance, and terms and conditions of Lease and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of Tenders, unless otherwise specified **in the TDS** from amongst those set out in Section III, Evaluation and Qualification Criteria. The criteria and methodologies to be used shall be as specified in ITT 34.2 (f).

34 Comparison of Tenders

34.1 The Procuring Entity shall compare the evaluated costs of all substantially responsive Tenders established in accordance with ITT 34.2 to determine the Tender that has the lowest evaluated cost. The comparison shall be on the basis of total cost for all Lease Items, and related services, together with prices for any required installation, training, commissioning and other services.

35 Abnormally Low Tenders and Abnormally High

Tenders Abnormally Low Tenders

35.1 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price.

35.2 In the event of identification of a potentially Abnormally Low Tender, the Procuring Entity shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.

35.3 After evaluation of the price analyses, in the event that the Procuring Entity determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, the Procuring Entity shall reject the Tender.

Abnormally High Tenders

35.4 An abnormally high tender price is one where the tender price, in combination with other constituent elements of the Tender, appears unreasonably too high to the extent that the Procuring Entity is concerned that it (the Procuring Entity) may not be getting value for money or it may be paying too high a price for the contract compared with market prices or that genuine competition between Tenderers is compromised.

35.5 In case of an abnormally high price, the Procuring Entity shall make a survey of the market prices, check if the estimated cost of the contract is correct and review the Tender Documents to check if the specifications, scope of work and conditions of contract are contributory to the abnormally high tenders. The Procuring Entity may also seek written clarification from the tenderer on the reason for the high tender price. The Procuring Entity shall proceed as follows:

i) If the tender price is abnormally high based on wrong estimated cost of the contract, the Procuring Entity may accept or not accept the tender depending on the Procuring Entity's budget considerations.

ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, the Procuring Entity shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.

35.6 If the Procuring Entity determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised (*often due to collusion, corruption or other manipulations*), the Procuring Entity shall reject all Tenders and shall institute or cause competent Government Agencies to institute an investigation on the cause of the compromise, before retendering.

36 Qualification of the Tenderer

36.1 The Procuring Entity shall determine, to its satisfaction, whether the eligible Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender, meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.

36.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer qualifications submitted by the Tenderer, pursuant to ITT 17. The determination shall not take into consideration the qualifications of other firms such as the Tenderer subsidiaries, parent entities, affiliates, subcontractors (other than specialized subcontractors if permitted in the tendering document), or any other firm(s) different from the Tenderer.

36.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative determination shall result in disqualification of the Tender, in which event the Procuring Entity shall proceed to the Tenderer who offers a substantially responsive Tender with the next lowest evaluated cost to make a similar determination of that Tenderer qualifications to perform satisfactorily.

37 Procuring Entity's Right to Accept Any Tender, and to Reject Any or All Tenders

37.1 The Procuring Entity reserves the right to accept or reject any Tender, and to annul the Tendering process and reject all Tenders at any time prior to Contract Award, without there by incurring any liability to Tenderers. In case of annulment, all Tenders submitted and specifically, tender securities, shall be promptly returned to the Tenderers.

F. Award of Contract

38. Award Criteria

38.1 The Procuring Entity shall award the Contract to the successful tenderer whose tender has been determined to be the Lowest Evaluated Tender.

39. Notice of Intention to enter into a Contract/Notification of award

39.1 Upon award of the contract and Prior to the expiry of the Tender Validity Period the Procuring Entity shall issue a Notification of Intention to Enter into a Contract/Notification of award to all tenderers which shall contain, at a minimum, the following information:

a) The name and address of the Tenderer submitting the successful tender;

b) The Contract price of the successful tender;

c) a statement of the reason(s) the tender of the unsuccessful tenderer to whom the letter is addressed was unsuccessful, unless the price information in (c) above already reveals the reason;

d) the expiry date of the Standstill Period; and

e) instructions on how to request a debriefing and/or submit a complaint during the standstill period;

40. Standstill Period

40.1 The Contract shall not be signed earlier than the expiry of a Standstill Period of 14 days to allow any dissatisfied tender to launch a complaint. Where only one Tender is submitted, the Standstill Period shall not apply.

40.2 Where a Standstill Period applies, it shall commence when the Procuring Entity has transmitted to each Tenderer the Notification of Intention to Enter into a Contract with the successful Tenderer.

41 Debriefing by the Procuring Entity

41.1 On receipt of the Procuring Entity's Notification of Intention to Enter into a Contract referred to in ITT 43, an unsuccessful tenderer may make a written request to the Procuring Entity for a debriefing on specific issues or concerns regarding their tender. The Procuring Entity shall provide the debriefing within five days of receipt of the request. .2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending such a debriefing meeting.

42 Letter of Award

42.1 Prior to the expiry of the Tender Validity Period and upon expiry of the Standstill Period specified in ITT 42.1, upon addressing a complaint that has been filed within the Standstill Period, the Procuring Entity shall transmit the Letter of Award to the successful Tenderer. The letter of award shall request the successful tenderer to furnish the Performance Security within 21 days of the date of the letter.

43 Signing of Contract

43.1 Upon the expiry of the fourteen days of the Notification of Intention to enter into contract and upon the parties meeting their respective statutory requirements, the Procuring Entity shall send the successful Tenderer the Contract Agreement.

43.2 Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to the Procuring Entity.

43.3 The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period.

44 Performance Security

44.1 Within twenty-one (21) days of the receipt of Letter of Acceptance from the Procuring Entity, the successful Tenderer, if required, shall furnish the Performance Security in accordance with the GCC 18, using for that purpose the Performance Security Form included in Section X, Contract Forms, or another Form acceptable to the Procuring Entity. If the Performance Security furnished by the successful Tenderer is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Tenderer to be acceptable to the Procuring Entity. A foreign institution providing a bond shall have a correspondent financial institution located in Kenya, unless the Procuring Entity has agreed in writing that a correspondent financial institution is not required.

44.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event the Procuring Entity may award the Contract to the Tenderer offering the next Most Advantageous Tender.

44.3 Performance security shall not be required for contracts estimated to cost less than Kenya shillings five million shillings.

45. Publication of Procurement Contract

45.1 Within fourteen days after signing the contract, the Procuring Entity shall publish the awarded contract at its notice boards and websites; and on the Website of the Authority. At the minimum, the notice shall contain the following information:

a) name and address of the Procuring Entity;

b) name and reference number of the contract being awarded, a summary of its scope and the selection method used;

c) the name of the successful Tenderer, the final total contract price, the contract duration.

d) dates of signature, commencement and completion of contract;

e) names of all Tenderers that submitted Tenders, and their Tender prices as read out at Tender opening.

46 Procurement Related Complaint and Administrative Review

46.1 The procedures for making a Procurement-related Complaint are as specified in the **TDS.**

46.2 A request for administrative review shall be made in the form provided under contract forms.

Section II - Tender Data Sheet (TDS)

The following specific data shall complement, supplement, or amend the provisions in the Instructions to Tenderers (ITT). Whenever there is a conflict, the provisions herein shall prevail over those in ITT.

<table>
<tr><th>ITT Reference</th><th>PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS</th></tr>
<tr><td colspan="2">A. General</td></tr>
<tr><td>ITT 1.1</td><td>The reference number of the Invitation for Tenders is: MOH/SDMS/HI/OT/002/2023/2024
The Procuring Entity is: Ministry of Health, State Department for Medical Services
The name of the Contract is: Provision of Medical Equipment on Lease in Public Health Facilities
The number and identification of lots (contracts) comprising this Invitation for Tenders is:
<table>
<tr><th>Lot</th><th>Category</th><th>Lease</th></tr>
<tr><td>Lot 1</td><td>Accident & Emergency</td><td>Lease</td></tr>
<tr><td>Lot 2</td><td>ICU</td><td>Lease</td></tr>
<tr><td>Lot 3</td><td>IPD</td><td>Lease</td></tr>
<tr><td>Lot 4</td><td>Assisted Technology</td><td>Lease</td></tr>
<tr><td>Lot 5</td><td>Pulmonology</td><td>Lease</td></tr>
<tr><td>Lot 6</td><td>Endoscopy</td><td>Lease</td></tr>
<tr><td>Lot 7</td><td>Mortuary</td><td>Lease</td></tr>
<tr><td>Lot 8</td><td>Diagnostics Imaging Xray</td><td>Lease</td></tr>
<tr><td>Lot 9</td><td>Diagnostics Imaging Sonography</td><td>Lease</td></tr>
<tr><td>Lot 10</td><td>Diagnostics Imaging Mammogram</td><td>Lease</td></tr>
<tr><td>Lot 11</td><td>Diagnostics Imaging CT</td><td>Lease</td></tr>
<tr><td>Lot 12</td><td>Diagnostics Imaging MRI</td><td>Lease</td></tr>
<tr><td>Lot 13</td><td>Radiation Oncology</td><td>Lease</td></tr>
<tr><td>Lot 14</td><td>Nuclear Medicine</td><td>Lease</td></tr>
<tr><td>Lot 15</td><td>Cardiology</td><td>Lease</td></tr>
<tr><td>Lot 16</td><td>General Theatre</td><td>Lease</td></tr>
<tr><td>Lot 17</td><td>Medical Gases</td><td>Lease</td></tr>
<tr><td>Lot 18</td><td>CSSD</td><td>Lease</td></tr>
</table></td></tr>
<tr><td>ITT 1.2(a)</td><td>Online electronic procurement procedures will be used to manage the issuance of tender document and tender clarifications as follows;
Interested eligible candidates may obtain a complete set of tender documents at the Public Procurement Information Portal www.tenders.go.ke and at the Ministry of Health website: www.health.go.ke free of charge. Tenderers downloading documents from the designated websites should forward their particulars including email addresses and telephone numbers immediately to the email address procurement@health.go.ke to facilitate any further clarifications or addenda</td></tr>
<tr><td>ITT 3.1</td><td>Maximum number of members in the Joint Venture (JV) shall be: [Three]</td></tr>
<tr><td></td><td>B. Contents of Tendering Document</td></tr>
<tr><td>ITT 6.</td><td>For Clarification of Tender purposes only, the Procuring Entity’s address is:
1. Attention: Head of Health Infrastructure, Head of Procurement
2. Postal Address: 30016-00100
3. Physical Address: Afya House, Cathedral Road, Health Infrastructure Unit or Procurement office on 5TH Floor Afya House Room No 514A
4. Electronic mail address: procurement@health.go.ke</td></tr>
</table>

<table>
<tr><td>ITT Reference</td><td>PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS</td></tr>
<tr><td></td><td>Requests for clarification should be received by the Procuring Entity no later than: 4 days before the deadline for submission of tenders</td></tr>
<tr><td></td><td>C. Preparation of Tenders</td></tr>
<tr><td>ITT 10 (j)</td><td>The Tenderer shall submit the following additional documents in its Tender: [See eligibility and qualification criteria]</td></tr>
<tr><td>ITT 12.1</td><td>Alternative Tenders shall not be considered.</td></tr>
<tr><td>ITT 13.4</td><td>Prices quoted by the Tenderer shall be fixed.

Tenderers shall be allowed to quote for each lot or multiple LOTs separately, and the methodology to determine the lowest tenderer is specified in Section III, Evaluation and Qualification Criteria.

Prices quoted for each lot (contract) shall correspond at least to 100% percent of the items specified for each lot (contract). Incomplete lots will be rejected and will not be evaluated further.

At the time of engagement which shall be vide call off contracts by the implementing agencies, the final award shall be determined as per the financial strength and the technical capability of the bidder and shall be subject to budgetary approval.</td></tr>
<tr><td>ITT 14.1</td><td>Tenders may not tender in other currencies which are used in international trade.</td></tr>
<tr><td>ITT 15.4</td><td>Period of time the Lease Items are expected to be functioning (for the purpose of spare parts): Seven (7) years renewable for a further three (3) years subject to satisfactory performance</td></tr>
<tr><td>ITT 16.2 (a)</td><td>Owner’s authorization is: “required” where applicable”</td></tr>
<tr><td>ITT 16.2 (b)</td><td>Related services are: “required”</td></tr>
<tr><td>ITT 17.1</td><td>The Tender validity period shall be 210 days after the deadline for Tender submission</td></tr>
<tr><td>ITT 17.3 (a)</td><td>The Tender price shall be adjusted as follows: N/A
Insert a figure to reflect a percentage by which the lease would be increased annually. Say after first one or two years.</td></tr>
<tr><td>ITT 18.1</td><td>A Tender Security “shall be” required.

If a Tender Security shall be required, the amount and currency of the Tender Security shall be

_____

Tender Security is required and must be in the form of demand Bank Guarantee valid for 28 days beyond tender validity in amounts and currency as follows
<table>
<tr><th>Lot</th><th>Category</th><th>Tender Security Amount (KES)</th></tr>
<tr><td>Lot 1</td><td>Accident & Emergency</td><td>8,000,000.00</td></tr>
<tr><td>Lot 2</td><td>ICU</td><td>8,000,000.00</td></tr>
<tr><td>Lot 3</td><td>IPD</td><td>3,000,000.00</td></tr>
<tr><td>Lot 4</td><td>Assisted Technology</td><td>3,000,000.00</td></tr>
<tr><td>Lot 5</td><td>Pulmonology</td><td>1,000,000.00</td></tr>
<tr><td>Lot 6</td><td>Endoscopy</td><td>2,000,000.00</td></tr>
</table></td></tr>
</table>

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS

Lot 7	Mortuary	5,000,000.00
Lot 8	Diagnostics Imaging Xray	5,000,000.00
Lot 9	Diagnostics Imaging Sonography	5,000,000.00
Lot 10	Diagnostics Imaging Mammogram	5,000,000.00
Lot 11	Diagnostics Imaging CT	10,000,000.00
Lot 12	Diagnostics Imaging MRI	10,000,000.00
Lot 13	Radiation Oncology	10,000,000.00
Lot 14	Nuclear Medicine	10,000,000.00
Lot 15	Cardiology	5,000,000.00
Lot 16	General Theatre	8,000,000.00
Lot 17	Medical Gases	5,000,000.00
Lot 18	CSSD	5,000,000.00

[Note: Tender Security is required for each lot as per amounts indicated against each lot. Tenderer have the option of submitting one Tender Security for all lots (for the combined total amount of all lots) for which Tenders have been submitted, however if the amount of Tender Security is less than the total required amount, the Procuring Entity will determine for which lot or lots the Tender Security amount shall be applied.]

ITT 18.3 (v)

Other types of acceptable securities:

N/A

***[Insert names of other acceptable securities. Insert "None" if no Tender Security is required under provision ITT 19.1 or if Tender Security is required but no other forms of Tender securities besides those listed in ITT 19.3 (a) through (c) are acceptable*.]**

ITT 19.1

In addition to the original of the Tender, the number of copies is**: [ONE copy***]*

ITT 19.3

The written confirmation of authorization to sign on behalf of the Tenderer shall consist of**:** ***Power of Attorney***

D. Submission and Opening of Tenders

ITT 21.1

For **Tender submission purposes** only, the Procuring Entity's address is:***]***

1. Attention: *Principal Secretary, State Department for Medical Services*
2. Postal Address: *30016-00100]*
3. Physical Address: Afya House 6th Floor, Cathedral Road.

The deadline for Tender submission is:

Date: ***[Tuesday 2nd July 2024***

Time: *[. 11:00 a.m.]*

[Note: The date and time should be the same as those provided in the Specific Procurement Notice - Request for Tenders, unless subsequently amended pursuant to ITT 22.2.]

tenderers ***"shall not"*** have the option of submitting their Tenders electronically.

ITT 24.1

The Tender opening shall take place at:

Afya House GTZ Boardroom , Cathedral Road,

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
	Postal Address P.O Box 30016-00100 Nairobi Tuesday ***2nd July 2024 at 1100 Hours East African Time***
ITT 24.6	The Form of Tender and Price Schedules shall be initialed by at least **three(3) representatives** of the Procuring Entity conducting Tender opening.
ITT 29.3	The manner of rectify quantifiable nonmaterial nonconformities described below: **_____NONE_____**
E. Evaluation and Comparison of Tenders	
ITT 34.6	The factors selected and expressed in monetary terms to facilitate comparison of Tenders are__**NONE**_____ _____
	F. Award of Contract
ITT 42	The maximum percentage by which quantities may be increased is: ***N/A]*** The maximum percentage by which quantities may be decreased is: ***N/A]***
ITT 46.1	**The procedures for making a Procurement-related Complaint are detailed in the "Notice of Intention to Award the Contract" herein and are also available from the PPRA** Website www.ppra.go.ke or email complaints@ppra.go.ke. If a Tenderer wishes to make a Procurement-related Complaint, the Tenderer should submit its complaint following these procedures, in writing (by the quickest means available, that is either by email or fax), to: **For the attention**: *[insert full name of person receiving complaints]* **Title/position**: *[insert title/position]* **Procuring Entity**: *[insert name of Procuring Entity]* **Email address***: [insert email address]* In summary, a Procurement-related Complaint may challenge any of the following: **1.** the terms of the Tendering Documents; and **2.** the Procuring Entity's decision to award the contract.

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

1. General Provision

1.1 Wherever a Tenderer is required to state a monetary amount, Tenderers should indicate the Kenya Shilling equivalent using the rate of exchange determined as follows:

a) For business turnover or financial data required for each Year-Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.

b) Value of single contract- Exchange rate prevailing on the date of the contract signature.

c) Exchange rates shall be taken from the publicly available source identified in the ITT. Any error in determining the exchange rates in the Tender may be corrected by the Procuring Entity.

1.2 This section contains the criteria that the Employer shall use to evaluate tender and qualify tenderers. No other factors, methods or criteria shall be used other than specified in this tender document. The Tenderer shall provide all the information requested in the forms included in Section IV, Tendering Forms. The Procuring Entity should use **the Standard Tender Evaluation Report for Goods and Works** for evaluating Tenders.

1.3 Evaluation and contract award Criteria

The Procuring Entity shall use the criteria and methodologies listed in this Section to evaluate tenders and arrive at the Lowest Evaluated Tender. The tender that (i) meets the qualification criteria, (ii) has been determined to be substantially responsive to the Tender Documents, and (iii) is determined to have the Lowest Evaluated Tender price shall be selected for award of contract.

2 Preliminary examination for Determination of Responsiveness

2.1 The Procuring Entity will start by examining all tenders to ensure they meet in all respects the eligibility criteria and other mandatory requirements in the ITT, and that the tender is complete in all aspects in meeting the requirements provided for in the preliminary evaluation criteria outlined below. The Standard Tender Evaluation Report Document for Goods and Works for evaluating Tenders provides very clear guide on how to deal with review of these requirements. Tenders that do not pass the Preliminary Examination will be considered non- responsive and will not be considered further.

Preliminary Evaluation Criteria

At the Preliminary Evaluation Stage, Bidders will be evaluated on the following Criteria

1. Provision of Certificate of Incorporation or Registration.
2. Copy of CR12 not more than 6 months from the date of tender opening or CR13 for Partnership or Proprietor IDs for Sole Proprietors.
3. Valid Tax Compliance Certificate.
4. Valid Single Business Permit.
5. Duly filled, signed and stamped Confidential Business Questionnaire Form -
6. Duly filled, signed and stamped Form of Tender
7. Dully filled, stamped and signed Price Schedules conforming to 100% of the items specified in the lot(Contract)
8. Duly filled, signed and stamped Certificate of Independent Tender Determination –
9. Duly filled, signed and stamped SD 1 and SD 2 forms provided
10. Duly filled, signed and stamped - Declaration and commitment to the Code of Ethics.
11. A tender security as **indicated in the Tender Data Sheet**
12. Submission of Power of Attorney issued to the authorized signatory of all documents and the contract
13. Detailed Company profile.
14. All pages of both original and copy of the tender documents submitted MUST be sequentially serialized and initialized by the tenderers.

In case of foreign entity, provide the equivalent document from their respective country of incorporation where applicable)

N/B: - Full compliance by the tenderers shall be required to proceed to the next stage of evaluation. Failure to provide any of the listed requirements shall lead to disqualification.

TECHNICAL EVALUATION CRITERIA

Financial Capability:

a. The Tenderer shall demonstrate that it has access to, or has available liquid assets, lines of credit, or other financial means from a financial institution, Fund, Private Equity or Banks to procure the equipment in each lot that they are bidding. The bidder should produce the proof of evidence for fund for each LOT as follows

Lots /Contracts

Lot	Category	Amount (KES)
Lot 1	Accident & Emergency	200,000,000.00
Lot 2	ICU	200,000,000.00
Lot 3	IPD	150,000,000.00
Lot 4	Assisted Technology	150,000,000.00
Lot 5	Pulmonology	100,000,000.00
Lot 6	Endoscopy	100,000,000.00
Lot 7	Mortuary	150,000,000.00
Lot 8	Diagnostics Imaging Xray	150,000,000.00
Lot 9	Diagnostics Imaging Sonography	150,000,000.00
Lot 10	Diagnostics Imaging Mammogram	150,000,000.00
Lot 11	Diagnostics Imaging CT	200,000,000.00
Lot 12	Diagnostics Imaging MRI	200,000,000.00
Lot 13	Radiation Oncology	200,000,000.00
Lot 14	Nuclear Medicine	200,000,000.00
Lot 15	Cardiology	150,000,000.00
Lot 16	General Theatre	200,000,000.00
Lot 17	Medical Gases	150,000,000.00
Lot 18	CSSD	150,000,000.00

b. Minimum average annual turnover of Kenya Shillings Three Billion (Ksh. 3,000,000,000.00) or equivalent calculated as total certified payments received for contracts in progress and/or completed within the last 3 years, divided by 3 years for the lead bidder or the principal holding company as shall be confirmed by audited accounts for the last 3 years

Experience:

The bidder or its subcontractors, partners or joint venture members or consortium members has satisfactorily and substantially completed at least Two (2 No) contract(s) of a similar nature, as a prime supplier, as a sub-contract, a joint venture/consortium member, or a sub-contract member each of a minimum value in Kenya shillings 150,000,000.00 or equivalent in the last five (5) years.

(Provide evidence to support)

The bidder or its subcontractors must provide proof of at least 5 similar contracts of equipment maintenance for Hospitals whether private or public successfully completed in the last 5 years indicating contract sums and client reference letters.

Technical Staff Requirement

1. Team Leader

Minimum of ten (10) years' experience in the technical field and project management.

Holder of minimum Degree with 10 year and above relevant experience

Relevant experience and certificates must be provided

(The Staffs whose documents are provided must be part of the bidder or its subcontractors, partners or vendors organization and should be nominated by the bidder for this assignment)

2. Technicians

At least 2 No. minimum Diploma holders of technicians in relevant field

two (2No) Biomedical Engineering technologist -must have a Degree in biomedical engineering with at least 7 yrs. experience.

Relevant experience and certificates must be provided

(The Staffs whose documents are provided must be part of the bidder or its subcontractors, partners or vendors organization and should be nominated by the bidder for this assignment)

3. Technicians

Five (5No) Biomedical Engineering technicians -must have at least a diploma in Biomedical Engineering with 5 years' experience.

Holder of minimum Certificate with 10 years and above

(Must Attach CVS and certificates)

(The Staffs whose documents are provided must be part of the bidder or its subcontractors, partners or vendors organization and should be nominated by the bidder for this assignment)

Logistics Capability.

Bidders to demonstrate ability to offer logistics in delivering the goods to pointof use safely and in good condition. Provide a proposal in terms of transport /courier services. The bidder to demonstrate ownership of transportation equipment or ability to hire as the case may be

(Provide documentary evidence)

Product Evaluation

a) Bidder to provide Original Manufacturers' Brochures containing technical data for all items quoted in the Lot where applicable and especially for equipment.
NB: Website downloads will be acceptable upon having an agreement with an authorized dealer or supplier or manufacturer

(Provide documentary evidence of the authorization or agreement)

Manufacturer's Authorization

Tenderers shall be required to provide a Manufacturer's Authorization / Prove of Dealership/ Agreements with the authorized Dealers (dealership authorization letter) for the equipment based on the LOT(S) they are bidding,
At least 3 Authorization per lot for LOT(S) where the number of equipment are higher than 5.

Certificate of Conformity

The tenderer shall be required to submit a letter of conformity to ensure the prescribed standards for each of the items offered within the prescribed turnaround time of 24hrs

The tenderer shall be required to submit a certificate of conformity for the Equipment in each lot they are bidding for,

Project Management Team and Timeline
Ability to put project management team and deliver the project within stipulated timelines. Work plan and methodology of contract execution if awarded, including deployment of staff, repair and maintenance as per our service requirements, equipment and Tools owned by the firm to be used to undertake the repair and maintenance services. **A Detailed Operational Plan of the Project Implementation including but not limited to: -** a. Implementation Process b. Plan to provide 95% uptime c. Advantages of the proposed Implementation plan d. Details of Equipment Planning e. Delivery and Distribution Plan f. Supply, Installation, Commissioning, Testing, and Maintenance plan g. Inventory and Spare Parts Management Plan h. Stakeholder Mapping and responsibilities i. Complaint and Break down Management j. ICT integration and report Generation k. Governance and Due diligence **Gantt Chart with the timeline to execute the project (supply, installation, testing and commissioning)**
Backup Support Tenderers or its subcontractors or partners must offer items with service and spare parts back up including a schedule of preventive servicing and maintenance. Documentary evidence and locations of such back up must be provided
Training Plan and Schedule
Provide a training and upskilling schedule for the staff involved in the Project on the medical equipment management. (Provide Training Schedule)
Quality Management Certification for the bidder (Provide documentary evidence) **Technical Specifications Compliance** The proposed equipment is expected to meet the minimum technical specifications provided

3 **Price evaluation for each item**: in addition to the criteria listed in ITT 34.2 (a)–(d) the following criteria shall apply:

a) Any additional evaluation factors as per ITT 33.2 (e) specified as follows:

_____

_____

b) **Deviation in payment schedule**. *[insert one of the following]*

i) Tenderers shall state their Tender price for the payment schedule outlined in the SCC. Tenders shall be evaluated on the basis of this base price. Tenderers are, however, permitted to state an alternative payment schedule and indicate the reduction in Tender price they wish to offer for such alternative payment schedule. The Procuring Entity may consider the alternative payment schedule and the reduced Tender price offered by the tenderer selected on the basis of the base price for the payment

schedule outlined in the SCC.

or

*ii) The SCC stipulates the payment schedule specified by the Procuring Entity. If a Tender deviate from the schedule and if such deviation is considered acceptable to the Procuring Entity, the Tender will be evaluated by calculating interest earned for any earlier payments involved in the terms outlined in the Tender as compared with those stipulated in the SCC, at the rate per annum **[insert adjustment rate]**.*

4 Multiple Contracts (ITT 34.4)

Multiple contracts will be permitted in accordance with ITT 34.4. Tenderers are evaluated on basis of Lots and the lowest evaluated tenderer identified for each Lot. The Procuring Entity will select one Option of the two Options listed below for award of Contracts.

OPTION 1

i) If a tenderer wins only one Lot, the tenderer will be awarded a contract for that Lot, provided the tenderer meets the Eligibility and Qualification Criteria for that Lot.
ii) If a tenderer wins more than one Lot, the tender will be awarded contracts for all won Lots, provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the Lots. The tenderer will be awarded the combination of Lots for which the tenderer qualifies and the others will be considered for award to second lowest the tenderers.

OPTION 2

The Procuring Entity will consider all possible combinations of won Lots [contract(s)] and determine the combinations with the lowest evaluated price. Tenders will then be awarded to the Tenderer or Tenderers in the combinations provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the won Lots.

Note

Tenderers shall be allowed to quote for each lot or multiple LOTs separately, and the methodology to determine the lowest tenderer is specified in Section III, Evaluation and Qualification Criteria.

Prices quoted for each lot (contract) shall correspond at least to 100% percent of the items specified for each lot (contract). Incomplete lots will be rejected and will not be evaluated further.

Awards in this tender will be placed on call off contracts by the procuring entity and the maximum value of the award to any bidder shall be limited to half the turnover of the lead bidder or its principal holding company for the preceding year, for all the lots tendered and the procuring entity will award the selected lots based on the capability of the bidder. The final award shall be determined as per the financial strength and the technical capability of the bidder and will be based on budgetary availability and approvals by the respective implementing agencies.

5 Alternative Tenders (ITT 12.1)

An alternative if permitted under ITT 12.1, will be evaluated as follows:

"A tenderer may submit an alternative Tender with or without a Tender for the base case. The Procuring Entity shall consider Tenders offered for alternatives as specified in the Technical Specifications of Section VII, Schedule of Requirements. All Tenders received, for the base case, as well as alternative Tenders meeting the specified requirements, shall be evaluated on their own merits in accordance with the same procedures, as specified in the ITT 34 to determine the Lowest Evaluated Tender."

6 Qualification (ITT 35)

6.1 After determining the substantially responsive Tender which offers the lowest-evaluated cost in accordance with ITT 33, and, if applicable, the assessment of any Abnormally Low or high Tender (in accordance with ITT35) the Procuring Entity shall carry out the post-qualification of the tenderer in accordance with ITT36, using only the requirements specified. Requirements not included in the text below shall not be used in the evaluation of the Tenderer qualifications.

6.2 For lease of infrastructural facilities (real estate)

List the requirements (*e.g. the property is in the right location, it is in good status of maintenance, there are proper services for water, power, etc., the space is adequate, access, there is case of lease litigation, etc.*

Make a physical check to ensure that each listed item is met. Determine if the facility is acceptable or not acceptable.

6.3 For lease of plant/equipment, vehicles (movable assets)

i) Confirm the offered items meet the specifications, and the capacity, age etc.

ii) Confirm their availability, etc.

iii) **Financial Capability** - The tenderer shall furnish documentary evidence that it meets the following financial requirement(s): *[list the requirement(s) including period]*

iv) **Documentary Evidence**- The tenderer shall furnish documentary evidence to demonstrate that the Lease Items it offers meet the following usage requirement: *[list the requirement(s)]*

Make a physical check to ensure that each listed item is met. Determine if the facility is acceptable or not acceptable.

6.4 After determining the substantially responsive Tender which offers the lowest-evaluated price meets the requirements in Items 6.2 and 6.3 above, the Procuring Entity shall carry out the post-qualification using the following criteria:

a) **History of non-performing lease contracts**:

Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that Non-performance of a contract did not occur because of the default of the Tenderer, or the member of a JVin the last (*specify years*). The required information shall be furnished in the appropriate form.

b) Pending Litigation

Financial position and prospective long-term profitability of the Single Tenderer, and in the case the Tenderer is a JV, of each member of the JV, shall remain sound according to criteria established with respect to Financial Capability under Paragraph (a) above if all pending litigation will be resolved against the Tenderer. Tenderer shall provide information on pending litigations in the appropriate form.

c) Litigation History

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the last (*specify years*). All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or ongoing under its execution over the years specified. A consistent history of awards against the Tenderer or any member of a JV may result in rejection of the tender.

Section IV - Tendering Forms

i) Form of Tender
ii) Tenderer Information Form
iii) Tenderer JV Members Information Form
iv) Price Schedule -Schedule of Requirements (Lease Items).
v) Form of Tender Security – Demand Guarantee
vi) Form of Tender Security (Insurance Guarantee)
vii) Form of Tender- Securing Declaration
viii) Owner's Authorization

Other Forms to be completed

i) Tenderer's Eligibility- Confidential Business Questionnaire
ii) Certificate of Independent Tender Determination
iii) Self-Declaration Form
iv) Appendix 1- Fraud and Corruption

FORM OF TENDER

(Amended and issued pursuant to PPRA CIRCULAR No. 02/2022)

INSTRUCTIONS TO TENDERERS

i) All italicized text is to help the Tenderer in preparing this form.

ii) The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address. Tenderers are reminded that this is a mandatory requirement.

iii) Tenderer must complete and sign CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF DECLARATION FORMS OF THE TENDERER as listed under (s) below.

Date of this Tender submission:.....*[insert date (as day, month and year) of Tender submission]* **Tender Name and Identification**:.....*[insert identification]* **Alternative No.**:.....*[insert identification No if this is a Tender for an alternative]*

To: ..... *[Insert complete name of Procuring Entity]*

a) **No reservations:** We have examined and have no reservations to the Tendering document, including Addenda issued in accordance with Instructions to tenderers (ITT 7);

b) **Eligibility**: We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3;

c) **Tender/Proposal- Securing Declaration**:
We have not been debarred by the Authority based on execution of a Tender-Securing Declaration or Tender Securing Declaration in Kenya in accordance with ITT 3.7;

d) **Performance Security**: If our Tender is accepted, we commit to obtain a performance security in accordance with the Tendering document;

e) **Conformity:** We offer to lease in conformity with the Tendering Document and in accordance with the lease periods, the Lease items specified in the Schedule below:

[insert completed **LIST OF LEASE ITEMS AND PRICES***]*

f) **Tender Price**: The total price of our Tender, excluding any discounts offered in item (f) below is:

Option 1, in case of one lot: Total price is: .....*[insert the total price of the Tender in words and figures, indicating the various amounts and the respective currencies];*

or

Option 2, in case of lots: (a) Total price of each lot *[insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]*; and (b) Total price of all lots (sum of all lots) *[insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies]*;

g) **Discounts**: The discounts offered and the methodology for their application are:

i) The discounts offered are: *[Specify in detail each discount offered.]*

ii) The exact method of calculations to determine the net price after application of discounts are shown below: *[Specify in detail the method that shall be used to apply the discounts]*;

h) **Tender Validity Period**: Our Tender shall be valid for the period specified in TDS 17.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 21.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

i) **Performance Security**: If our Tender is accepted, we commit to obtain a performance security in accordance with the Tendering document;

j) **Suspension and Debarment**: We, along with any of our subcontractors, Lessors, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Procuring Entity. Further, we are not ineligible under the Kenya laws or official regulations or pursuant to a decision of the United Nations Security Council;

k) **State-owned enterprise or institution**: *[select the appropriate option and delete the other] [We are not a state- owned enterprise or institution]/ [We are a state-owned enterprise or institution but meet the requirements of ITT 3.8];*

l) **Commissions, gratuities, fees:** We have paid, or will pay the following commissions, gratuities, or fees with respect to the Tendering process or execution of the Contract: *[insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity].*

Name of Recipient	Address	Reason	Amount

(If none has been paid or is to be paid, indicate "none.")

m) **Binding Contract**: We understand that this Tender, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;

n) **Procuring Entity Not Bound to Accept**: We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other Tender that you may receive; and

o) **Fraud and Corruption**: We here by certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption.

p) Collusive practices: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.

(q) **Code of Ethical Conduct:** We undertake to adhere by the Code of Ethical Conduct for Persons Participating in Public Procurement and Asset Disposal Activities in Kenya, copy available from ***www.pppra.go.ke*** during the procurement process and the execution of any resulting contract.

(r) **Beneficial Ownership Information:** We commit to provide to the procuring entity the Beneficial Ownership Information in conformity with the Beneficial Ownership Disclosure Form upon receipt of notification of intention to enter into a contract in the event we are the successful tenderer in this subject procurement proceeding.

(s) We, the Tenderer, have duly completed, signed and stamped the following Forms as part of our Tender:

i) Tenderer's Eligibility; Confidential Business Questionnaire – to establish we are not in any conflict to interest.

ii) Certificate of Independent Tender Determination – to declare that we completed the tender without colluding with other tenderers.

iii) Self-Declaration of the Tenderer–to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.

iv) Declaration and commitment to the code of ethics for Persons Participating in Public Procurement and Asset Disposal Activities in Kenya,

Further, we confirm that we have read and understood the full content and scope of fraud and corruption as informed in **"Appendix 1- Fraud and Corruption**" attached to the Form of Tender.

Name of the tenderer: *[*insert complete name of the tenderer*]

Name of the person duly authorized to sign the Tender on behalf of the tenderer: ** [*insert complete name of person duly authorized to sign the Tender*]

Title of the person signing the Tender: *[insert complete title of the person signing the Tender]*

Signature of the person named above: [*insert signature of person whose name and capacity are shown*

above] **Date signed** [*insert date of signing*] **day of** [*insert month*], [*insert year*]

*****: In the case of the Tender submitted by a Joint Venture specify the name of the Joint Venture as tenderer.

**: Person signing the Tender shall have the power of attorney given by the tenderer. The power of attorney shall be attached with the Tender Schedules.

TENDERER'S ELIGIBILITY - CONFIDENTIAL BUSINESS QUESTIONNAIRE

Instruction to Tenderer

Tender is instructed to complete the particulars required in this Form, *one form for each entity if Tender is a JV.* Tenderer is further reminded that it is an offence to give false information on this Form.

a) Tenderer's details

	ITEM	DESCRIPTION
1	Name of the Procuring Entity	
2	Reference Number of the Tender	
3	Date and Time of Tender Opening	
4	Name of the Tenderer	
5	Full Address and Contact Details of the Tenderer.	1. Country 2. City 3. Location 4. Building 5. Floor 6. Postal Address 7. Name and email of contact person.
6	Current Trade License Registration Number and Expiring date	
7	Name, country and full address (*postal and physical addresses, email, and telephone number*) of Registering Body/Agency	
8	Description of Nature of Business	
9	Maximum value of business which the Tenderer handles.	
10	State if Tenders Company is listed in stock exchange, give name and full address (*postal and physical addresses, email, and telephone number*) of state which stock exchange	

General and Specific Details

b) Sole Proprietor, provide the following details.

Name in full_____ Age_____

Nationality_____ Country of Origin_____

Citizenship _____

c) Partnership, provide the following details.

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

d) Registered Company, provide the following details.

I) Private or public Company.....

ii) State the nominal and issued capital of the Company: -

Nominal Kenya Shillings (Equivalent).....

Issued Kenya Shillings (Equivalent).....

iii) Give details of Directors as follows.

	Names of Director	Nationality	Citizenship	% Shares owned
1				
2				
3				

e) DISCLOSURE OF INTEREST - Interest of the Firm in the Procuring Entity.

i) Are there any person/persons in…… (*Name of Procuring Entity)* who has/have an interest or relationship in this firm? Yes/No……

If yes, provide details as follows.

	Names of Person	Designation in the Procuring Entity	Interest or Relationship with Tenderer
1			
2			
3			

ii) Conflict of interest disclosure

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
1	Tenderer is directly or indirectly controls, is controlled by or is under common control with another tenderer.		
2	Tenderer receives or has received any direct or indirect subsidy from another tenderer.		
3	Tenderer has the same legal representative as another tenderer		
4	Tender has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of the Procuring Entity regarding this tendering process.		
5	Any of the Tenderer's affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender.		
6	Tenderer would be providing goods, works, non-consulting services or consulting services during implementation of the contract specified in this Tender Document.		
7	Tenderer has a close business or family relationship with a professional staff of the Procuring Entity who are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract.		
8	Tenderer has a close business or family relationship with		

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
	a professional staff of the Procuring Entity who would be involved in the implementation or supervision of the such Contract.		
9	Has the conflict stemming from such relationship stated in item 7 and 8 above been resolved in a manner acceptable to the Procuring Entity throughout the tendering process and execution of the Contract.		

f) Certification

On behalf of the Tenderer, I certify that the information given above is complete, current and accurate as at the date of submission.

Full Name_____

Title or Designation_____

_____ _____

(Signature) *(Date)*

CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying Letter of Tender to the_____ *[Name of Procuring Entity]* for: _____ *[Name and number of tender]* in response to the request for tenders made by: _____ *[Name of Tenderer]* do hereby make the following statements that I certify to be true and complete in every respect:

I certify, on behalf of _____ [Name of Tenderer] that:

1. I have read and I understand the contents of this Certificate;

2. I understand that the Tender will be disqualified if this Certificate is found not to be true and complete in every respect;

3. I am the authorized representative of the Tenderer with authority to sign this Certificate, and to submit the Tender on behalf of the Tenderer;

4. For the purposes of this Certificate and the Tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
   a) Has been requested to submit a Tender in response to this request for tenders;
   b) could potentially submit a tender in response to this request for tenders, based on their qualifications, abilities or experience;

5. The Tenderer discloses that [check one of the following, as applicable]:
   a) The Tenderer has arrived at the Tender independently from, and without consultation, communication, agreement or arrangement with, any competitor;
   b) The Tenderer has entered into consultations, communications, agreements or arrangements with one or more competitors regarding this request for tenders, and the Tenderer discloses, in the attached document(s), complete details thereof, including the names of the competitors and the nature of, and reasons for, such consultations, communications, agreements or arrangements;

6. In particular, without limiting the generality of paragraphs (5) (a) or (5) (b) above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
   a) prices;
   b) methods, factors or formulas used to calculate prices;
   c) the intention or decision to submit, or not to submit, a tender; or
   d) the submission of a tender which does not meet the specifications of the request for Tenders; except as specifically disclosed pursuant to paragraph (5) (b) above;

7. In addition, there has been no consultation, communication, agreement or arrangement with any competitor regarding the quality, quantity, specifications or delivery particulars of the works or services to which this request for tenders relates, except as specifically authorized by the procuring authority or as specifically disclosed pursuant to paragraph (5) (b) above;

8. The terms of the Tender have not been, and will not be, knowingly disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening, or of the awarding of the Contract, whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph (5) (b) above.

Name_____
Title_____
Date_____

_____
[Name, title and signature of authorized agent of Tenderer and Date]

SELF-DECLARATION FORMS

FORM SD1

SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENT AND ASSET DISPOSAL ACT 2015.

I, ……., of Post Office Box …….……. being a resident of …….. in the Republic of ……. do hereby make a statement as follows: -

1. THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of ……...…….. *(insert name of the Company)* who is a Bidder in respect of **Tender No……...**for…….. (insert tender title/description) for……. *(insert name of the Procuring entity)* and duly authorized and competent to make this statement.

2. THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.

3. THAT what is deponed to here in above is true to the best of my knowledge, information and belief.

…… …… ……
(Title) (Signature) (Date)

Bidder's Official Stamp

FORM SD2

SELF DECLARATION THAT THE PERSON/TENDERER WILL NOT ENGAGE IN ANY CORRUPT OR FRAUDULENT PRACTICE.

I, ……..……. of P. O. Box ……. being a resident of …….. in the Republic of ……. do hereby make a statement as follows: -

1. THAT I am the Chief Executive/Managing Director/Principal Officer/Director of…….....
…… *(insert name of the Company)* who is a Bidder in respect of **Tender No. ……...** for …….. *(insert tender title/description)* for …… *(insert name of the Procuring entity)* and duly authorized and competent to make this statement.

2. THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and/or employees and/or agents of……... *(insert name of the Procuring entity)* which is the procuring entity.

3. THAT the aforesaid Bidder, its servants and/or agents /subcontractors have not offered any inducement to any member of the Board, Management, Staff and/or employees and/or agents of……... *(name of the procuring entity).*

4. THAT the aforesaid Bidder will not engage /has not engaged in any corrosive practice with other bidders participating in the subject tender.

5. THAT what is deponed to here in above is true to the best of my knowledge information and belief.

…… …… ……
(Title) (Signature) (Date)

Bidder's Official Stamp

DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I……..……. (person) on behalf of ***(Name of the Business/ Company/Firm***) …….. declare that I have read and fully understood the contents of the Public Procurement & Asset Disposal Act, 2015, Regulations and the Code of Ethics for persons participating in Public Procurement and Asset Disposal Activities in Kenya and my responsibilities under the Code.

I do hereby commit to abide by the provisions of the Code of Ethics for persons participating in Public Procurement and Asset Disposal.

Name of Authorized signatory…….……..

Sign…….……

Position…….……

Office address…….…. Telephone…….

E-mail…….……

Name of the Firm/Company…….……

Date…….……

(Company Seal/ Rubber Stamp where applicable)

Witness

Name…….……

Sign…….……

Date…….…….....

APPENDIX 1- FRAUD AND CORRUPTION

(Appendix 1 shall not be modified)

1. Purpose

1.1 The Government of Kenya's Anti-Corruption and Economic Crime laws and their sanction's policies and procedures, Public Procurement and Asset Disposal Act *(no. 33 of 2015)* and its Regulation, and any other Kenya's Acts or Regulations related to Fraud and Corruption, and similar offences, shall apply with respect to Public Procurement Processes and Contracts that are governed by the laws of Kenya.

2. Requirements

2.1 The Government of Kenya requires that all parties including Procuring Entities, Tenderers, (applicants/proposers), Consultants, Contractors and Suppliers; any Sub-contractors, Sub-consultants, Service providers or Suppliers; any Agents (whether declared or not); and any of their Personnel, involved and engaged in procurement under Kenya's Laws and Regulation, observe the highest standard of ethics during the procurement process, selection and contract execution of all contracts, and refrain from Fraud and Corruption and fully comply with Kenya's laws and Regulations as per paragraphs 1.1 above.

2.2 Kenya's public procurement and asset disposal act *(no. 33 of 2015)* under Section 66 describes rules to be followed and actions to be taken in dealing with Corrupt, Coercive, Obstructive, Collusive or Fraudulent practices, and Conflicts of Interest in procurement including consequences for offences committed. A few of the provisions noted below highlight Kenya's policy of no tolerance for such practices and behavior:

1. A person to whom this Act applies shall not be involved in any corrupt, coercive, obstructive, collusive or fraudulent practice; or conflicts of interest in any procurement or asset disposal proceeding;
2. A person referred to under subsection (1) who contravenes the provisions of that sub-section commits an offence;
3. Without limiting the generality of the subsection (1) and(2), the person shall be—
   a) disqualified from entering into a contract for a procurement or asset disposal proceeding; or
   b) if a contract has already been entered into with the person, the contract shall be voidable;
4. The voiding of a contract by the procuring entity under subsection (7) does not limit any legal remedy the procuring entity may have;
5. An employee or agent of the procuring entity or a member of the Board or committee of the procuring entity who has a conflict of interest with respect to a procurement—
   a) Shall not take part in the procurement proceedings;
   b) shall not, after a procurement contract has been entered into, take part in any decision relating to the procurement or contract; and
   c) shall not be a subcontractor for the tenderer to whom was awarded contract, or a member of the group of tenderers to whom the contract was awarded, but the subcontractor appointed shall meet all the requirements of this Act.

7 An employee, agent or member described in subsection (1) who refrains from doing anything prohibited under that subsection, but for that subsection, would have been within his or her duties shall disclose the conflict of interest to the procuring entity;

8 If a person contravenes subsection (1) with respect to a conflict of interest described in subsection (5) (a) and the contract is awarded to the person or his relative or to another person in whom one of them had a direct or indirect pecuniary interest, the contract shall be terminated and all costs incurred by the public entity shall be made good by the awarding officer. Etc.

2.3 In compliance with Kenya's laws, regulations and policies mentioned above, the Procuring Entity:

a) Defines broadly, for the purposes of the above provisions, the terms set forth below as follows:
   i) "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;

(ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;

iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;

iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;

v) "obstructive practice" is:

· Deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation by Public Procurement Regulatory Authority (PPRA) or any other appropriate authority appointed by Government of Kenya into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or

· Acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3 e. below.

b) Defines more specifically, in accordance with the above procurement Act provisions set forth for fraudulent and collusive practices as follows:

"fraudulent practice" includes a misrepresentation of fact in order to influence a procurement or disposal process or the exercise of a contract to the detriment of the procuring entity or the tenderer or the contractor, and includes collusive practices amongst tenderers prior to or after tender submission designed to establish tender prices at artificial non-competitive levels and to deprive the procuring entity of the benefits of free and open competition.

c) Rejects a proposal for award[1] of a contract if PPRA determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;

d) Pursuant to the Kenya's above stated Acts and Regulations, may sanction or recommend to appropriate authority (ies) for sanctioning and debarment of a firm or individual, as applicable under the Acts and Regulations;

e) Requires that a clause be included in Tender documents and Request for Proposal documents requiring (i) Tenderers (applicants/proposers), Consultants, Contractors, and Suppliers, and their Sub-contractors, Sub- consultants, Service providers, Suppliers, Agents personnel, permit the PPRA or any other appropriate authority appointed by Government of Kenya to inspect[2] all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the PPRA or any other appropriate authority appointed by Government of Kenya; and

f) Pursuant to Section 62 of the above Act, requires Applicants/Tenderers to submit along with their Applications/Tenders/Proposals a "Self-Declaration Form" as included in the procurement document declaring that they and all parties involved in the procurement process and contract execution have not engaged/will not engage in any corrupt or fraudulent practices.

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[1] *For the avoidance of doubt, a party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in A consultancy, and tendering, either directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.*

[2] *Inspections in this context usually are investigative (i.e., forensic) in nature. They involve fact-finding activities undertaken by the Investigating Authority or persons appointed by the Procuring Entity to address specific matters related to investigations/audits, such as evaluating the veracity of an allegation of possible Fraud and Corruption, through the appropriate mechanisms. Such activity includes but is not limited to: accessing and examining a firm's or individual's financial records and information, and making copies thereof as relevant; accessing and examining any other documents, data and information (whether in hard copy or electronic format) deemed relevant for the investigation/audit, and making copies there of as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.*

Tenderer Information Form

[The tenderer shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

Date: ..... *[insert date (as day, month and year) of Tender submission*]

Tender Name and Identification: ..... [*insert identification*

1. Tenderer's Name *[insert Tenderer's legal name]*
2. In case of JV, legal name of each member: *[insert legal name of each member in JV]*
3. Tenderer's actual or intended country of registration: *[insert actual or intended country of registration]*
4. Tenderer's year of registration: *[insert Tenderer's year of registration]*
5. Tenderer's Address in country of registration: *[insert Tenderer's legal address in country of registration]*
6. Tenderer's Authorized Representative Information Name: *[insert Authorized Representative's name]* Address: *[insert Authorized Representative's Address]* Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]* Email Address: *[insert Authorized Representative's email address]*
7. Attached are copies of original documents of *[check the box(es) of the attached original documents]* ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or documents of registration of the legal entity named above, in accordance with ITT 3.1. ☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.1. ☐ Tax Obligations for Kenyan Tenderers, attach copy of current tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority in accordance with ITT 4.14. ☐ In case of state-owned enterprise or institution, in accordance with ITT 3.8 documents establishing: (i) Legal and financial autonomy (ii) Operation under commercial law 1. Establishing that the tenderer is not under the supervision of the Procuring Entity 2. Included are the organizational chart and a list of Board of Directors.

Tenderer's JV Members Information Form

[The tenderer shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the tenderer and for each member of a Joint Venture]].

Date: *[insert date (as day, month and year) of Tender submission*]

Tender Name and Identification: [*insert identification* Alternative No.: *[insert identification No if this is a Tender for an alternative]*

Page_____of_____pages

1. Tenderer's Name: *[insert Tenderer's legal name]*
2. Tenderer's JV Member's name: *[insert JV's Member legal name]*
3. Tenderer's JV Member's country of registration: *[insert JV's Member country of registration]*
4. Tenderer's JV Member's year of registration: *[insert JV's Member year of registration]*
5. Tenderer's JV Member's legal address in country of registration: *[insert JV's Member legal address in country of registration]*
6. Tenderer's JV Member's authorized representative information Name: *[insert name of JV's Member authorized representative]* Address: *[insert address of JV's Member authorized representative]* Telephone/Fax numbers: *[insert telephone/fax numbers of JV's Member authorized representative]* Email Address: *[insert email address of JV's Member authorized representative]*
7. Attached are copies of original documents of *[check the box(es) of the attached original documents]* ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITT 3.1 ☐ Tax Obligations for Kenyan Tenderers, attach copy of current tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority in accordance with ITT 3.14. ☐ In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of the Procuring Entity, in accordance with ITT 3.8. 8. Included are the organizational chart and a list of Board of Directors,

LIST OF LEASE ITEMS AND PRICES

[The tenderer shall fill in this Price Schedule in accordance and insert in Form of Tender as instructed. The list of line items in Columns 1 and 2 of the Price Schedules shall coincide with the List of Lease Items and Related Services specified by the Procuring Entity in the Schedule of Requirements.]

	1	2	3	4	4	5	6
Lot No.	**Lease Item N°**	**Description of Lease Item and Related Services.**	**Quantity and physical unit**	**Location of Use**	**Duration of Lease (in Months)**	**Unit Price per Month (ksh)**	**Total price for whole lease period (ksh)**
		Machine/Equipment	*One Unit*	*Any public Health Facility in the Republic of Kenya wherever situated*	*84 Months*	*[to be completed by Tenderer]*	*[to be completed by Tenderer]*
	No 1						
	No 2						
	No 3						
	No 4						
	No 4						
Total Price for the Lot							

Name of Tender_____

Signed by the Tenderer_____

Dated_____

16. FORM OF TENDER SECURITY-[Option 1–Demand Bank Guarantee]

Beneficiary: _____

Request forTenders No: _____

Date: _____

TENDER GUARANTEE No.: _____

Guarantor: _____

1. We have been informed that _____(here inafter called "the Applicant") has submitted or will submit to the Beneficiary its Tender (here inafter called" the Tender") for the execution of _____ under Request for Tenders No. _____(“the ITT”).

2. Furthermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender guarantee.

3. At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____(_____) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:

(a) has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Letter of Tender (“the Tender Validity Period”), or any extension thereto provided by the Applicant; or

b) having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance.

4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) thirty days after the end of the Tender Validity Period.

5. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

_____

[signature(s)]

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

FORMAT OF TENDER SECURITY [Option 2–Insurance Guarantee]

TENDER GUARANTEE No.: _____

1. Whereas …… [*Name of the tenderer]* (hereinafter called "the tenderer") has submitted its tender dated …… [*Date of submission of tender]* for the …… *[Name and/or description of the tender]* (hereinafter called "the Tender") for the execution of under Request for Tenders No._____ ("the ITT").

2. KNOW ALL PEOPLE by these presents that WE …… of …… [**Name of Insurance Company**] having our registered office at …… (hereinafter called "the Guarantor"), are bound unto …….. [*Name of Procuring Entity*] (hereinafter called "the Procuring Entity") in the sum of …… (Currency and guarantee amount) for which payment well and truly to be made to the said Procuring Entity, the Guarantor binds itself, its successors and assigns, jointly and severally, firmly by these presents.

   Sealed with the Common Seal of the said Guarantor this ___day of _____ 20 __.

3. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Applicant:

   a) has withdrawn its Tender during the period of Tender validity set forth in the Principal's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Principal; or

   b) having been notified of the acceptance of its Tender by the Procuring Entity during the Tender Validity Period or any extension thereto provided by the Principal; (i) failed to execute the Contract agreement; or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to tenderers ("ITT") of the Procuring Entity's Tendering document.

   then the guarantee undertakes to immediately pay to the Procuring Entity up to the above amount upon receipt of the Procuring Entity's first written demand, without the Procuring Entity having to substantiate its demand, provided that in its demand the Procuring Entity shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii)twenty-eight days after the end of the Tender Validity Period.

5. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above on or before that date.

_____	_____
[Date]	*[Signature of the Guarantor]*
_____	_____
[Witness]	*[Seal]*

Note: All italicized text is for use in preparing this form and shall be deleted from the final product.

TENDER-SECURING DECLARATION FORM {r 46 and 155(2)}

[The Bidder shall complete this Form in accordance with the instructions indicated]

Date: .....*[insert date (as day, month and year) of Tender Submission]*

Tender No.: ..... *[insert number of tendering process]*

To: .....*[insert complete name of Purchaser]*

I/We, the undersigned, declare that:

1. I/We understand that, according to your conditions, bids must be supported by a Tender-Securing Declaration.

2. I/We accept that I/we will automatically be suspended from being eligible for tendering in any contract with the Purchaser for the period of time of.....*[insert number of months or years]* starting on [insert date], if we are in breach of our obligation(s) under the bid conditions, because we:- (a) have withdrawn our tender during the period of tender validity specified by us in the Tendering Data Sheet; or (b) having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or(ii)fail or refuse to furnish the Performance Security, in accordance with the instructions to tenders.

3. I/We understand that this Tender Securing Declaration shall expire if we are not the successful Tenderer(s), upon the earlier of:

   a) Our receipt of a copy of your notification of the name of the successful Tenderer; or

   b) Thirty days after the expiration of our Tender.

4. I/We understand that if I am/we are/in a Joint Venture, the Tender Securing Declaration must be in the name of the Joint Venture that submits the bid, and the Joint Venture has not been legally constituted at the time of bidding, the Tender Securing Declaration shall be in the names of all future partners as named in the letter of intent.

Signed:……..……..

Capacity / title (director or partner or sole proprietor, etc.) ……..…….

Name: …….

Duly authorized to sign the bid for and on behalf of: .....*[insert complete name of Tenderer]*

Dated on ……. day of ……., ……. *[Insert date of signing]*

Seal or stamp

***[Note:** In case of a Joint Venture, the Tender-Securing Declaration must be in the name of all members to the Joint Venture that submits the Tender.]*

OWNER'S AUTHORIZATION

[The tenderer shall require the Owner to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Owner and should be signed by a person with the proper authority to sign documents that are binding on the Owner. The tenderer shall include it in its Tender, if so indicated in the ***TDS.****]*

Date: .....*[insert date (as day, month and year) of Tender submission]*

ITT No.: .....*[insert number of ITT process]*

Alternative No.: .....*[insert identification No if this is a Tender for an alternative]*

To: .....*[insert complete name of Procuring*

Entity] WHEREAS

We.....*[insert complete name of Manufacturer],* who are official manufacturers of.....*[insert type of Lease Items manufactured],* having factories at.....*[insert full address of Manufacturer's factories],* do hereby authorize.....*[insert complete name of tenderer]* to submit a Tender the purpose of which is to provide the following Lease Items, manufactured by us *[insert name and or brief description of the Lease Items],* and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Lease Items offered by the above firm.

Signed: .....*[insert signature(s) of authorized representative(s) of the Owner]*

Name: .....*[insert complete name(s) of authorized representative(s) of the Owner]*

Title: ..... *[insert title]*

Dated on_____day of_____,_____*[insert date of signing]*

PART 2 - LEASE REQUIREMENTS

SECTION VI - SCHEDULE OF REQUIREMENTS

NOTES FOR PREPARING THE SCHEDULE OF REQUIREMENTS

The Schedule of Requirements shall be included in the Tendering document by the Procuring Entity, and shall cover, at a minimum, a description of the Lease Items and services to be supplied and the delivery schedule.

The objective of the Schedule of Requirements is to provide sufficient in formation to enable tenderers to prepare their Tenders efficiently and accurately, in particular, the Price Schedule, for which a form is provided in Section IV. In addition, the Schedule of Requirements, together with the Price Schedule, should serve as a basis in the event of quantity variation at the time of award of contract pursuant to ITT 42.1.

The date or period for lease should be carefully specified, considering (a) the implications of lease terms stipulated in the Instructions to tenderers; (b) the date prescribed here in from which the Procuring Entity's payment obligations start (i.e., notice of award, contract signature, opening or confirmation of the letter of credit, etc.).

TERMS OF REFERENCE

INTRODUCTION

The purpose of this tender is to invite proposals for leasing medical equipment, encompassing supply, installation, maintenance, and commissioning.

The goal is to guarantee the optimal performance, reliability, and safety of the medical equipment utilized in our public facilities.

The initial agreement will include leasing and maintenance for a duration of 7 years. The agreement may be extended upon mutual agreement, subject to satisfactory performance evaluation.

SERVICE PROVIDER OBLIGATIONS

a) The selected service provider will be responsible for supplying, installing, commissioning, and maintaining the medical equipment as specified in the tender.

b) The successful bidder will provide comprehensive maintenance services, including preventive maintenance, breakdown support, calibration, and documentation throughout the 7-year agreement period.

c) The service provider should ensure timely availability of spare parts and necessary technical support for uninterrupted equipment operation.

d) Detailed documentation and reports on maintenance activities, equipment performance, and any incidents must be provided regularly.

PROCURING ENTITY/CLIENT OBLIGATIONS

a) The clients shall provide suitable premises and necessary utilities for the installation and operation of the medical equipment.

b) The clients shall cooperate with the service provider, providing accurate and timely information regarding equipment issues and maintenance requirements.

c) The clients shall promptly report any equipment issues or breakdowns to the service provider using the agreed communication channels.

d) The clients shall ensure that their staff follows the operating instructions and safety guidelines provided by the service provider.

e) The clients shall facilitate access to the equipment for scheduled maintenance, repairs, and inspections as required.

SCOPE OF SERVICES

Supply, Installation, and Commissioning:

- Procurement and supply of specified medical equipment.
- Installation and commissioning of equipment at designated healthcare facilities.
- Verification of equipment functionality and performance after installation.

Planned Preventive Maintenance (PPM): (applicable to 7 years)

- Scheduled inspections and maintenance to prevent equipment failures.
- Calibration and adjustment of equipment to ensure accurate performance.
- Cleaning, lubrication, and firmware/software updates as required.

Corrective Maintenance (CM): (applicable to 7 years)

- Prompt troubleshooting, diagnosis, and repair of equipment malfunctions.
- Replacement of faulty components and parts to restore equipment functionality.
- Testing and validation of equipment after repairs.

Documentation and Reporting:

- Maintenance of comprehensive records documenting all maintenance activities, repairs, and replacements.
- Provision of regular reports on equipment status, performance, and maintenance history.

WORK SCHEDULE REQUIREMENTS

Phase	Activity	Objective	Timeline
1. Preparation and Planning	Project Kickoff Meeting	Align on scope, timelines, and deliverables	Week 1
	Site Assessment	Evaluate facilities for installation readiness	Weeks 2-3

	Procurement Planning	Finalize medical equipment and suppliers	Week 4
2. Training and Capacity Building	Training Program Development	Develop training modules for equipment use and maintenance	Weeks 5-6
	Training Delivery	Train MOH staff on equipment operation and basic maintenance	Weeks 7-10
3. Supply, Installation, and Commissioning	Procurement and Supply of Equipment	Deliver equipment to healthcare facilities	Weeks 11-14
	Installation and Commissioning	Install and test equipment	Weeks 15-18
	Verification of Functionality	Ensure equipment works as expected	Week 19
4. Maintenance Services (7 Years)	Planned Preventive Maintenance (PPM)	Regular inspections, calibration, and updates	Ongoing for 7 years
	Corrective Maintenance (CM)	Rapid response to and repair of equipment malfunctions	Ongoing for 7 years
5. Documentation and Reporting	Maintenance Records	Document all maintenance activities	Ongoing
	Regular Reporting	Provide reports on equipment status and maintenance history	Quarterly

Lotting

Lot	Category	Lease
Lot 1	Accident & Emergency	Lease
Lot 2	ICU	Lease
Lot 3	IPD	Lease
Lot 4	Assisted Technology	Lease
Lot 5	Pulmonology	Lease
Lot 6	Endoscopy	Lease
Lot 7	Mortuary	Lease
Lot 8	Diagnostics Imaging Xray	Lease
Lot 9	Diagnostics Imaging Sonography	Lease
Lot 10	Diagnostics Imaging Mammogram	Lease
Lot 11	Diagnostics Imaging CT	Lease

Lot 12	Diagnostics Imaging MRI	Lease
Lot 13	Radiation Oncology	Lease
Lot 14	Nuclear Medicine	Lease
Lot 15	Cardiology	Lease
Lot 16	General Theatre	Lease
Lot 17	Medical Gases	Lease
Lot 18	CSSD	Lease

List of Itemized Lots

LOT	Category	Lease Period
Lot 1	Accident & Emergency	Lease
1	Patient Stretchers/Side Rails	7 years
2	Crash Cart	7 years
3	Vital signs monitor	7 years
4	Defibrillator	7 years
5	Mid End Modular Patient Monitor	7 years
	Central Monitoring Workstation (Set Based on The Total Number of Beds To Be Installed)	7 years
6	Central Monitoring Unit (Hardware)	7 years
7	Transport Monitor	7 years
8	Transport Ventilator with Adult and Paediatric Modes with Niv	7 years
Lot 2	ICU	Lease
1	Baby Incubator	7 years
2	Feeding Pump	7 years
3	Pneumatic Pumps	7 years
4	Infusion Pump	7 years
5	Syringe Pump	7 years
6	High Flow Nasal Cannula	7 years
7	Neonatal Cpap Machine	7 years
8	Respirator / Ventilator	7 years
9	Patient Bed (5 Functions)	7 years
10	Ventilator - Invasive Adult	7 years
11	Ventilator - Invasive Neonatal	7 years
12	Ventilator - Transport Portable	7 years
13	Ventilator: Non-Invasive with BIPAP	7 years
Lot 3	IPD	Lease
1	Dressing Trolley	7 years
2	Patient Bed (3 Functions)	7 years
3	Patient Bed (Manual Bed)	7 years
4	Bedside Cabinet Trolley	7 years
5	Baby Cot	7 years
Lot 4	Assistive Technology	Lease
1	Pediatric multifunctional standing frame	7 years
2	Adult Standing frame	7 years
3	Tilt board for physical therapy	7 years
4	Combined Ultrasound And Electrical Stimulation	7 years
5	Portable body com- position analyzer	7 years
6	Heavy Duty Multigym	7 years
7	Static recumbency bicycle	7 years

8	Mechanical traction kit	7 years
9	Rehabilitation suspension sling	7 years
10	Rehabilitation Electric Treadmill apparatus	7 years
11	Pelvic chair for incon- tience therapy	7 years
12	Shock wave therapy	7 years
13	Laser therapy for rehabilitation	7 years
14	3D printing machines	7 years
Lot 5	Pulmonology	
1	Spirometry	7 years
Lot 6	Endoscopy	Lease
1	Endoscopic Tower with instruments	7 years
Lot 7	Mortuary	Lease
1	Autopsy Table	7 years
2	Body Lift And Transfer System	7 years
3	Cadaver Storage Refrigerators	7 years
4	Embalming Workstation	7 years
5	Morgue Ventilation System:	7 years
6	Mortuary Trolley	7 years
7	Autopsy Weighing Machine – Organ	7 years
Lot 8	Diagnostics Imaging Xray	Lease
1	Fixed X- Ray Ceiling Machine DR	7 years
2	Mobile X –Ray Machine DR	7 years
3	C -Arm Machine	7 years
Lot 9	Diagnostics Imaging Sonography	Lease
1	Ultrasound	7 years
Lot 10	Diagnostics Imaging Mammogram	Lease
1	Digital Mammogram	7 years
Lot 11	Diagnostics Imaging CT	Lease
1	CT 128 slices	7 years
Lot 12	Diagnostics Imaging MRI	Lease
1	1.5 Tesla	7 years
2	MRI COMPATIBLE ANESTHETIC MACHINE WITH VENTILATOR AND MONITOR	7 years
3	MRI COMPATIBLE INJECTOR	7 years
4	MRI COMPATIBLE SYRINGE PUMPS	7 years
Lot 13	Radiation Oncology	Lease
1	Brachytherapy Table	7 years
2	Brachytherapy Unit	7 years
3	Multiple Energy Linac (High Energy Linear Accelerator)	7 years
4	Radiotherapy Treatment Planning System	7 years
5	Radiotherapy/Ct Simulator	7 years
Lot 14	Nuclear Medicine	Lease
1	Immobilization Devices	7 years
2	Lead Aprons And Radiation Attenuating Gloves	7 years
3	Radiation Shielding	7 years
4	Shielded Syringe And Needle Handling Devices	7 years
5	Radioisotope Generators	7 years
6	Radiopharmaceutical Dose Calibrator	7 years
7	Gamma Camera (Spect Scanner	7 years
8	Glove Boxes And Hot Cells	7 years
9	Patient Radiation Monitoring System	7 years
10	Pet-Ct Scanner	7 years
11	Thyroid Uptake System	7 years

Lot 15	Cardiology	Lease
1	ECG (Electrocardiography)	7 years
2	Exercise Stress Test (Treadmill Test)	7 years
3	Holter Monitoring	7 years
Lot 16	General Theatre	Lease
1	Blood/Fluid Warmers	7 years
2	Electrocautery Unit	7 years
3	Electrosurgical Unit	7 years
4	Head Light Source	7 years
5	Operating Theatre Table plus accessories for various specilities	7 years
6	Radiant Warmer	7 years
7	Operating Microscope	7 years
8	Operating Theatre Lamp, Ceiling Mounted (Dual Dome)	7 years
9	Patient Monitor theatre	7 years
10	Anaesthesia Machine	7 years
11	Laparoscopic tower and Instrument Set	7 years
12	Bone drill	7 years
Lot 17	Medical Gases	Lease
1	Medical Air Plant - for 300 Bedded Hospital)	7 years
2	Medical Air Plant - (for 100 Bedded Hospital)	7 years
Lot 18	CSSD	Lease
1	Autoclave 250Litres	7 years
2	21L Ultrasonic washer	7 years

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SCHEDULE OF REQUIREMENTS (FULL DESCRIPTIONS OF LEASE ITEMS, RELATED SERVICES AND PRICES)

Lot No.	Lease Item N°	Description of Lease Item and Related Services.	Quantity and physical unit	Location of Use	Duration of Lease (in Months)	Lease Cost per quarter (3) months (Ksh)	Lease Cost per year (Ksh)
		Machine/Equipment	*As and When Required(AWR)*	*Any public Health Facility within the Republic of Kenya wherever situated.*	*84*	*See Lease Item Specifications and the required support*	
	No 1						
	No 2						
	No 3						
	No 4						
	No 5						
Lease cost per year for the Lot (Ksh)							
Total Lease cost for seven(7) years (Ksh) to be transferred to Form of Tender							

2. Technical Specifications

2.1 The purpose of the Technical Specifications (TS), is to define the technical characteristics of the Lease Items and Related Services required by the Procuring Entity. The Procuring Entity shall prepare the detailed TS consider that:

i) The TS constitute the benchmarks against which the Procuring Entity will verify the technical responsiveness of Tenders and subsequently evaluate the Tenders. Therefore, well-defined TS will facilitate preparation of responsive Tenders by tenderers, as well as examination, evaluation, and comparison of the Tenders by the Procuring Entity.

ii) The TS shall require that all Lease Items and materials to be incorporated in the Lease Items be new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided for otherwise in the contract.

iii) The TS shall make use of best practices. Samples of specifications from successful similar procurements in the same country or sector may provide a sound basis for drafting the TS.

iv) The PPRA encourages the use of metric units.

v) Standardizing technical specifications may be advantageous, depending on the complexity of the Lease Items and the repetitiveness of the type of procurement. Technical Specifications should be broad enough to avoid restrictions on workmanship, materials, and equipment commonly used in manufacturing similar kinds of Lease Items.

vi) Standards for equipment, materials, and workmanship specified in the Tendering document shall not be restrictive. Recognized international standards should be specified as much as possible. Reference to brand names, catalogue numbers, or other details that limit any materials or items to a specific manufacturer should be avoided as far as possible. Where unavoidable, such item description should always be followed by the words “or substantially equivalent.” When other particular standards or codes of practice are referred to in the TS, whether from the Procuring Entity's or from other eligible countries, a statement should follow other authoritative standards that ensure at least a substantially equal quality, then the standards mentioned in the TS will also be acceptable.

vii) Reference to brand names and catalogue numbers should be avoided as far as possible; where unavoidable the words “or at least equivalent” shall always follow such references.

viii) Technical Specifications shall be fully descriptive of the requirements in respect of, but not limited to, the following:

a) Standards of materials and workmanship required for the production and manufacturing of the Lease Items.

b) Any sustainable procurement technical requirements shall be clearly specified.

2.2 The requirements to be specified shall be specific enough to not demand evaluation based on rated criteria/merit point system. Tenderers may be invited to offer Lease Items that exceeds the specified minimum sustainable procurement requirements.

2.3 The TS shall specify all essential technical and performance characteristics and requirements, including guaranteed or acceptable maximum or minimum values, as appropriate. Whenever necessary, the Procuring Entity shall include an additional ad-hoc Tendering form (to be an Attachment to the Letter of Tender), where the tenderer shall provide detailed information on such technical performance characteristics in respect to the corresponding acceptable or guaranteed values.

2.4 When the Procuring Entity requests that the tenderer provides in its Tender a part or all of the Technical Specifications, technical schedules, or other technical information, the Procuring Entity shall specify in detail the nature and extent of the required information and the manner in which it has to be presented by the tenderer in its Tender.

2.5 If a summary of the Technical Specifications (TS) has to be provided, the Procuring Entity shall insert information in the table below. The tenderer shall prepare a similar table to justify compliance with the requirements.

Summary of Technical Specifications - The Lease Items and Related Services shall comply with following Technical Specifications and Standards:

TECHNICAL SPECIFICATIONS

Lot 1: Accident & Emergency		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Patient Stretchers/Side Rails	• Shock absorbing, non-marking wrap around bumper system protects stretcher, and facility walls • 3in High density foam mattress • 24in Patient surface width • Collapsible side rails • 2 IV receptacles • 1 Stainless steel IV pole • Central locking brakes • Steering pedal activator • Integrated oxygen bottle holder • Storage compartment • Retractable 5th wheel steering system • Dual pneumatic assisted backrest (0-80 degrees) • Dual sided foot pedal for height adjustment • Hands free trendelenburg • Patient restraints • O2 holder (requires shelf); holds E-size tank • Heavy-gauge, tubular frame, powder coated white • Continuous heavy rubber bumper • Overall length: 2-2.5M • Overall width(side rails up): 80-85cm • Overall width (side rails down): 60-70cm • High: 85-90cm • Low: 50-65cm • Backrest: 0-80 degrees • Trend/ Reverse trend: +18 degrees • Weight capacity: 300-350kg • Caster size: Approx. 200mm
2	Crash Cart	Cart Construction: Sturdy construction with durable materials, often made of metal, for durability and easy cleaning. Mobility: Equipped with wheels for easy maneuverability, allowing quick access to emergency situations throughout the healthcare facility. Locking Mechanism: Some crash carts have a locking mechanism to secure medications and equipment when not in use and to prevent unauthorized access. Drawers and Compartments: Multiple drawers and compartments for organized storage of medical supplies, medications, and emergency equipment. Color Coding: Color-coded drawers or sections for easy identification of specific emergency categories, such as airway, medications, or equipment. Trays and Bins: Adjustable trays, bins, and dividers to customize storage for various-sized items. Defibrillator Compartment: A designated space or compartment for storing a defibrillator, if applicable. IV Pole:

		Some crash carts may have an integrated IV pole for immediate access during emergencies requiring intravenous interventions. Waste Container: A designated area for disposing of used supplies or sharps safely. Power Strip: An integrated power strip or outlets for connecting and charging essential devices like defibrillators or monitors. Cardiac Board: A cardiac board or space for organizing and displaying cardiac arrest algorithms, drug dosages, and other emergency protocols. Oxygen Tank Holder: A secure holder for an oxygen tank, with quick access for emergency respiratory support. Emergency Medications: Dedicated compartments or drawers for storing emergency medications, clearly labeled and regularly checked for expiration dates. Ergonomic Handles: Ergonomically designed handles for easy maneuvering, especially in high-stress situations. CPR Board: Some carts may include a CPR board for providing a hard surface during cardiopulmonary resuscitation (CPR). Accessories: Clips, hooks, or holders for securing additional equipment such as gloves, masks, or scissors. Emergency Procedures Documentation: A designated space for emergency procedures documentation and patient records.
3.	Vital Signs Monitor	User Interface 1) Quick access menu and hard keys 2) At least 3 waveforms including ECG,SpO2 and RESP 3) Alarm levels -Life-threatening, serious and advisory. 4) Indicator LEDs - power, alarm, charge b) Standard Parameters 1) 3 leads ECG Monitoring 2) Heart Rate 3) SpO2, 4) Pulse rate 5) Non-Invasive Blood Pressure 6) Temperature c) Monitoring Capability - Neonatal, paediatric and adult applications ECG, SpO2, Temp NIBP d) Supplied with -Accessories for all specified parameters -Operator's Instruction Manual (hard and soft copy) -Technical/Service Manual (hard copy) e) Mounting Option - Roller stand with at least 2 lockable castors g) Power Requirements 1) Rated Voltage 240V a.c 50Hz 2) Battery type Rechargeable 3) Battery capacity 120 minutes h) Standards Monitor should comply with Medical Devices Directive (MDD) 93/42 EEC and bear the CE mark. j) The unit must be supplied with one year warranty k) The supplier must provide User training and Biomedical factory training.
4	Defibrillator	. Defibrillator suitable for cardiac care complete with ECG monitoring, SPO2 monitoring and NIBP 2.1 Main unit 3. Performance Specifications 1. The defibrillator should have biphasic technology having energy selection of maximum 320 joules. 2. The machine should have facility for ECG monitoring, defibrillation, external pacing & recorder.

		3. Machine should have more than 8" TFT Screen. 4. Machine must be with sweep rate 25mm/sec, 50mm/sec. 5. Machine should have 24 hour trend storage facility. 6. Should have 5 leads and capable of monitoring 12 lead configuration ECG through ECG Cables, electrodes & paddles. 7. The machine should have defibrillation facility for adult & pediatric patients. 8. Should be CE / FDA marked or equivalent.
5	Mid End Modular Patient Monitor	Modular Monitoring system to be which can be Pendant-Mounted (or) Wall Mounted, with at least 8 Channel measurement capabilities in the core system. Built in power supply. High resolution display (1960 × 1020), is bright and easy to read, even from a distance. At least 15.6 "inch or more TFT touch screen. Analog shape signals and numerical values visualization; Settable limits for the measured variables; Networking capabilities so as to enable central monitoring. Advanced Parameters Modules with their accessories to be quoted as mandatory such as: (ECG -Resp / SpO2 - PR / NIBP / Etco2 - Main Stream technology / Dual -Invasive Pressure - NMT - Neuro Muscular Transmission , Cardiac Output Module and last but not least the TRANSPORT Monitoring Module with 5.5" inch screen size along with Etco2 Monitoring capability) Interface at minimum with Defibrillator configuration, USB, nurse call, and others. Non-invasive parameters at minimum 12 lead ECG, SpO2, non-invasive blood pressure, respiration and dual temperature. Storing of data at least 96 hours for all selected parameters in graph format Ability to print reports Audible and visual alarm setting and display. Alarm (visual and audible) override and temporary silence facility to be included. Blood pressure monitoring range at least 20 to 300 mmHg, minimum gradation 1 mmHg. Heart rate measurement range to be at least 30 to 250 bpm, with accuracy better than ± 5 bpm and minimum gradation 1 bpm. SpO2 measurement range at least 70 to 99 %, with accuracy better than ± 3% and minimum gradation 1% Internal pump for cuff inflation for non-invasive blood pressure measurement, with over pressure protection. Temperature probe to be reusable, external skin contact type. Temperature range at least 30 to 40 deg C, minimum gradation 0.1 deg C. Respiration rate measurement range at least 0 to 100 bpm, minimum gradation 1 bpm. Transfer of data point during patient transfer. Automatic and programmable memory. Storage of at least 24 hours of continuous monitoring data, interface with nursing electronic system, critical decision-making tools and Electronic Health Record (EHR). Trace signal velocity of at least 25mm/sec. Protections of all the functions against defibrillator discharges and electrosurgical units. Pace-maker detection. Facility to measure and display on screen: Alarm limits. All parameters selected for each individual patient may have a minimum of Twelve waves. It should be supplied with all types of calculations - such as Hemodynamic Calculations - Oxygen Calculations - Ventilation Calculation. This should be possible by integrating the Anesthesia Ventilator Data by Hardwire cable with a suitable Link Module, which helps the Anesthesiologist to monitor patient Anesthetized condition in constant manner This Monitor should be also be mandatorily have the Special Functions such as: CAA - Clinical Assist - ST Graphic / Sepsis Sight Analysis / BOA Dash Board /

		EWS - Early warning Sign / GCS - Glaxco Comma Scale / 24 Hoirs ECG Monitoring / Titration Table / External Monitoring mirroring facility Alarms for parameters will be patient specific and based on parameters selected and will be done by end user. Requirement for system to mandate alarm settings. Main frame machine, Components for additional parameters (such as invasive), in add on box modules or software, Screen (touch) Cables (power) and patient cables Battery Pack Transport Monitoring Module to be a mandatary in the above configuration NA Power input to be 220-240 Volt fitted with Nigerian compatible mains plug. Voltage corrector / stabilizer to allow operation at ± 30% of local rated voltage. Resettable overcurrent breaker required on both live and neutral supply lines. An internal battery capable of powering the unit for at least 30 minutes if fully charged UPS Power outlet required during usage Aas per the requeted qty of accessoreis to be supplied ECG cable(s) at least Three sPO2 sensors (all age groups) at least two of each size NIBP cuffs (all sizes), - Disposable at least five (5) of each, re-usable at least two. Temperature probes, Rectal (2 nos) IBP cable, 4 nos Disposable Inv Pressure Transducer, transducer holder (at least five) with connector for both pediatric and adult Cardiac output cable, plus pediatric and adult cardiac output connector set - 2 sets Control syringe Inline temperature probe. (Skin) - 2 nos etCO2 software/model and its accessories - 5 sets CO2 airway adapter (all ages), 5 sets rechargeable batteries - 2 sets NMT and its accessories - 5 sets Thermal Recorder modeul and its Printing paper. - 5 rolls of paper Single Use items to be sterilized with open end sterility date. Specific autoclave / sterilization guidelines to be provided by Manufacturer for cables and components (if not single use) All consumables as explained in accessories should be part of initial quote (at least one of the cables per machine) and for the sensors and cuffs at least five per age group. Single use items must be part of initial package at least 25 (5 per size or population). Others to be listed by Manufacturer / Supplier Spare cables (at least one extra as part of initial bid/offer), Parameter Modules available / replaceable
6	Central Monitoring Workstation (Set Based on The Total Number of Beds To Be Installed)	Central monitoring system complete with 10 bedside monitors for ICU. Should be capable of monitoring the following 128 parameters in adults, neonatal and pediatric.at both bedside and centrally and Should be CE or equivalent • SpO2 • Temperature • Blood pressure both NIBP and IBP • cardiac output • ECG • Respiration • CO2 • Pulse Rate 2. Composition 2.1 Central Monitoring System (Set Based On The Total Number Of Beds To Be Installed) 3. Performance Specifications Central Monitoring System (Set Based On The Total Number Of Beds To Be Installed) 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil

7	Central Monitoring Unit (Hardware)	Central monitoring unit complete with six bedside monitors for ICU. Should be capable of monitoring the following parameters in adults, neonatal and pediatric.at both bedside and centrally It should have quality certification CE or equivalent • SpO2 • Temperature • Blood pressure both NIBP • cardiac output • ECG • Respiration • CO2 •Pulse Rate 129 2. Composition 2.1 Central Monitoring Unit 3. Performance Specifications Central Monitoring Unit 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
8	Transport Monitor	Portable Bedside monitor suitable for use in A&E and ICU. Should be capable of continuous measuring/ monitoring of the following parameters in adults, neonatal and pediatric. Should be CE and FDA marked or equivalent ● SpO2 ● Temperature ● Blood pressure IBP& NIBP ● ECG ● Respiration ● ETCO2 ● Pulse Rate
9	Transport Ventilator with Adult and Paediatric Modes with Niv	1. Performance Specifications 1.1 Main Unit 1.1.1 Ventilation mode: CMV, PEEP, CPAP, PSV, SIMVand NIV Supports, invasive and non-invasive ventilation, Nasal CPAP, ASV 1.1.2 Ventilation rate CMV: up to 100 bpm 1.1.3 Inspiratory flow: 5-80 lpm 1.1.4 Tidal Volume: 2-2000 ml 1.1.5 I/E ratio: 5:1- 1:5 1.1.6 Inspiration time: 0.3-5.0 sec 1.1.7 Trigger sensitivity: Flow/pressure 1.1.8 PEEP/CPAP: 1 to 40 cmH20 1.1.9 Oxygen Concentrations: 21-100% 1.1.10 Alarms: Upper and lower airway pressure, Gas supply pressure, system error, (audio and visible) 1.1.11 Nebulizer: In CMV, SIMV mode 1.1.12 Display: LCD colour screen, Display respiratory parameters 1.1.13 Connectivity: Serial port RS 232, Ethernet, Wi-Fi, etc. 1.1.14 Batter back up: Provided, rechargeable 1.1.15 Back up time: 4 hrs. approximately 1.2 Components 1.2.1 Trolley: Mobile on castors with brakes 1.2.2 Tubing support arm: 1 pc 113 1.2.3 Breathing circuit set (reusable): 1 pc 1.2.4 Bacteria filter: 2 sets 1.2.5 O2 pressure hose: 1pc 1.2.6 Air pressure hose: 1 pc 1.2.7 Cylinder support: 1 pc 1.2.8 Test bag: 1 pc 1.2.9 Laryngeal mask: 1 pc 1.2.10 Air way, 3 type: 1 Set 1.2.11 Humidifier Heated humidifier: 1 pc 1.2.12 Trends: At least 24 hrs. 1.2.13 Medical air supply: Should have a Gas delivery system by soundless inbuilt compressor /external integrated compressor with the unit Should have CE or equivalent 2. Composition 2.1 Transport Ventilator With Adult And Pediatric Modes With Niv 3. Performance Specifications Transport Ventilator With Adult And Pediatric Modes With Niv 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards

		4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
Lot 2: ICU		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Baby Incubator	Product feature ● Air temp servo-controlled by computer ● Various and self-check alarms ● Removable humidity reservoir, easy to clean ● With the transfusion shelf and tray ● RS-232 connector ● Phototherapy unit (option) Electrical requirement ～ 220V 50Hz or ～ 230V 60Hz Power consumption ≤ 450VA Air mode temp. range 25.0℃～ 37.0℃ Skin mode temp. range - 124 Air over temp. range < 38.0℃ Air mode high temp. range - Skin mode high temp. range - High temp. mode alarm - Air mode alarm ±3.0℃ Skin mode alarm - Skin sensor accuracy - Air control accuracy ≤ 0.5℃ Mattress temp. uniformity ≤ 0.8℃ Noise ≤ 55dB(A) 2. Composition 2.1 Baby Incubator 3. Performance Specifications Baby Incubator 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions
2	Feeding Pump	FEEDING VOLUME 1-100ml/h (1ml/h increments) 100-500ml/h (5ml/h increments) FEEDING MODE Continuous PRIMING Automatic & manual priming availability COUNTER Preferably cumulative feeding volume Counters from 0.001L to 99.999L DATA EVENT LOG Feeding history 24-72hrs or 250 Events (more will be preferable) NIGHT MODE Night mode decreases brightness of Screen & the power LED (preferable) KEYPAD LOCK Possibility to lock the keypad to prevent Unintentional key press

		INTENDED USE For external feeding use only compatible to hospital conventional feed. INFORMATION Target volume almost reached battery almost Discharge, start reminder, technical information ALARMS Target volume reached door open, wrong set Installation, downstream occlusion, occlusion, Empty bag/air in line, empty battery, technical Information PUMPING MECHANISM Linear peristaltic pumping system BATTERY Full battery charging time: 5-6 hrs. Battery life minimum of 12-15 hrs. Once fully charged FLUSH Programmable flushing capabilities FREE FLOW PROTECTION Preventing the risk of free flow when door is opened When the set is engaged to ensure the patient Safety and an adequate delivery of nutrition SET LENGTH Adjustable anti free flow clamp positioning • Device must be certified by recognized society for safe use like FDA/ACE/ CE or equivalent
3	Pneumatic Pumps	1.It should be of portable size with handle. 2. It should be FDA or CE approved 3.It should weigh between 3 to 5 kgs. 4. It should have power input of 230 volts, 20-25 watts with power cord of length min. 3 meters. 5. Battery backup should last for minimum 3-4 hour after fully charged. 6.The pressure adjustable range of 40-65 mm Hg. 7.LCD/LED with separate pressure display of both legs numeric & indicating the Inflated Leg. It should have timer sittings from 1to24 hour. 8.Safety Standards: - •Audio and visual Alarms For Leak, For Maximum Pressure: •Automatic shutdown if pressure exceeds the maximum limit.
4	Infusion Pump	1. Should be operated on drip rate Peristaltic finger pump method. 2. Should be compatible with most of the IV set (macro/micro drip sets). 3. Should have the following flow rates. 4. IV Set ml/hr. drops/min • 15 drops/ml 3~450ml/hr. 1~ 100drops/min • 20 drops/ml 3~450ml/hr. 1~100drops/min • 60 drops/ml 1~100ml/hr. 1~100drops/min 5. Should have a flow rate accuracy of ±10% and drip rate accuracy of ±2%. 6. Should have a volume infused display from 0 to 999.9ml. 7. Should have a purge and KVO facility. 8. Should have an audible and visual alarm for occlusion pressure, air alarm, door open, empty, low battery. 9. Should have a LCD display with backlight and graphical display of infusion. 10. Should work with input 240Vac 50 Hz supply. 12. Should be CE or FDA marked or equivalent1. It should be of portable size with handle. 2. It should be FDA or CE approved 3. It should weigh between 3 to 5 kgs. 4. It should have power input of 230 volts, 20-25 watts with power cord of length min. 3 meters. 5. Battery backup should last for minimum 3-4 hour after fully charged. 6. The pressure adjustable range of 40-65 mm Hg. 7. LCD/LED with separate pressure display of both legs numeric & indicating the Inflated Leg. It should have timer sittings from 1to24 hour. 8. Safety Standards: - • Audio and visual Alarms For Leak, For Maximum Pressure: • Automatic shutdown if pressure exceeds the maximum limit
5	Syringe Pump	1. Should be easy to use and nurse friendly. 2. Should have automatic syringe size and model detection 3. System should be front loading 4. Should have large format LCD/TFT display.

		5. Should have a minimum flow rate range from 0.1 – 1200 ml/hr. for 50ml syringe, 0.1 – 100 ml/hr. for 20ml syringe and 0.1 – 60 ml/hr. for 10ml syringe. 6. Syringe range from 20-50/60 ml. 7. Should have a flow rate accuracy of ±2% 8. Should have a bolus rate up to 1000ml/hr. for 50 ml syringe. 9. Should have automatic and manual bolus. 10. Should have at least 3 levels of programmable occlusion pressure. 11. Should have automatic bolus reduction system to avoid accidental bolus delivery after occlusion incident. 12. Should have a rechargeable battery with back up time of minimum 3 hours. 13. System should have a docking station 14. Pump must trigger following alarms with visual indication:- i. Occlusion Pressure Alarm ii. KVO or 3 min pre- alarm iii. Syringe empty and volume infused alarm iv. Internal malfunction and Battery Charge Low Alarm v. Syringe disengaged and incorrectly placed alarm vi. Alarm loudness control. vii. No mains viii. Line disconnected (rapid pressure drop). 15. Should work with input 200 to 240Vac 50 Hz supply. 116 16. Should be CE and FDA marked or equivalent 2. Composition 2.1 Syringe Pump 3. Performance Specifications Syringe Pump 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
6	High Flow Nasal Cannula	High-flow nasal cannula (HFNC) therapy is an oxygen supply system capable of delivering up to 100% humidified and heated oxygen at a flow rate of up to 60 liters per minute 2. Composition 2.1 High Flow Nasal Cannula 3. Performance Specifications High Flow Nasal Cannula 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty

		10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
7	Neonatal Cpap Machine	Performance Specifications 1 Main Unit Potable, mounted on stand with castors 1.1 Performance Continuous supply of air blended with oxygen to new born 1.2 Generator Provided, silent operation 1.3 Output pressure Adjustable by user 1.4 Concentration Adjustable by user 139 1.5 Display large LCD display, of pressure, concentration and breathing 1.6 Control microprocessor based 1.7 Alarm Visible and audio apnea , adjustable by user 1.8 Power supply Internal rechargeable battery charging on, 240V, 50 Hz ac 2 Mounting On mobile stand with castors, two with brakes It should have quality certification CE or equivalent 2. Composition 2.1 Neonatal Cpap Machine 3. Performance Specifications Neonatal Cpap Machine 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
8	Respirator / Ventilator	1. Performance Specifications 1.1 Main Unit 1.1.1 Ventilation mode: CMV, PEEP, CPAP, PSV, SIMVand NIV Supports, invasive and non-invasive ventilation, Nasal CPAP, ASV 1.1.2 Ventilation rate CMV: up to 100 bpm 1.1.3 Inspiratory flow: 5-80 lpm 1.1.4 Tidal Volume: 2-2000 ml 1.1.5 I/E ratio: 5:1- 1:5 1.1.6 Inspiration time: 0.3-5.0 sec 1.1.7 Trigger sensitivity: Flow/pressure 1.1.8 PEEP/CPAP: 1 to 40 cmH20 1.1.9 Oxygen Concentrations: 21-100% 1.1.10 Alarms: Upper and lower airway pressure, Gas supply pressure, system error, (audio and visible) 1.1.11 Nebulizer: In CMV, SIMV mode 1.1.12 Display: LCD colour screen, Display respiratory parameters 1.1.13 Connectivity: Serial port RS 232, Ethernet, Wi-Fi, etc. 1.1.14 Batter back up: Provided, rechargeable 1.1.15 Back up time: 4 hrs. approximately 1.2 Components 1.2.1 Trolley: Mobile on castors with brakes 1.2.2 Tubing support arm: 1 pc 1.2.3 Breathing circuit set (reusable): 1 pc 1.2.4 Bacteria filter: 2 sets 1.2.5 O2 pressure hose: 1pc 1.2.6 Air pressure hose: 1 pc 1.2.7 Cylinder support: 1 pc 1.2.8 Test bag: 1 pc 1.2.9 Laryngeal mask: 1 pc 1.2.10 Air way, 3 type: 1 Set 1.2.11 Humidifier Heated humidifier: 1 pc 1.2.12 Trends: At least 24 hrs.

		1.2.13 Medical air supply: Should have a Gas delivery system by soundless inbuilt compressor /external integrated compressor with the unit Should have CE or equivalent 2. Composition 2.1 Respirator / Ventilator 3. Performance Specifications Respirator / Ventilator 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 145 10.2 Equipment System Nil
9	Patient Bed (5 Functions)	Electrical and Manual operated ICU bed complete with adjustable backrest, knee rest, trendelenberg/ reverse trendelenberg, waterproof mattress and ripple mattress. 1. General Description Electrical and Manual operated ICU bed complete with adjustable backrest, knee rest, trendelenberg/ reverse trendelenberg, and water proof mattress 2. Composition Main Unit 2. Operational Requirements 2.1 The system should be electrically and manually operated and adjustable for heights, trendelenburg etc. It should also be having radiotransluscent top for carrying out X-Ray at the bedside 3. Technical Specifications 3.1 Should have four section mattress base 3.2 Should be able to handle weight of up to 300Kg 3.3 Should have X-Ray translucent back section made up of high pressure laminate. 3.4 Should have X-Ray cassette holder underneath the back section & should allow insertion of X-Ray cassette from either side of the bed. 3.5 Base frame & support frame should be made up of steel for long life & prevention from rusting. 3.6 Should have stepless electrical adjustment for the following :- • Height : 450-840 mm • Back section : 0- 50 degrees • Leg Section : 0-30 degrees 3.7 Should have stepless pneumatic adjustment for Trendelenburg (20-25° approx.), reverse-trendelenburg (10-15° approx.) 3.8 Should have a manual quick release mechanism for back section adjustment during emergency situation 3.9 Should be equipped with four articulated half-length tuck away side rails 3.10 Should be equipped with large castors (diameter 150 mm) with central braking and steering facility. 3.11 Mattress of the Bed should be made up of high density foam with Anti- Microbial agent incorporated into all components that assists in Prohibiting growth of bacteria & fungi and easy to clean. 3.12 Mattress should be fully Radiolucent for ease in performing portable X- Rays. 3.13 Should have bumpers at all four corners and place for fixing accessories 3.14 Dimensions of bed : • Length : 2100 -2290 mm • Width : 850 -1020mm • Mattress Size : appropriate as per bed size 4. System Configuration Accessories, spares and consumables 4.1 I.C.U Bed Mainframe -01 4.2 Bed Ends, detachable : 01 pair 4.3 Articulated half-length tuck away side rails: 04 Nos. 4.4 IV Rods: 01 No. 159 4.5 Mattress 12 cm Thick: 01 No. 5. Environmental factors 5.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) ISO 13485 General Requirements of Safety for Electromagnetic Compatibility. 5.2 The unit shall be capable of being stored continuously in ambient temperature of 15 -50 0C and relative humidity of 20-90% 5.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40 0C and relative humidity of 20-90% 6. Power Supply 6.1 Power input to be 220-240VAC, 50Hz as appropriate fitted with BS plug 6.2 Resettable overcurrent

		breaker shall be fitted for protection 7. Standards, Safety and Training 7.1 Electrical safety conforms to standards for electrical safety IEC-60601 / IS- 13450 7.2 Manufacturer should have ISO certification for quality standards. 7.3 Electric Shock Protection level-Class-B 7.4 Electric current Protection- Class -1 7.5 Certified to be compliant with IEC 60601-2-38 Medical Electrical Equipment part 2-38 Particular requirements for safety of Electrically Operated Hospital Beds Quality Standards 4.1 Manufacturing standards ISO 9001 and 60601, ISO 13485 4.2 Conformity to equivalent standards , IP X4 electrical protection standard
10	Ventilator - Invasive Adult	Smart Ventilation with supportive clinical decision making capabilities. Operated in any mode (invasive) and also non-invasive without having additional machines. Preferred option to have one system which can ventilate pediatrics as well. Critical Care (All populations), Accident and Emergency Respiratory Machine Various mode of respiratory support for those patient population who may experience difficulty in spontaneous respiration, require long term ventilation and those who may require anesthesia and whose breathing is compromised. Hospitals, Day Care Centers, Home Healthcare, Emergency Services. Intensive Care (all populations), Accident and Emergency, Cath Lab, Endoscopy and Minimal Invasive Surgical Suites, Operating Theatres, Recovery Areas and General Wards Simple operation and quick configuration, interface capabilities with major HIS systems, Automatic device check, quality control, ability to configure (automatic) based on patient weight, and ages, Intelligent alarm handling, easy cleaning and disinfection. Adult and Pediatric Ventilation capabilities Should have ability to perform invasive and non-invasive ventilation Various modes and settings Volume Controlled ventilation: VC-CMV VC-SIMV VC-AC Pressure controlled ventilation: PC-CMV PC-BIPAP1 / SIMV+ PC-SIMV PC-AC PC-APRV PC-PSV Support of Spontaneous Breathing: DuoVent APRV / PRVC / PSV - VT SPN-CPAP / HFNC USB interface for patient information/data transfer, inclusive of: Lung monitoring and diagnostics along with Loops of Pr vs Flow – Pr VsVol , Pr – Vs time. Therapy decision trends with breath by breath trends (PEEP, EIP, Vt, Cdyn) Volumetric CO2-Monitoring (VCO2, VTCO2, Slope Phase 3, Vds/VTe) Clinical decision making tools/software (effective weaning, diagnostics, etc.) Battery life of not less than 120 minutes with 1 fully charged battery and 240 minutes with 2 fully charged battery. Touch screen at least 12 inch, Serial interface RS232, USB, and LAN Operate as transport ventilator (with gas, power, and transport supply units) PEEP settings between 0-50mbar. Alarms and Parameter settings (audible and visible).Latest generation tubes with fluoroscopic power of at least 3000 watts and noise reduction features. Nebulization medication administration Suctioning port RR rate setting for adults 0.5 - 98 / minute and pediatric 0.5 - 150 / minute. Inspiratory Flow Adults 2-120 L/min and Pediatrics 2-30L/min. Inspiratory Pressure 1-95mbar.

		Should include software programs (latest) Pressure limitation 2-100mbar Disconnection alarm 0-60 seconds. Automatic switch over from external to internal power. Continuous display of parameters (settings), alarms, trends and graphs. Continuous display of patient information (ID) and patient recording. At least the following: Plateau pressure (Pplat), Positive end-expiratory pressure (PEEP), Peak Inspiratory Pressure (PIP), Mean airway pressure (Pmean), Minimum airway pressure (Pmin). Minute Volume, Tidal Volume, O2 concentration, Respiratory Rate, Plateau pressure (Pplat), Positive end-expiratory pressure (PEEP), Peak Inspiratory Pressure (PIP) Mean airway pressure (Pmean) Minimum airway pressure (Pmin). Minute Volume, Tidal Volume, O2 concentration, Respiratory Rate Interface connectivity, language, patient specific requirement settings. Alarms limits for all displays outline above End-User adopted programs (pre-programming part of system with end-user option to select) Ability to switch between multiple configurations with one touch, and unique for each patients Interface connectivity, language, patient specific requirement settings. Alarms limits for all displays outline above. View Screen size and zoom Ventilator - Turbine based , cart, screen, humidifier, tubing, gas lines, bracket for supplies Mobile with lockable castors and all components on one trolley, with brackets to add additional items such as humidifier, PPE, etc. Integrated System. Power consumption Maximum 300 watts In operational mode 100 W with ventilation and display unit. UPS Electric Power inlet 100V-240V Full system as set out above (Ventilation Unit, Display Unit, Trolley). Reusable Humidifier and tubing. Part of quote with spare parts for major components to be included for at least one year. Initial supplies as outlined in detailed description above Ventilator Tubing systems (single use) - circuits Filters for system Hi-flow nasal oxygen delivery system These must match the actual system whereas the rest consumables will be part of unit specific consumable. Non Invasive ventilation masks Cuffs and leads To be included for at least one year and included in quote. Spare parts as part of offer to be listed, and for components only, by the Manufacturer / Contractor. Complimentary brackets, trolley and initial two sets of accessories (all patient population) Intact and sealed do not require sterile in components but accessories require full sterility with expiry dates. Supply chain related documents (from loading to unloading) required. Open end dates for those applicable Duty, customs and safety clearance to be managed through Contractor Store as per temperature requirement from Manufacturer. Remain in sealed container. Packed as fragile in view of internal components. Handle with Care, Fragile Operating Condition: Capable of operating continuously in ambient temperature of 5ºC to 40ºC and relative humidity of 15% to 80% in ideal circumstances.

		Storage condition: Capable of being stored continuously in ambient temperature of 0ºC to 40ºC and relative humidity of 15% to 90%. System set up upon arrival. Testing and quality control check and sign off. No construction or gas line layout review required Not to exceed 12 weeks post contract approval Local clinical staff to affirm completion of installation On-site training for Biomedical Engineering, and Clinical Staff Information to be provided by manufacturer/supplier, e.g. cleaning, disinfection/sterilization method (for reusable devices). From the date of sign off- both parties, for a minimum of one year for the entire system and modules including screens. Preventive/periodic maintenance requirements to be listed by supplier/contractor. Non-comprehensive with spare part replacement costs to be billed to client after initial period of warranty Minimum Seven years – service support – Application Support and Spare parts support is mandatary The contractor without any additional costs, should supply any updates, available on the market, at the time of supply. USB Interface as per need, link to HIS as per need and per license agreement (some suggest at least once every four years), data analysis software during upgrades, Operating Manuals (for each of the components within the system) Specifications for each of the products and emergency trouble shoot guide Quality Control Program and calibration requirement Training Modules and Certification List of consumables / supplies required List of spare parts and their serial numbers Shipping Documents Manufacturer Compliance Certificates Preventive Maintenance Program and Schedule To be provided by the manufacturer as item specific. To be provided by manufacturer/supplier (typically verified by regional or national regulatory agencies).There is increasing international harmonization, facilitated by the International Medical Device Regulators Forum (see http://www.imdrf.org/) with at least four systems in use: Class A to D (IMDRF/GHTF); Class I, IIa, IIb, III (EU, Australia); Class I, II, III (USA); Class I to IV (Japan, Canada), with low-risk devices in Classes A or I and high-risk devices in Classes D or III (or IV for Japan and Canada). Only FDA or CE approved systems ISO preferred. Environmental impact studies on outcome and risks will be preferred. Related standards for device in relevant regulatory jurisdiction (Kenya)
11	Ventilator - Invasive Neonatal	Technical Specification Physical Characteristics Size 1300mm*440mm*520mm Weight 26kg Screen Size: 8” TFT touch screen Resolution 800 × 600 Caster wheel 4 wheels 4” brakes Brightness: Adjustable Operation Environment Working Temp 5~40°C Humidity 10~95% Power Supply 100-240V~, 50/60Hz±1Hz Battery Type Rechargeable Lithium-ion battery Battery Capacity 2600mAh Battery Recharging Time 10 hours for charging; Battery backup 240min (fully charged new battery, ambient temperature of 25ºC) Trace Waveforms: Pressure-time; Flow histogram: Gas flow Operation Environment Working Temp 5~40°C

		Humidity 10~95% Power Supply 100-240V~, 50/60Hz±1Hz Battery Type Rechargeable Lithium-ion battery Battery Capacity 2600mAh Battery Recharging Time 10 hours for charging; Battery backup 240min (fully charged new battery, ambient temperature of 25ºC) Trace Waveforms: Pressure-time; Flow histogram: Gas flow Interfacing: USB interface DC power interface(12~24V) RJ45 RS232 AC power interface Equal-potential grounding terminal Data storage Log: 2000 groups Trend Graph: 120 hours Trend Table: 120 hours Alarm: User-adjustable High and Low 3-level Limits; Prioritized audible and visual alarm Abdominal respiratory monitoring Monitoring respiratory rate: Available Trigger sensitivity: Adjustable Triggering synchronous ventilation: Available Apnea awaking: Available SpO2 Monitoring Display: Pulse waveform, pulse oxygen saturation Display range: 1~100%, resolution 1% Measurement range and accuracy: Masimo SpO2 Range: 1%~100%, Accuracy: 3% (70%~100%, non-motion state); not defined (others) Nellcor SpO2 Range: 0%~100%, Accuracy: 3% (70%~100%, non-motion state); not defined (others) Preset alarm value and accuracy: Masimo SpO2 upper limit: (lower limit + 1%) ~ 100%; lower limit: 1% ~ (upper limit - 1%); Nellcor SpO2 upper limit: (lower limit + 1%) ~ 100%; lower limit: 0% ~ (upper limit - 1%). Alarm error: ±1% of the set value Pulse Rate (PR) measurement range and accuracy: Masimo SpO2 25bpm~240bpm; ±3bpm (non-motion state) and ±5bpm (motion state) Nellcor SpO2 20bpm~300bpm; ±3bpm (20bpm~250bpm) and not defined (others) Processing time of data and other signals: 8s Features Air oxygen mixer type: Built-in electronic air oxygen mixer Patients: Designed for neonatal Mode: Mechanical, Standby

		Direct set pressure: Available Leakage compensation: Available Built-in oxygen sensor monitoring: Available Oxygen concentration test: Available Leakage test: Available Power on self-test: Available Self-test information graphic indication: Available Lock screen: Available Built-in water cup: Available Ventilator parameter ranges Airway pressure: 1cmH2O~13cmH2O Accuracy: ±0.5cmH2O or ±5% of set value, whichever is the greater. Apnea awaking: 3cmH2O~20cmH2O Accuracy: ±0.5cmH2O or ±5% of set value, whichever is the greater. Apnea interval: OFF, 10s~30s Accuracy: ±1s PEEP: 1cmH2O~13cmH2O Accuracy: ±0.5cmH2O or ±5% of set value, whichever is the greater. Inspiratory pressure: 3cmH2O~20cmH2O Accuracy: ±0.5cmH2O or ±5% of set value, whichever is the greater. Respiratory rate: 1bpm~120bpm Accuracy: ±0.5bpm or ±1% of set value, whichever is the greater. Backup frequency: 1bpm~120bpm Accuracy: ±0.5bpm or ±1% of set value, whichever is the greater. Inspiratory time: 0.1s~15s Accuracy: ±0.005s Flow rate: 0.5L/min~20L/min; 3L/min~25L/min (Manual ventilation) Accuracy: ±0.5 L/min or ±5% of set value, whichever is the greater. Oxygen Sensor Type Electronic flow meter Range 0~100% Accuracy ±2% 100% oxygen signal deviation 100±1% Resolution 1hPa O2 Expected service life 1.5x106 % measurement hours (at 20°C); 0.8x106 % measurement hours (at 40°C) Response time (21% air - 100% oxygen) <15s Linearity Linear 0-100% O2 Gas Supply Pipeline gasses O2, Air Pipeline gas connection NIST Pressure range at inlet 280~600 kPa Auxiliary gas supply Flush oxygen, manual
12	Ventilator - Transport Portable	Clinical Home Ventilator, Respirator, Portable Home Use Ventilator Machine - Respiratory An electrically powered light weight, device that is easily moved/mounted and used to provide long-term alveolar ventilation support for patients who do not require complex critical care ventilation. It typically uses positive pressure to deliver gas to the lungs at normal breathing rates and tidal volumes through an endotracheal (ET) tube, tracheostomy cannula, or mask. It includes a control system and alarms, sometimes with additional features (e.g. humidification).

		Several methods of cycling and ventilation modes may be used. It may be in line and/or internal/external battery-powered and is typically used in the home, in an extended care facility, and/or by emergency medical services or during short term transport. Ventilators designed to provide support to patients who do not require complex critical care ventilators Hospitals, Ambulatory Care Centers, Diagnostic Centers, Home Healthcare, and Clinics All clinical care areas in which short term/transport ventilation is required Dispense a controlled mixture of oxygen and air to the patient. Gives artificial respiratory support as necessary. Fully alarmed with all necessary monitors for continuous operation in home or transport environment. Includes compressor and humidifier, reusable, sterilizable masks and/or connectors. Suitable for all ages and body weights of patients. Provide ports for oxygen cylinder/concentrator. Equipment should be configured to have pressure and flow triggers as default Consist of a flexible breathing circuit, control system, monitors and alarms Microprocessor controlled Time, flow, volume and pressure adjustments with automatic compensation Automatic self test and sensor calibration Automatic leakages compensation Back up ventilation in case of apnoea during spontaneous mode of ventilation Communication input and output ports to receive and transfer data, at least RS-232 in/out connections should be available Should be able to operate with either high- and low-pressure oxygen sources Should be able to operate with central gas supply and with medical gas cylinder sources Type of gasses supported at least: Medical oxygen and Medical Air 8.4" TFT – Touch Screen Colour graphic high contrast display – 800 x 800 resolution Monitor Parameters: Oxygen Concentration Tidal Exhaled Volume Pressure Peaks and Mean Airway Pressure Respiratory Rate PEEP Exhaled Minute Volume Mean Airway Pressure Occlusion Pressure Detection Air and Oxygen Pressure Spontaneous ventilation Leak Percentage Internal Battery charge status Real time flow and pressure curves monitoring and visualization, at least 3 simultaneously Vital Signs The following variables should be controllable by the operator: Tidal Volume up to 1,000mL Pressure (inspiratory) up to 80cm H20 Volume (inspiratory) up to 120L/min Respiratory rate: up to 60 breaths per minutes SIMV respiratory rate: up to 40 breaths per minute CPAP/PEEP up to 20cm H20 Pressure support up to 45cm H20 Fi02 between 21 to 100% Inspiratory and Expiratory times up to at least 2 seconds and 8 seconds respectively I:E Ratio at least from 1:1 to 1:3 Modes of Ventilation selection Volume Controlled Pressure Controlled Pressure Support - APRV – DUOVENT - MODES Synchronized intermittent mandatory ventilation (SIMV) with pressure support

		Assist Control Mode Alarms required: Fi02, minute volume, pressure, PEEP, apnoea, occlusion, high respiration rate, disconnection System alarms required: power failure, gas disconnection, low battery, vent inoperative, self diagnostics If alarm silencing feature is incorporated, it must be temporary and clearly displayed when activated Air and external supplied oxygen mixture ratios fully controllable Inlet gas supply (02) pressure range at least 35 to 65 psi Built in air compressor integral to unit with inlet filter External oxygen supply connection to be secure but easy to fit and release Case to be hard and splashproof Panel settings protected from accidental operation Whole unit to be easily portable by hand Unit stable when mounted Controls and displays to be easily visible from the front of the unit in low light levels Portable Power input to be fitted with Keyan compatible mains plug Maintenance-free rechargeable battery backup operation for a minimum 240 minutes with 1 fully charged battery and 8 hours with Dual fully charged battery in the event of mains power failure Low battery indicator required to alert user when the on-board battery is low Battery to be recharged automatically when connected to mains power supply Voltage corrector/stabilizer UPS to allow operation at around 30% of Keyan rated voltage and one hour operation in the event of mains power failure Resettable overcurrent breaker required on both live and neutral supply lines Mains supply cable to be at least 3m in length Protections against over-voltage and over-current line conditions Compliance with Kenyan Electrical standards and regulations Must be included at no extra cost: Breathing Mask of all sizes /tracheostomy connectors (two sets of each) Filters sufficient for two weeks continuous use External power supply Humidifier (if applicable) 2 oxygen high pressure supply hose 4 reusable adult and pediatric circuits With Spo2 & EtCO2 Monitoring facilities along with Sample lines of Side Stream C02 detectors (at least five) To be managed through Operator. Others to be listed by Manufacturer / Supplier, with serial number and contact details of local supplier Rechargeable batteries with at least the following characteristics: Automatic switch from AC power electric-line mode to battery operating mode and vice-versa Equipment able to operate from AC power source and external battery (12V or 24V) Continuous monitoring working time in battery mode with standard ventilation not less than 5 hours Integrated batteries charger Low battery visual alarm 100% high capacity batteries with recharging time not greater than 6 hours Customs, clearance and safety inspections to be managed by Contractor. As per the import regulations of Kenya Labelling on the primary and secondary packaging under Kenyan regulations Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 - 90% Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% Not to exceed 8 weeks post contract sign off Supplier to perform installation, safety and operation checks before handover. Local clinical staff to affirm completion of installation.

		Certificates to be included at hand over, and Quality checks record to be included as part of hand over. Training and User Manuals in English: Training of users in operation and basic maintenance shall be provided (nursing appointed leads, technicians, assistants, and biomedical engineer). Advanced maintenance tasks required shall be documented and handed over. Troubleshoot guide to be included The unit should be able to be disinfected between patients with approved disinfectant. All other cleaning and sterilization Information to be provided by manufacturer/supplier. One year from the date of installation Specific equipment needed for calibration or testing purposes must be specified. Advanced maintenance tasks required shall be documented, with details of maintenance support from the manufacturer/supplier. Comprehensive At least 7 years after device acquisition. All hardware upgrades to be included free of charge as per life span of equipment. At installation only latest versions should be installed. Operating and service manuals including lists of important spares and accessories - with their part numbers and list of equipment and procedures required for calibration and routine maintenance. Documentation must also show recommended procedures for disposal and any probable hazards to the environment and/or community. Quality and other certificates to be included and all safety inspection and quality reports (testing and calibration) to be included. Quality Control and risk management Programs Class C (GHTF Rule 9-1); Class III (EU, Australia, Japan, Canada), Class II (USA) FDA approval (USA), or CE mark (EU) or UL Compliance to at least the below: IEC 60601-1:2012 Medical electrical equipment - Part 1-general requirements for basic safety and essential performance IEC 60601-1-2000 medical electrical equipment - Part 1-1 general requirement for safety - collateral standard: safety requirements for medical electrical systems IEC 60601-1-2:2007 Medical electrical equipment - Part 1-2 general requirements for basic safety and essential performance - collateral standard: Electromagnetic compatibility - requirements and tests ISO 53561-:2004 Anesthetic and respiratory equipment -- conical connectors -- part 1: cones and sockets ISO 13485:2003 Medical Devices - quality management systems -- requirements for regulatory purposes (Australia, Canada and European Union) ISO 14971:2007 Medical Devices -- application of risk management to medical devices Related standards for device in relevant regulatory jurisdiction (Kenya)
13	Ventilator: Non-Invasive with BIPAP	Clinical Home Ventilator, Respirator, Portable Home Use Ventilator Machine - Respirator An electrically powered light weight, device that is easily moved/mounted and used to provide long term alveolar ventilation support for patients who do not require complex critical care ventilation. It typically uses positive pressure to deliver gas to the lungs at normal breathing rates and tidal volumes through an endotracheal (ET) tube, tracheostomy cannula, or mask. It includes a control system and alarms, sometimes with additional features (e.g. humidification). Several methods of cycling and ventilation modes may be used. It may be in line and/or internal/external battery-powered and is typically used in the home, in an extended care facility, and/or by emergency medical services or during short term transport. Non-invasive positive pressure ventilation involves the delivery of oxygen into the lungs via positive pressure without the need for endotracheal intubation. Hospitals, Ambulatory Care Centers, Diagnostic Centers, Home Healthcare, and Clinics All clinical care areas

		Delivery of oxygen through a delivery device (mask, cannula), using positive pressure, and allowing clinicians to adjust two different pressures during inspiratory and expiratory phase of breathing Should be light, compact, portable and provide NIV (Non-Invasive ventilation) to patients Should essentially have the following modes - BIPAP, Auto CPAP & CPAP (Spontaneous) Should incorporate latest algorithms for leak compensation and synchronization. Should include user adjustable alarms and essential nonadjustable fixed alarms for patient safety. Should include alarms for leak, apnoea, patient circuit disconnection, low internal battery etc. Should be able to provide adequate pressure ranges for IPAP, EPAP for patients (kindly mention the IPAP, EPAP pressure ranges which can be delivered) Should have provision for inspiratory and expiratory trigger sensitivity adjustment Should have provision for inspiratory and expiratory slope adjustments Should have built in internal battery for 8 hrs of back up at a minimum 10 mbar pressure Should be provided with stand/cart - castor wheels Real Time Monitoring Display: Tidal Volume Respiratory Rate I:E Ratio Delivered IPAP and EPAP Alarm events and limits The following variables should be controllable by the operator: Modes of Ventilation selection Alarms required: Fi02, pressure, PEEP, apnoea, occlusion, high respiration rate, disconnection Fi02 between 21 to 100% I:E Ratio System alarms required: power failure, gas disconnection, low battery, vent inoperative, self diagnostics If alarm silencing feature is incorporated, it must be temporary and clearly displayed when activated Air and external supplied oxygen mixture ratios fully controllable External oxygen supply connection to be secure but easy to fit and release Case to be hard and splashproof Panel settings protected from accidental operation Whole unit to be easily portable by hand Unit stable when mounted Controls and displays to be easily visible from the front of the unit in low light levels Portable Power input to be fitted with Kenyan compatible mains plug Should have built in internal battery for 8 hrs of back up at a minimum 10 mbar pressure Low battery indicator required to alert user when on-board battery is low Battery to be recharged automatically when connected to mains power supply Voltage corrector/stabilizer UPS to allow operation at around 30% of Nigerian rated voltage and one hour operation in the event of mains power failure Resettable overcurrent breaker required on both live and neutral supply lines Mains supply cable to be at least 3m in length Protections against over-voltage and over-current line conditions Compliance with Kenyan electrical standards and regulations Must be included at no extra cost: NIV Mask of all sizes (pediatric and adult) at least three each Filters sufficient for two weeks continuous use Patient Circuits (at least five) NA To be managed through Operator.

		Others to be listed by Manufacturer / Supplier, with serial number and contact details of local supplier Rechargeable batteries with at least the following characteristics: Automatic switch from AC power electric-line mode to battery operating mode and vice-versa Equipment able to operate from AC power source and external battery (12V or 24V) Continuous monitoring working time in battery mode with standard ventilation not less than 5 hours Integrated batteries charger Low battery visual alarm 100% high capacity batteries with recharging time not greater than 6 hours Customs, clearance and safety inspections to be managed by Contractor. As per the import regulations of Kenya Labelling on the primary and secondary packaging under Kenyan regulations Capable of being stored continuously in ambient temperature of 0 to 50 deg C and relative humidity of 15 - 90% Capable of operating continuously in ambient temperature of 10 to 40 deg C and relative humidity of 15 to 90% Not to exceed 8 weeks post contract sign off Supplier to perform installation, safety and operation checks before handover. Local clinical staff to affirm completion of installation. Certificates to be included at hand over, and Quality checks record to be included as part of hand over. Training and User Manuals in English: Training of users in operation and basic maintenance shall be provided (nursing appointed leads, technicians, assistants, and biomedical engineer). Advanced maintenance tasks required shall be documented and handed over. Troubleshoot guide to be included The unit should be able to be disinfected between patients with approved disinfectant. All other cleaning and sterilization Information to be provided by manufacturer/supplier. Specific equipment for needed for calibration or testing purposes must be specified. Advanced maintenance tasks required shall be documented, with details of maintenance support from manufacturer/supplier. Non-Comprehensive At least 7 years after device acquisition. All hardware and software upgrades to be included free of charge as per life span of equipment. At installation only latest versions should be installed. Operating and service manuals including lists of important spares and accessories - with their part numbers and list of equipment and procedures required for calibration and routine maintenance. Documentation must also show recommended procedures for disposal and any probable hazards to the environment and/or community. Quality and other certificates to be included and all safety inspection and quality reports (testing and calibration) to be included. Quality Control and risk management Programs Class C (GHTF Rule 9-1); Class III (EU, Australia, Japan, Canada), Class II (USA) FDA approval (USA), (or) CE mark (EU) or UL Compliance to at least the below: IEC 60601-1:2012 Medical electrical equipment - Part 1-general requirements for basic safety and essential performance IEC 60601-1-2000 medical electrical equipment - Part 1-1 general requirement for safety - collateral standard: safety requirements for medical electrical systems IEC 60601-1-2:2007 Medical electrical equipment - Part 1-2 general requirements for basic safety and essential performance - collateral standard: Electromagnetic compatibility - requirements and tests ISO 53561-:2004 Anesthetic and respiratory equipment -- conical connectors -- part 1: cones and sockets

		ISO 13485:2003 Medical Devices - quality management systems -- requirements for regulatory purposes (Australia, Canada and European Union) ISO 14971:2007 Medical Devices -- application of risk management to medical devices Related standards for device in relevant regulatory jurisdiction (Kenya)
Lot 3: IPD		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Dressing Trolley	Dressing trolley constructed from stainless steel frame, with shelves, bowl, and bucket. The Unit should be mobile on four castors 2 lockable
2	Patient Bed (3 Functions)	Bed (3 function) with electrically operated remote controlled back rest 0-75º, knee rest 0-35°, High - Low 550-750mm. • Back rest, Knee rest and High - low can be operated manually also. • Size: L 2030mm × W 900mm × H 550-750mm (Adjustable Height). • ABS removable & interchangeable Head and foot panel, with safety lock and roller bumpers. • Epoxy coated mild steel frame work and 4 section mattress platform made up of CRCA M.S. Sheet • Provision for I.V. Rod on four locations. • Collapsible Side Rails • 125mm Dia. castors with diagonal locking
3	Patient Bed (Manual Bed)	Electrical and Manual operated bed complete with adjustable backrest, knee rest, trendelenberg/ reverse trendelenberg, waterproof mattress and ripple mattress. 1. General Description Electrical and Manual operated bed complete with adjustable backrest, knee rest, trendelenberg/ reverse trendelenberg, and water proof mattress 2. Composition Main Unit 2. Operational Requirements 2.1 The system should be electrically and manually operated and adjustable for heights, trendelenburg etc. It should also be having radiotransluscent top for carrying out X-Ray at the bedside 3. Technical Specifications 3.1 Should have four section mattress base 3.2 Should be able to handle weight of up to 300Kg 3.3 Should have X-Ray translucent back section made up of high pressure laminate. 3.4 Should have X-Ray cassette holder underneath the back section & should allow insertion of X-Ray cassette from either side of the bed. 3.5 Base frame & support frame should be made up of steel for long life & prevention from rusting. 3.6 Should have stepless electrical adjustment for the following :- • Height : 450-840 mm • Back section : 0- 50 degrees • Leg Section : 0-30 degrees 3.7 Should have stepless pneumatic adjustment for Trendelenburg (20-25° approx.), reverse-trendelenburg (10-15° approx.) 3.8 Should have a manual quick release mechanism for back section adjustment during emergency situation 3.9 Should be equipped with four articulated half-length tuck away side rails 3.10 Should be equipped with large castors (diameter 150 mm) with central braking and steering facility. 3.11 Mattress of the Bed should be made up of high density foam with Anti-Microbial agent incorporated into all components that assists in Prohibiting growth of bacteria & fungi and easy to clean. 3.12 Mattress should be fully Radiolucent for ease in performing portable X-Rays. 3.13 Should have bumpers at all four corners and place for fixing accessories

		3.14 Dimensions of bed : • Length : 2100 -2290 mm • Width : 850 -1020mm • Mattress Size : appropriate as per bed size 4. System Configuration Accessories, spares and consumables 4.1 I.C.U Bed Mainframe -01 4.2 Bed Ends, detachable : 01 pair 4.3 Articulated half-length tuck away side rails: 04 Nos. 4.4 IV Rods: 01 No. 4.5 Mattress 12 cm Thick: 01 No. 5. Environmental factors 5.1 Shall meet IEC-60601-1-2:2001(Or Equivalent BIS) ISO 13485 General Requirements of Safety for Electromagnetic Compatibility. 5.2 The unit shall be capable of being stored continuously in ambient temperature of 15 -50 0C and relative humidity of 20-90% 5.3 The unit shall be capable of operating continuously in ambient temperature of 10 -40 0C and relative humidity of 20-90% 6. Power Supply 6.1 Power input to be 220-240VAC, 50Hz as appropriate fitted with BS plug 6.2 Resettable overcurrent breaker shall be fitted for protection 7. Standards, Safety and Training 7.1 Electrical safety conforms to standards for electrical safety IEC-60601 / IS-13450 7.2 Manufacturer should have ISO certification for quality standards. 7.3 Electric Shock Protection level-Class-B 7.4 Electric current Protection- Class -1 7.5 Certified to be compliant with IEC 60601-2-38 Medical Electrical Equipment part 2-38 Particular requirements for safety of Electrically Operated Hospital Beds Quality Standards 4.1 Manufacturing standards ISO 9001 and 60601, ISO 13485 4.2 Conformity to equivalent standards , IP X4 electrical protection standard
5	Bedside Cabinet Trolley	1. General Description Hospital Bedside Cabinet trolley locker, with drawer, cabinet and hidden pull out tray. Construct from robust plastic (ABS) on four castors, lockable. 2. Composition 2.1 Main unit 3. Physical Specifications 3.1 Main Unit 3.1.1 Top Plastic robust (ABS) 3.1.2 Drawer 1 No. 3.1.3 Cabinet 1 No. 3.1.4 Tray 1 No. Pull out type 3.1.5 Towel Holder 2 No. provided on the sides 3.1.6 Castors castors with brakes 2. Composition 2.1 Bedside Cabinet Trolley 3. Performance Specifications . Bedside Cabinet Trolley 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
6	Baby Cot	Baby Cot for use in ICU. 1) The whole product made of beauty ABS plastic, Finish White 2)big transprants baby basinet 3)base can lifted up and down by gas spring 4)4pcs super stable casters 5)with self-brake & Storage Area 6) bed can title from one side to another side 7) one-handed drop side mechanism 8) Designed with narrow bars on every side so baby can see out, while parents can easily see in.

		Parameter: 1)Size: L905xW505xH845mm Accessories: 1)transparent acrylic bassinet 1 pcs 2)casters 4 pcs 3)Mattress 1pcs
Lot 4: Assistive Technology		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Pediatric multifunctional standing frame	• 0 – 90 degrees adjustable • Durable Aluminum lifter • 4 sets spring locking devices to ensure safety of special frame. • Pair of underarm struts • High grade polyurethane leather for standing frame for comfortability • Four wheels, two of which have brake function. • 1 set of manual lifting device • Set of hand lifting device • Size: 146X68X94-135cm (height adjustable) • Tray – Depth: 33cm • Trad – Width: 33cm • Sandal length: - 20cm • Sandal width: 9.5cm • Chest width: 39cms
2	Adult Standing frame	• User weight capacity: 170kgs • User height:- 5' – 6'5" • Knee pad: 6"-9.5" D x 9" W x 18-21" H • Front pad dimensions: 2» - 12.5» D x 40» - 56» H • Inside width: 22.75" • Locking caster diameter: 3" • Standard footprint: 34" x 28" • Unit weight:- 60Kgs • Tray size: 21" x 24" • Swing-out inner access: 38"
3	Tilt board for physical therapy	• Adjustable tilt angle – 0 to 90 degree • Size: 61cmX195cm longX80cm high • Tube legs: 10cm, made of 35mm steel • Safety features • Supportive padding • Mobility & locking • Height adjustment • Portability & storage • Ease of cleaning
4	Combined Ultrasound And Electrical Stimulation	• Body composition analysis • Impedance(Z): 30 impedance measurements by using 6 different frequencies (1kHz, 5kHz, 50kHz, 250kHz, 500kHz, 1000kHz) at each 5 segments of the body(right arm, left arm, trunk, right leg, left leg) • Reactance (Xc): 15 reactance(Xc), phase angle(θ) measurements by using 3 different frequencies (5kHz, 50kHz, 250kHz) at each Phase Angle(θ): 5 segments of the body(right arm, left arm, trunk, right leg, left leg) Electrode Method: Tetrapolar 8-Point Tactile/Adhesive Electrode System 1. Measurement Method: Direct Segmental Multi-frequency Bioelectrical Impedance Analysis Method, DSM- BIA method

5	Portable body composition analyzer	• Bioelectric Impedance • Analysis (BIA) • Measurement Item: - 40 Impedance Measurements by Using 8 Different Frequencies (1kHz, 5kHz, 50kHz, 250kHz, 500kHz, 1MHz, 2MHz, 3MHz) at Each of 5 Segments (Right Arm, Left Arm, Trunk, Right Leg and Left Leg) • Phase Angle: 15 Phase Angle Measurements by Using 3 Different Frequencies (5kHz, 50kHz, 250kHz) at Each of 5 Segments (Right Arm, Left Arm, Trunk, Right Leg, and Left Leg) • Electrode Method: 16-Point Clamp Electrodes • Measurement Method: - Direct Segmental Multi-Frequency Biolectrical Impedance Analysis (DSM-BIA) • Simultaneous Multi-Frequency Bioelectrical Impedance Analysis (SMF-BIA • Digital Results: LCD Screen, LookinBody Web, LookinBody120
6	Heavy Duty Multigym	• Design with heavy duty steel structure • 4 station gym with 3 steel weight stacks of 90 kgs each • Multiple exercise function – leg press, shoulder press, chest press, lat pull, seated row and all high / low pulley exercises • Comfortable seat pads all weight stacks attached at right angle for maximum space saving when placed in a corner • Durable powder coated finish • Arc cover for protection 330cm (l) x 310cm (w) x 220cm (H)
7	Static recumbency bicycle	• Frame: Heavy gauge stainless steel • Dimensions: 67” X 29” X 49” • Product Weight:88 kg. • Maximum User Weight: 240kg. • Resistance 40 Levels
8	Mechanical traction kit	• To Apply Cervical & Lumber Traction • Timer: 00 to 60 min • Therapy Modes:Continuous and Intermittent • Traction Force:Direct Pulling 05 to 45 kg in Twelve Steps. • Maximum Traction Force:With Doubler Pulley up to 90kgs. • Hold Time: 00-99 Seconds, adjustable in 1 Second Step. • Rest Time: 00-99 Seconds, adjustable in 1 Second Step. • The fixed height upholstered traction table is ideal for Horizontal Cervical and Pelvic / Lumbar Traction. • The lumbar section rolls freely on nylon rollers for friction free lumbar pull. This section can also be locked in any position if desired. • Cervical traction angle is controlled by vertical adjustment of the Machine mounting board. • Size: Table is 182cm long x 66cm wide x 76cm high and comes complete with Storage Shelf. • Cervical Head Holder with Bar. • Lumber Traction Belts with Bar. • Adjustable Flexion Stool, Padded. • Main Cord. • Weight Doubler Pulley.
9	Rehabilitation suspension sling	• Ideal for training balance and gait • Battery -powered electric height adjustment. • Wide frame: 90 cm • Maximum height: 234 cm • Two-point suspension with pelvic positioning and front back inclination • Four-wheel system; with two brakes wheel • Max patient weight: 160kg • Variable angle adjustable handlebar • Universal suspension harness (medium & XL) • Product weight: 102kg

10	Rehabilitation Electric Treadmill apparatus	• For use physiotherapy , visual impaired • Speed range :0.8 – 20km/h (12.4 mph) • Incline range: 0 – 15% • Running Deck size: 152cm x 51cm (60” x 20”) • Deck cushioning: Elastomer • Motor power:5.0 HP peak • Safety Stop system: Yes - with large Hi-Viz button • Fitness console type: LCD • Display information: Programme progress, speed, time, distance, incline, calories, and heart rate • Programmes: 40 • Bluetooth enabled. • Heart rate monitoring: Hand sensors/Chest Strap • Transport wheels: Yes • Maximum user weight:180kg
11	Pelvic chair for incon- tience therapy	• Primary Function: Muscle stimulation • Type of Energy: Magnetic field • Energy Source: 100 – 240 V AC, 50 – 60 Hz, max 14 A • Number of output channels: 1 • Magnetic Field Intensity: 0.7 – 2.5 T • Pulse Repetition Rate: 1 – 150 Hz • Pulse Width: 280 µs (± 20%) • Shape of Stimulation Pulse: Dual phase, rectangular pulses • Therapy Time: Up to 30 min • Interface: Touchscreen • Firmware controlled: Yes • Operating Temperature +10 to +30 °C • Dimensions: 50 x 58 x 97 cm (Dx W x H) • Applicator Dimensions: 73 x 73 x 73 cm (Dx W x H) • Weight: 46 kg
12	Shock wave therapy	• Technology Ballistic radial shockwave therapy system • Energy: Generator Compressor free Electromagnetic Generator • Power Level / Energy 10 to 185 mJ (equivalent to 1- 5 bar) • Frequency 1 – 22 Hz • Therapy Modes Continuous and Burst • Preset Programs 7 Preset Programs • EncyclopediaYes with Body Parts Images • Custom Program: Yes • User Interface 7” Inch Color Touch Screen • Controls: Hand Piece and Foot Switch • Applicator Heads: 6 / 15 / 25mm • Service Life: 4,000,000 shots per handpiece • 3,00,000 shots per head • Dimension • Gross Weight:8 Kilograms • Mains Supply:120-240 Volts AC • Safety Class Class I
13	Laser therapy for rehabilitation	• Laser type – Semiconductor laser – Ga Al As • Laser probe – 810nm – 300 mW pointed (module) 650nm – 40mW pointed (module) 650nm – 200mW cluster (diode) • Treatment time – 0 – 60 mins • Laser classification– Class 3B according to IEC – 60825 – 1 • Mains voltage – 100 – 240V / 50 or 60 Hz • Dimensions – L x B x H – 28 x 22 x 9 cms • Weight – 1.4 Kgs • Auto probe detection

		• IR with visible Red laser combination • Microcontroler based • 5” Colour LCD with touch screen • Capacitive Touch Display • Light weight plastic cabinet
14	3D printing machines	Printing Technology: Digital Light Processing (DLP) • Direct Peel Mechanism • Manual Resin Filling • Easily Removable Supports • Print volume: 7.1” by 4” by 8”. 18.2 cm by 10.2cm by 20cm • Layer thickness options: 50 microns, 100 microns, 170 microns • Minimum feature size: 9.5 microns • Print speed: up to 2 in/hour @ 100 microns. 1 in/hour @50 microns • Resin curing unit: sprint ray custom built 1080 PFHD. Projector texas instrument DLP chip. 405 nm LED. LED - based light source. 50,000hrs expected lifetime • Resin tank: 500 ml capacity. Vacuum protective cover. Up to 10 litres extended lifetime. • Connectivity: 5 GHZ Wi-Fi chip set. Direct ADHOC mode via Wi-Fi 33 b/g/n. Local network via wife b/g/n. Local network via Ethernet cable • Printer control: 7-inch screen with direct print via USB part • Unit dimensions: WDH. 14 by 10 by 20 • Weight and size: 20 inches by 20 inches by 40 inches – 40lb. 50 cm by 50 cm by 56 cm. 18 kgs
Lot 5: Pulmonology		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Spirometry	1. General Description Forced Parameters Measured Forced vital capacity: FVC, FEV.5, FEV1, FEV3, FEV6, FEV1/FVC, FEV1/FEV6, FEV.5/FVC, FEV3/FVC, PEF, FEF25, FEF50, FEF75, FEF25-75, FEF 75-85, FET, FEV1/FEV.5, FEV1/PEF, MIF50, FIVC, FIV1, FIV1/FVC, FEV1/FIV1, PIF, MTT, PEV/PIF, Lung Age MVV: Br/min Relaxed Parameters Measured VC: VC, TV, ERV, IRV, IC, Ti, Te, Tt, Ti/Tt Manoeuvres per patient: 5 total; best test and last test highlighted Interpretation: Selectable – Kory, Miller, ATS, NLHEP (Ferguson) Predicted sets: Selectable – 14 Total Ethnic correction: Selectable – % Actual, Caucasian, Hispanic, Afro-American Language: Selectable – English or Spanish Measurement Scale (BTPS) Flow range 0–16 L/sec Volume 0–10 L Measurement method: Infrared Interruption via Digital Turbine Dynamic flow resistance: <1.5 cm H20/L/sec @ 14 L/sec Precision of Measurements (BTPS) At highest volume: +/- 3% or 50 mL At highest flow: +/- 5% or 150 mL Time related precision: .5% Volume resolution: <6 mL Sampling frequency: 50 Hz Hardware Specifications Storage capacity: 1000+ studies Keyboard: Alphanumeric LCD touchscreen Communication: USB to printer and PC, RS232 Optional: Bluetooth to PC

		Dimensions: 5.75" x 3.25" x 4.0" Power supply: 2 x 1.5 DC Alkaline or NiMH batteries Weight: 9 oz (250 g)
Lot 6: Endoscopy		
S/No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Endoscopic Tower with instruments	. Product Quality Standards: 1.1. Should be USFDA and CE (Notified) approved model. 1.2. Manufacturer should be ISO 13485 certified for quality standards. 1.3. Shall comply with EN/IEC 60601, Particular requirements for electrical safety of the device. 2. Technical Specification: 2.1. Video Processor, Light source & Monitor: 2.1.1. Should be fully digital system. 2.1.2. Should have high illumination xenon (100W to 300W) light source or equivalent LED technology. 2.1.3. Brightness control: Auto/Manual 2.1.4. Should have colour correction facility. 2.1.5. Should have colour enhancement facility. 2.1.6. Convenient digital to digital recording of both still and moving images. 2.1.7. Picture and picture display for any combination of endoscopic images. 2.1.8. Convenient index display for documentation. 2.1.9. Scope ID function for endoscopy suite management. 2.1.10. Analog output: RGB, Y/C & Composite. 2.1.11. Digital Output: HD-SDI, DVI 2.1.12. Should be provided with high resolution medical grade monitor of minimum 21-inch size diagonally. 2.1.13. Should have video storing facility in inbuilt or external memory. 2.2. Video Gastroscope for both Diagnostic & therapeutic purpose: 2.1. Should be capable of high-resolution imaging. 2.2. Should be provided with water irrigation system with complete accessories. ● Field of view: 140 degrees or more ● Depth of field: 2-100mm ● Forward viewing facility ● Total length:1340 to 1365mm ● Working length more than 1000mm ● Insertion tube outer diameter 9.8mm ● Distal end diameter 9.8 to 10.3mm ● Bending section tip deflection Up – 210 degrees, Down – 90 to 120 degrees Left - 100 to 120 degrees Right – 100 to 120degrees ● Instrument channel - Diameter – 2.8 to 3mm 3. Video Colonoscope: 3.1. Should be capable of high-resolution imaging. 3.2. Should be provided with water irrigation system with complete accessories. ● Field of view- 140 degrees or more ● Depth of field: 2-100mm ● Forward viewing facility ● Total length - 1600 to 2000mm ● Working length more than 1300 to 1700mm ● Insertion tube outer diameter 12 mm or more ● Bending section tip deflection Up – 180 degrees, Down – 180 degrees Left - 160 degrees

		Right – 160 degree ● Instrument channel - Diameter – 3.8mm or more 4. Video Duodenoscope: 4.1. Should be capable of high-resolution imaging. 4.2. Should be provided with water & suction irrigation system with complete accessories. ● Field of view- 100 degrees or more ● Depth of field: 5-60mm ● Direction of view: Side Viewing (Retro 5 to 10 degrees) ● Total length - 1500 to 1600mm ● Working length more than 1230 mm ● Insertion tube outer diameter 11.5 to12.5 ● Bending section tip deflection Up – 120 degrees, Down – 90 degrees Left - 90 degrees Right – 100 to 110 degrees ● Instrument channel - Diameter – 4 mm or more 4.5. Endoscope Washing/Reprocessing Station: 4.5.1. The Endoscopic Washing/reprocessing station should be able to reprocess two scopes simultaneously. 4.5.2. The Endoscopic washing Machine should be able to perform ultrasound cleaning and high-pressure cleaning to remove debris from the endoscope. 4.5.3. The Endoscopic Washing Machine should have different sensors that include : Pressure Sensor Disinfectant Level Sensor Leak Detect Sensor 4.5.4. It should be compatible with all kinds of flexible endoscopes. 4.5.5. It should have different time settings for various steps during disinfection such as cleaning, disinfection, drying etc. 4.5.6. It should be compatible with most types of disinfectants available commercially e.g. Gluteraldehyde, Paracetic acid etc 4.6. Accessories to supply: NOTE: Each accessory should be from reputed make having USFDA & CE certification 4.6.1. Compatible biopsy forcep-5nos. 4.6.2. Endoscopic CVT basket-5nos. 4.6.3. Endoscopic Lithotripter-5nos. 4.6.4. Endoscopic Sphincterotomes-5nos. 4.6.5. CBD Ballon-5nos. 4.6.6. Guide wire -5nos. 4.6.7. Stent Pusher-5nos. 4.6.8. Cleaning brush: 1no. 4.6.11. Soaking cap-1no. 4.6.12. Cleaning adapter-1no. 4.6.13. Leakage tester-1no. 4.6.14. Computer system, at least (Core i7, 16GB RAM, 1TB HDD) with 17 inch monitor & laser colour printer and compatible image transfer and reporting software. 4.6.15. Endoscope trolley (S.S 304 grade) to carry all the required equipment with castor wheel having front locking facility. 4.7. Power supply: 4.7.1. Power input to be 220 – 240V AC, 50Hz fitted with B.S. plug of appropriate rating. 4.8. Environmental Factors: 4.8.1. Operating condition: The unit shall be capable of operating in ambient temperature of 10-40 deg C and relative humidity of 15-90%

		4.8.2. Storage: The unit shall be capable of being stored continuously in ambient temperature of 0-50deg C and relative humidity of 15-90% Should be CE and FDA marked.
Lot 7	Mortuary	
1	Autopsy Table	Framework constructed with stainless steel material Top is constructed with a stainless steel sheet using high border integrated lighting. Mounted on heavy duty PCV rubber stumps Provision for drainer hole with tube for waste liquid Provision for water tap connected with sink Over all size: 2000(L) x 800(W) x 850(H) mm Optional table can be provided wheels
2	Body Lift And Transfer System	Hydraulic lifting, adjustable height, safety locks, easy maneuverability
3	Cadaver Storage Refrigerators	Temperature range -10°C to 8°C Temperature controller • Microprocessor controller • High resolution LED display • Elegant flat keypad • IP65 protection • Made in Italy No. of controller Individual controller per chamber Display precision 0.1°C Temperature sensor NTC thermistor
4	Embalming Workstation	Embalming Workstation are made of high grade Stainless Steel These workstations are used for preservation, Autopsy and sanitation purposes of the cadavers (dead human body used in scientific or medical research) The Complete workstation contains embalming trolley and embalming machine The trolley is made of complete SS manufactured without rivets or bolts on the surface Embalming machine is mounted on the underlying frame suitable for transportation The trolley is fitted with heavy castor's for easy movement with or without embalming machine The dimensions are 150L X 70W X 85H cm The machines are fitted with specialized pump for noiseless performance resulting in effective suction which in turn acts as a source of delivery of fluids at optimum pressure. The Fluid delivery rate is 10 liters/ hr.
5	Morgue Ventilation System:	Air filtration, odor control, adjustable airflow, monitoring.
6	Mortuary Trolley	Mortuary trolley is use for shifting dead body. It is also use for getting safe of dead body. On the length end both parts are move able or will be open to store dead body easily or with safety. Size 2150x570x850 mm (LxWxH) Wheel Feature Consist with four wheels, two wheels are breakable and other two are movable Material Grade 304 Wheel Diameter 6-10"
7	Autopsy Weighing Machine – Organ	1. Amputation Saw 12” -1 Quantity 2. Bowel Scissors 7" 1 4 Quantity 3. Post Mortem Scissors 6" 1 4 Quantity 4. Blow Pipe straight 8" 2 Quantity 5. Hammer with chisel 8” 1 Quantity 6. Detachable Cross handle chisel 3.5” 1 Quantity 7. Skull Rest 7” 1 Quantity 8. Brain Knife 9.5” 1 Quantity 9. Caltin Knife 9.5” 1 Quantity

		10. Cartilage Knife 7.5” 1 Quantity 11. Scalpel 16” 4 Quantity 12. Dissecting Forceps 6” 1 Quantity 13. Chain hook set of 3, 3” 1 Quantity 14.Scalpel Handle 127 mm 1 Quantity 15. Organ knife and saw 22mm blade 1 Quantity 16 Bistoury Knife 70mm blade 1 Quantity 17 Rib Knife 1 Quantity 18 Pelvic Organ Knife 1 Quantity 19 Dissection scissors 1 Quantity 20 Bone cutting scissors 1 Quantity 21 Needle Holder 1 Quantity 22 Raspatory 1 Quantity 23 Retractor 2 Quantity 24 Osteotome 2 Quantity 25 Vagotome 1 Quantity 26 Surgical needles 12 Quantity 27Folding rulers 300 mm 2 Quantity 28 Probes with eye/fish tail 2 Quantity 29 Measuring/specimen jar (100 ml and 1 Litre) 1 Quantity 30 Rib Shears 31 Magnifying lens 1 Quantity 14. Box Containing all these instruments 1 PC
Lot 8: Diagnostics Imaging Xray		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Fixed X- Ray Ceiling Machine DR	Max. Anode HU: 230kHU/163kJ Focus spot size: 0.6/1.2mm Max. kV:40~150KV Anode speed:2800r/min High Voltage Generator Power Rating: 50KW Line Nominal, Phase: 380VAC, 3Φ Working frequency:80kHz-300kHz kV Range: 40~150KV mA Range: 10~630mA mAs Range:0.1 ~630mAs Time Range:0.001~10 sec Tube Stand Wall Bucky Stand Flat panel Detector
3	Mobile X –Ray Machine DR	1. General Description 1.1. Compact, easily transportable with articulated/telescopic arm suitable for bedside X-ray with maximum positioning flexibility in any patient position. The angles in various planes to be specified by the manufacturer 2. The unit should be a digital system with flat panel detector 3. Power Line Connection: a. Should operate on single phase power supply with plug in facility to any standard wall outlet Yes b. Automatic adaptation to line voltage 200 to 240 Volts, 15 Amp plug 4. The Generator a. Must be microprocessor controlled high frequency, output 32 KW or above. b. It should have a digital display of mAs and kV and an electronic timer c. KV range: 40kV to 150kV or more d. Max. Current: 300 mA or 50 to 400 (not user selectable) * mA steps = 50, 100, 120, 150, 180, 250, 320, 400 f. Shortest exposure time: should be 1ms or less g. The dose delivered per exposure must be displayed 5. X-Ray Tube a. Output should match the output of the generator

		b. It must have a rotating anode with 3000 rpm or more c. Focal spot size should be 0.6mm/1.2mm or better d. Mention the heat storage capacity of Anode Heat Capacity 300 kHU (212 kJ) Battery a. The machine should be able to run on mains as well as on battery supply b. Battery powered, 240 Vdc (+20%, -10%) with Nominal voltage 12-volt. Typical charge time, 4 hours, Typical usage capacity: 5 hour run time (with full charge, new batteries), ~120 images alternating between 90 kVp / 4 mAs and 100 kVp / 2 mAs, and a total of 2 miles driving distance It should have quality certification CE/ FDA
4	C -Arm Machine	Mobile C-arm Digital Imaging System on anti-static castors; easy to maneuver and capable of undertaking orthopedic and angiographic procedures 1.1. The system must be of state-of-the-art design and enable mobile Fluoroscopy and radiography of the complete skeletal system Chest and abdominal organs. 1.2. The system must have sufficient capability to provide high quality imaging on large and small patients, with no, or minimal deterioration in image quality. 1.3. The system must have a minimum of 30" free space between the x-ray tube and the image receptor. 1.4. The C-arm depth must be a minimum 24" in depth to provide C-arm clearance around the patient and table. 1.5. The C-arm must provide a minimum of 115˚ C-arm orbital rotation, 90˚ under-scan and 25˚ over-scan capabilities. 1.6. The system must allow user to reverse the x-ray tube and Image Intensifier positions and maintain C-arm under-scan and over-scan capabilities. 1.7. The C-arm must be able to rotate 180˚ to facilitate angled projections. 1.8. The system shall have a minimum of 18" of vertical C-arm travel for height adjustment. 1.9. The C-arm must provide side-to-side movement and horizontal travel to allow for "panning" during imaging. 1.10. Shall be counter-balanced in all positions. 1.11. Shall include a laser positioning system. 1.12. Generator Requirements 1.13. The generator must be a 60 KHz or higher high frequency inverter type, microprocessor controlled. 1.14. The output power rating of the generator must be 15 kW or greater. 1.15. The system shall be capable of performing examinations on large patients. 1.16. The generator shall be capable of providing a high dose fluoroscopic exposure at a minimum of 15mA. 1.17. The generator must be capable of providing pulse fluoroscopy. 1.18. The generator must be capable of providing cine pulse mode for cardiac & vascular imaging to reduce imaging lag caused by patient motion or C-arm movement with DSA digital subtraction angiography. 1.19. The mAs range in radiography mode must be approximately 1 to 300 mAs 1.20. The generator must meet the following minimum power requirements: • Radiographic kVp range: 40 – 120 kVp • Radiographic mA range: 50 mA or higher • Fluoroscopic mA range: 20mA or better • Fluoroscopic kVp range: 40 – 120 kVp 1.24. The system should have a warning for the user before and when the anode reaches its maximum heat storage capacity 1.25. The anode temperature should automatically be monitored for its protection? 1.26. State the system dose management capabilities. 1.27. Imaging System 1.28. The system shall have a 12" tri-mode image intensifier. 1.29. State type of video capture device. 1.30. Monitors must be at least 16and above " dual monitors with 1 ? 2K or K2 resolution. Flat panel LCD type antiglare 1.32. The system must provide an ambient room light sensor to automatically adjust the monitor brightness for optimum image display (Automatic Brightness Control). 1.33. Digital Image Processing 1.34. Shall have automatic brightness control.

		1.35. Shall have noise filter. 1.36. Shall have motion artifact and noise reduction. 1.37. Shall have edge enhancements. 1.38. Shall have minimum of 1 TB image storage. 1.39. Shall have last image hold. 1.40. Shall have patient & image information annotation. 1.41. Shall have dose summary. 1.42. System Functions and Image Management 1.43. The system must provide a simple method to input patient information. 1.44. The system shall be equipped with a backlit X-ray control panel that allows for operation of the system in dim light situations. 1.45. The system shall allow for the change of image orientation on the display screen during exposure or using the last image hold. Functions should include: image rotation, left to right and top to bottom image reversals. 186 1.46. The system shall provide integration to a laser camera and shall include any & all required software/hardware. Please provide additional options for hard copy printing. 1.47. The system must provide a DICOM 3.0 interface capability that can be connected to the hospital's network to facilitate the transfer of images for archiving and print purposes. 1.48. Networking 1.49. The system must be PACS / DICOM 3.0 & HL-7 compatible / compliant. 1.50. The system must support the following DICOM 3.0 interfaces: • DICOM print/store
Lot 9: Diagnostics Imaging Sonography		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Ultrasound	1. General Description General ultrasound unit comprising of scanning unit, display, probes, console printer, jelly dispenser holder and U.P.S. all mounted on a dedicated trolley on four (4) antistatic castors, two (2) of which should have breaks. 2. Composition 2.1. Main unit 3. Description of the medical supply unit design type 3.1. Should be CE or equivalent approved product. 3.2. Manufacturer or Supplier should have ISO 13485 certification for quality standards. 3.3. Electrical safety conforms to the standards for electrical safety IEC 60601- General requirements (or equivalent BS Standard) Add specific safety standard for ultrasound machine updated/ current: IEC 60601- particular for U/S: current version 3.4. Shall meet internationally recognized for Electromagnetic Compatibility (EMI/EMC) Technical Specification: 3.5. Multipurpose High Density full digital colour Doppler system 3.6. Offered system should have whole body scanning Applications & software for a wide range of applications that includes: • abdominal, • OB/Gyn, • cardiology, • urology, • small parts, • vascular, • orthopedic, and • MSK applications 3.7. System should have following Scanning Modes: • B, Dual B, Quad B, • THI, PIH, Trapezoid Imaging, • Real-time Panoramic Imaging (B mode), M, Color M, • Anatomic M, Color Doppler, Power Doppler Imaging, • Directional PDI, TDI, PW with HPRF, CW, • Dual-Live, Duplex: B and Doppler/M, • Triplex: B, Color Flow, and PW/CW Doppler. 3.8. Should have Full digital ultrasound beam forming technology 3.9. Should have Auto Image optimization function, Physical key should be available on the keyboard for easy access. It should also offer 8 slider controls for TGC 3.10. System should have minimum 21" high resolution LED display with swivel and tilt facility. 3.11. System should have minimum 4 probe Connectivity ports as standard which can support all transducers. 3.12. Probes offered should be Broad band frequency probes offering at least user 3 selectable frequency range. 3.13. System should offer Scanning depth of more than 30 cms. 3.14. Should have at least 256 gray scale for better imaging 3.15. System should have 1TB or more hard disk for digital image storage 3.16. System should have at least 3 ports of Hi Speed USB for data transfer and inbuilt CD/DVD writer 3.17. System Should

		have multiple focusing method minimum 6 focus 3.18. System should have Cine loop of minimum 500 Frames/sec or more. 3.19. System should have Tissue Harmonic Imaging Facility with all the probes 3.20. System should be provided with DICOM connectivity as standard. 3.21. System should have inbuilt Calculations of full OB/GYN calculation package(both early pregnancy and mid-third trimester calculations), Vascular calculations, Urology calculations, Cardiac Calculations, Doppler calculations, Auto Trace 3.22. Should be able to measure velocity without taking Doppler tracings. 3.23. System should be upgradable to Volume 3D Imaging in Future. 3.24. System should be supplied with following probes. 1. Broad Band Convex probe (Frequency Range 2 – 6 MHz) 2. Broad Band Linear Probe for Vascular and small parts applications. (Frequency Range 5 – 12 MHz) 3. Broad Band Endocavitary / Transvaginal Probe (frequency range 4-9 MHz) 4. Broad Band sector transducer for cardiac studies Cardiac Probe 3.25. Color Printer: - a. Accessories to be supplied along with i. Online UPS of appropriate KVA with 2 hr backup • System should be offered with color Printer offering color prints of 6 X 8 Inch Size. • Color Printer should be able to connect directly to the Video Output of Ultrasound machine. • User selectable print options should be available to select from 1,2,4,6,9 Image formats on 1 sheet. • System should be supplied with following suitable Color Printer & Workstation PC 3.26. Power Supply: • Power unit: Input voltage- 220V-240V AC, 50Hz Single-phase. • Should be provided with online UPS for power back up of minimum 30 minutes. Should be CE or equivalent. 2. Composition 2.1 Ultrasound Scanner (Routine Examination) 3. Performance Specifications Ultrasound Scanner (Routine Examination) 4 Quality standards Manufacturing standards 4.1 ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 5 Conformity to standards Delivery point See Schedule CE marked or any other equal or recognized international document 5.1 For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training User Training 7.1 On site user training on operation and daily up keep 7.2 8 Maintenance training Technical documentations User manuals On-site maintenance training on preventive maintenance 8.1 1 Set 9 Commissioning Testing and commissioning of the devices to the satisfaction of the user. 9.1 10 Warranty Equipment 10.1 Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
Lot 10: Diagnostics Imaging Mammogram		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Digital Mammogram	1. Should be an advanced high-end digital mammography machine which allows fast, low-dose, high-quality 3D imaging of the breast. 2. System should be upgradable with latest technology available in future 1. GANTRY ASSEMBLY: • The system should consist of a tube head and detector assembly that has isocentric rotation for every positioning. The angle of C-arm movement shall be displayed. • The isocentric movements should be motorized. The patient Compression device should have automatic multispeed variable compression system which senses the breast density and adjust the compression force. • Magnification devices of ratio 1.5 and 1.8 x • At least a pair of two foot switches should be provided for compression. • Digital display of motorized and manual compression force and compression thickness should be available on either side of gantry. • Grid ratio should be mentioned. Mention about grid/breast support assembly system. • The compression should be extremely smooth and there should be automatic decompression at the end of each exposure. • There should be a safety mechanism for compression with respect to power failure. • Two compression paddles for small and large breasts with Regular sliding movement. • Round spot and square spot compression paddle or equivalent.

		• Radiation field-provide protective lead glass sheield 2. X-RAY GENERATOR: The X-ray generator should be high frequency with the following parameters: • KV range: at least 20-35 kV in steps of 1 kV. • mAs range: 2-500 mAS or more. • Exposure time: 10ms – 4 sec. or better. • Maximum mA: 200 mA or higher. • Exposure parameters should be displayed. • Should display the dose delivered after each exposure. • Automatic exposure control device should be provided. 3. X-RAY TUBE UNIT: • Dual focus rotating anode tube with Focal spot size: 0.1 mm and 0.3 mm. • Anode heat storage capacity should be at least 130 KHU or higher. • Should have at least two filters. Please mention the material used in the filter and its thickness. • Tube heat storage capacity of 2 MHU or more. 4. FLAT PANEL DETECTOR: • Type of detector: should be amorphous selenium. • Direct Capture Technology or needle capture technology(please specify) • Detector size: 24cm x 29cm or more with two image format. Please mention the expected life time of the detector. Image matrix in pixels: Large sizes 3000X3500 or more Small Size: 2000X2500 or more. No Ghosting or lag effect should be present; image depth should be at least more than 12 bits. 5. DIGITAL ACQUISITION SYSTEM: • Storage capacity should be 10000 images or more. • Should provide Dual 5 Megapixel Grayscale medical grade LCD image monitor minimum 19’ with high luminance. Retrieval of images from CD, DVD or PACS should be possible. • It should be DICOM 3.0 ready and should have the facilities for connectivity. • Film prints and CD, DVD copying should be possible. • Latest technology: Highly effective computer aided detection (CAD) digital mammography solution for early detection of cancer. There should be advanced technology for identification of micro calcification and suspicious lesions.
Lot 11: Diagnostics Imaging CT		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	CT 128 slices	A computerized tomography (CT) scan combines a series of X-ray images taken from different angles around the body and uses computer processing to create cross-sectional images (slices) of the bones, blood vessels and soft tissues inside your body. CT scan images provide more-detailed information than plain X-rays do. A CT scan has many uses, but it's particularly well-suited to quickly examine people who may have internal injuries or other types of trauma. A CT scan can be used to visualize nearly all parts of the body and is used to diagnose disease or injury as well as to plan medical, surgical or radiation treatment. Radiologists, specialists, technicians. Radiology and Medical Imaging Department Radiology / Medical Imaging This unit shall be an advanced multi-slice spiral CT scanner that will be used to perform all types of CT examinations including head, spine, chest, abdomen and pelvis in addition to extensive cardiovascular applications. Gantry: High-end multi-slice CT scanner that is capable of acquiring 128 slices / rotation. Gantry opening: 70 cm. Detector type: Solid state, ceramic or nano panel. 8 cm detector coverage or better. Scan localizer light: laser type.

		X-Ray generator and tube: Generator nominal power rating: 100 kW. Tube Current: 30 – 600 mA. Tube Voltage range: 80 – 140 kV. Anode heat storage capacity shall be not less than 8.0 MHU. Alternatively, anode heat storage capacity and high anode cooling rate combination shall provide maximum heat capacity equivalence. The anode shall be the dual focus type Scanning parameters: Shortest scan time for a full 360°rotation: 0.4 sec. or better. Single Maximum Continuous Acquisition Time: 100 seconds. Maximum scan length: 175 cm. Minimum slice thickness: 0.6 mm. Imaging matrix of 1024x1024 should be available. Field of View (FOV): 50 cm. Reconstruction time for 512^2 image matrix: 25 images / second, without iterative reconstruction technique, and more than 18 images / second, with iterative reconstruction technique. Low-contrast specification (LC): 20 cm phantom: 5 mm / 3 HU. Patient skin dose at specified LC: <= 20 mGy. High-contrast specification (HC) at 2% MTF: 24 Lp/cm. Patient Table: Maximum patient weight: 250 kg. Table speed: 1 – 100 mm/s, or better Movement ranges: Vertical: 40 – 100 cm approximately from floor level. Longitudinal: 150 cm. Positioning movement accuracy: +/- 0.5 mm or better. Operator controls for table movement shall be available at the gantry from both sides of the table. Workstation: A high-end computer workstation should be offered with:Dual 18" minimum, flat TFT, high-resolution (1024 x 0124 minimum) display monitors. The highest capacity hard disc drive should be offered for image storage. DVD-CD/ RW and MOD should also be offered. It shall be the multi-tasking type that is capable of performing several functions (such as scanning, processing, archiving, filming etc) simultaneously. An additional ceiling mounted console/monitor within the scan room should be offered for CT interventional procedures. All accessories for CT interventions should be offered. The following software functions and packages should be offered: MPR, MIP, Advance 3D Software Angio CT, Advanced Cardiac Package Advance Vascular Package Advance Neuro Package with Perfusion Virtual Endoscopy and Colonoscopy Lung and Nodule Analysis Dose Reduction Software BMD (Optional) Complete Dose Reduction (Fourth Generation) with dose reduction more than 60% Metal Artifact Reductio for Orthopedic Implants All available optional software packages and accessories must be listed and quoted separately. Only latest versions of software to be installed at the time of installation. Fluoroscopy Software The system shall be capable of remote diagnostics and shall include a modem that will be capable of interfacing to the manufacturer's remote diagnostics service. The system shall be fully DICOM compliant with all standard DICOM specifications with interface to the hospital RIS/PACS network/system. Ability to carry out CT Fluoroscopy As per system selected - to be demostrated by Bidder Device functional parameters, alarms, language, etc. that could be adjustable at the discretion of the user/s should be specified by the Contractor. Work station, Ganty, Tube, Scanner Fixed, for full instalation of entire system in pre-allocated room and control room. Battery of at least 30 minutes. Voltage as per Kenya

		Collapsible wheel chair with rubberized swivel wheels - x1. tandard Patient positioning accessories and restraining devices - 2 sets ight weight Lead Aprons “0.25” lead equivalence - x3. Gonadal shields – x2. Thyroid shields – x3 Lead goggles – x2. Lead Glass 100 cm x 150 cm of 2 mm Lead equivalence as per the requirement of the equipment. 120 KVA Online UPS of suitable rating should be supplied for the complete system. Dual Head Pressure Injector with 700 syringes of 200 ml. System must be PACS, HIS/RIS interface ready without any new hardware or software requirement Software for Remote Diagnostics Service over a telephone line / server - teleradiology To be Managed through Operator All spare parts to be listed with their serial numbers, local suppliers and contact details As per Kenya Regulations ☐ Yes ☐ No ☐ NA ☒Planned At request to review HVAC and dimensions Storage and operating temperatures (specify ranges), resistance to high humidity and/or dust levels (specify requirements) - in accordance with local/anticipated conditions. ☐ Yes ☐ No ☐ NA ☒Managed by Client. DICOM and software licenses through Contractor - unlimited Complete pre-installation site preparation works inclusive of: Chiller/ cooler (if required) Floor ducting: Lead glass viewing window Installations and finishing shall be delivered and installed by the supplier and coordinated with the civil and electromechanical contractors as required. Contractors may inspect installation site prior to bidding their offers. Radiation warning lights (interlocked with system’s power-on where necessary) and warning signs shall be installed by the supplier in accordance with international and local regulations. Equipment and computer cabinets and control console desk with two operator chairs shall all be included with the system. Not ot exceed 12 weeks post contract approval Manufacturer/supplier to perform installation, safety and operation checks before handover. Acceptance tests to be specified and local clinical and technical staff to verify proper and full functioning of device. Training of users in operation and basic maintenance shall be provided. Training of maintenance personnel (if relevant) also to be specified and provided. Included but not limited to Radiographers, Technicians, Radiologists, Biomedical Engineer, and Radiation Safety Officers Information to be provided by manufacturer/supplier, e.g. cleaning, disinfection/sterilization method (for reusable devices). Comprehensive Maintenance Contract for 7 years years including all the accessories, Air conditioning and CT tube and all major consumables. Warranty: 12 months from the date of satisfactory installation. The warranty shall cover all the accessories including CT tube and all major consumables. A free comprehensive software update guarantee for entire life of scanner must be provided. Specific equipment for needed for calibration or testing purposes must be specified. Advanced maintenance tasks required shall be documented, with details of maintenance support from manufacturer/supplier. Comprehensive Contract Seven Years of spare parts availbility is mandatary

		A free comprehensive software update guarantee for entire life of scanner must be included User Manuals, Trouble Shoot Manual, Certificates, List and Numbers of Spare Part, Shipping Bills Specified for compliance by manufacturers in global marketplace, notably ISO 13485: Quality Management System ISO 14971: Risk Management System. Apply to categories of devices, e.g. for Electromedical devices IEC 60601-1 (General requirements for basic safety and essential performance), IEC 60601-1-1-1 (Collateral standard: safety requirements for medical electrical systems) and IEC 60601-1-2 (Collateral standard: Electromagnetic compatibility - Requirements and tests). Apply to specific devices, e.g. IEC 60601-2-19 (Particular requirements for the basic safety and essential performance of infant incubators), ISO 10079-1 (Medical suction equipment), etc. Related standards for device in relevant regulatory jurisdiction (Kenya)
Lot 12: Diagnostics Imaging MRI		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	1.5 Tesla	As per ECRI: MRI systems use strong magnetic fields and radio-frequency (RF) radiation to translate the distribution of hydrogen nuclei in body tissue into computer-generated images of anatomic structures. Magnetic resonance images have excellent soft tissue contrast allowing clinicians to distinguish between normal and abnormal tissue, and patients are not exposed to any ionizing radiation during the procedure. MRI systems can currently be grouped into 3 general categories based on magnetic field strength: 3T scanners, 1.5T scanners, and low-field (1.2T or less) scanners. MRI is widely used in hospitals and clinics for medical diagnosis, staging and follow-up of disease and provides better contrast in images of soft-tissues, e.g. in the brain or abdomen through usage of strong magnetic fields, magnetic field gradients, and radio waves to generate images of the organs in the body. MRI does not involve X-rays or the use of ionizing radiation. Trained, qualified, privileged physician specialists (Radiologist), Medical Imaging / Radiology Department Only Diagnostic Imaging / Radiology Only This shall be a high-end latest generation Magnetic Resonance Imaging system that shall have the following components (integrated): Magnet, actively shielded gradient system, general performance parameters, patient table, Radio Frequency {RF} system, Computer System, Operating Consoles, Patient Comfort Accessories, Coils, Software, and artifact reduction techniques Magnet System Type: Closed system with short bore for whole body MR imaging. Overall magnet length: 150 cm and above. Inner magnet diameter: 60 cm The magnet design shall be ergonomic, patient friendly and, when combined with the above dimensions, shall give the impression of being compact from the outside and yet spacious from the inside giving ample personal space. Magnet Field strength: 1.5 Tesla. Magnet type: Superconductive active shielded magnet with zero Helium boil-off technology Homogeneity ≤ 1.0 ppm typical over 40 cm DSV. Best homogeneity specifications preferred. Well ventilated and illuminated with built-in Bi-Directional Patient-Operator communication It shall have an integrated whole-body coil. Actively Shielded Gradient System: It shall have a maximum amplitude of more than 30mT/m or higher. It shall have a slew rate equal or more than 100 mT/m/ms. the Gradient Coil shall have low acoustic noise emissions.

		General Performance Management: Acquisition Matrix: true image matrices without interpolation nor over sampling: from 64x64 up to 1024 x 1024. Minimum Field of View: 5 mm or better. Maximum Field of View: 500 mm or better Minimum 2D Slice thickness: 0.1 mm or better. Minimum 3D Slice Thickness: 0.05 mm or better. Highest in-plane resolution: 12 µm or better. Patient Table: Maximum patient weight capacity: 200 Kg. Vertical table movement range: 58 – 80 cm or better. Longitudinal table movement range: 210 cm or better. Position accuracy: ± 0.5 mm. Radio Frequency (RF) System: It should be a digital broadband solid-state system with low noise fully digital RF transmitter/receiver, frequency synthesizer, modulation/demodulation and amplifier subsystems. RF Transmit Amplifier type: solid state microprocessor controlled. Transmit Amplifier Power - 15 Kilo watt or more Number of receive channels ≥ 8 /16 channels or equivalent. Dynamic Range ≥ 150dB. RF receiver bandwidth: approximately 1 MHz for each channel. RF receiver signal resolution: up to 32 bits. It shall be capable of simultaneous receive capability with channel independent technology or highest number of channels. Computer System: It shall be based on a high-end, latest generation and fast multi-processor computer, with preferably 64-bit processor architecture and multi-tasking capability. It shall include large RAM, preferably 32 GB. It shall have multiple Hard Disk drives of large capacity (300 GB) for System Software and data storage. It shall have an image storage capacity of at least 25,000 images of 256 x 256 image matrix. It shall include CD-RW for archiving and storage of images It shall be fully DICOM 3 compliant with all standard DICOM specifications with interface to the hospital RIS/PACS network/system. Operator Console and Workstation: 18” or more - High Resolution LCD Colour Monitor with 1280x1024 screen matrix display. Ergonomically designed. Mouse and Alphanumeric Keyboard. Two-way intercom system for patient communication. Patient Accessories: Complete set of patient Accessories (Table Mattress set, knee support, positioning wedges, set of sands bag, set of fixation straps, head/leg support) Wireless VCG. Wireless Respiratory Wireless PPU. Coils: High Quality Quadrature /Phased array coils or equivalent Body Coil, Head /Neck/ Spine coil which can be opened for fast and easy positioning or equivalent, Head / Spine coil which can be opened for fast and easy positioning or equivalent, Set of flexible coils suitable for imaging the shoulder, extremities and other parts. A set of dedicated TMJ, wrist and shoulder coils or equivalent. Quadrature / Phased Array spine coil for imaging the chest/abdomen/pelvis/thoracic and lumbar spines or equivalent. Breast MRI Coils Coils to have built-in ADC in each coil to ensure optimum SNR (Signal to Noise Ratio). Software: Sequences: Spin Echo (SE), Inversion Recovery techniques (IR and STIR), 2D gradient Echo sequences: FLASH, FISP and PSIF, 3D FLASH / FISP, Fast Field Echo (FFE),

		2D / 3D Turbo Spin Echo (TSE), 2D / 3D TURBO-IR, 2D / 3D TURBO FLASH, 2D / 3D Time of flight. Fluid Attenuation Inversion Recovery (FLAIR). 3D imaging for Volume Acquisition. Simultaneous Excitation technique (SIMEX). Magnetic Resonance Angiography using Time of flight method and dedicated Maximum Intensity Projection (MIP) to create the angiograms. Contrast Enhanced Angiography (CE-Angio) with post-processing software for quantification of contrast enhanced imaging. 2D / 3D Phase contrast angiography. Flow quantification. Echo Planar Imaging (EPI) techniques. Fat/Water Separation techniques. Respiratory Gating. Cardiac Gating. A complete package for Magnetic Resonance Spectroscopy (MRS) and Functional Magnetic Resonance Imaging (fMRI). Artifact Reduction Techniques: Flow Compensation to suppress artifact induced by CSF flow. Regional Saturation to suppress artifact due to Inflowing blood. Fold over suppression. Manual Start for breath hold acquisition. Should have high Gradient Linearity or Gradient Distortion Correction (GDC) for high geometric fidelity. Viewing and Processing: All extensive range of image viewing and processing functions should be able to perform with direct mouse control. Filter for improved image appearance by suppressing noise. Cine/image review/movie functions. All options, accessories and software packages related to Oncology and / or Paediatric applications should be quoted. Sequence type, repetition time (TR), echo time (TE), slice orientation, body weight. Images, Sound Pressure Levels. Software selection, patient information/data and quality control information. Control panel should be located near the MR console, UPS for the computer shall be included. Phantoms: For Image Quality audits and monitoring. Remote Diagnostics: Remote on-line support functions for service and also applications shall be provided. MR Compatible Music system, Two screens NON-MAGNETIC TOOLS: Handheld Metal Detector, Non-Magnetic Wheel Chair, Non-Magnetic Fire Extinguisher The Contractor to specify spare parts covered in the purchase quote and the time frame for cover e.g. one year etc. ☐ Yes ☐ No ☐ NA ☒Planned Plans and layout to be provided upon request so as to determine dimensions and size Relative Humidity below 90%, Temperature between 20-40 degrees C Layout review and plan (Construction and Contractor). Predefined requirements prior to shipment Complete pre-installation site preparation inclusive of: Installation of: Chiller RF Faraday Cage With complete finishing including: RF cage flooring False ceiling Lighting Air conditioning ducting (non-magnetic)

		All such installations shall be delivered and installed by the Construction / Contractor and coordinated with the civil and electromechanical contractors as required. Contractor shall deliver all necessary equipment and server cabinets, control console desk (with two operator chairs) and cabinet or cart system for safely storing MR coils. Contractors may inspect installation site prior to bidding their offers. Warning lights (interlocked with system's scanning-on as necessary) and warning signs shall be installed by the Contractor in accordance with international and local regulations. Manufacturer/supplier to perform installation, safety and operation checks before handover. Acceptance tests to be specified and local clinical and technical staff to verify proper and full functioning of device. On-site training to be provided to end user, biomedical engineer and Radiation Safety Officer. Information to be provided by manufacturer/supplier, e.g. cleaning, disinfection/sterilization method (for reusable devices). One year warranty Specific equipment for needed for calibration or testing purposes must be specified. Advanced maintenance tasks required shall be documented, with details of maintenance support from manufacturer/supplier. Comprehensive Contract 7 years Spare Parts availability is mandatary Operating and service manuals (language/s to be specified) including Lists of important spares and accessories - with their part numbers and list of equipment and procedures required for calibration and routine maintenance. Documentation must also show recommended procedures for disposal and any probable hazards to the environment and/or community. Safety Data Sheets Quality Logs Certification of product and quality and safety checks ISO 13485: Quality Management System ISO 14971: Risk Management System. Apply to categories of devices, e.g. for Electromedical devices IEC 60601-1 (General requirements for basic safety and essential performance), IEC 60601-1-1-1 (Collateral standard: safety requirements for medical electrical systems) and IEC 60601-1-2 (Collateral standard: Electromagnetic compatibility - Requirements and tests). Apply to specific devices, e.g. IEC 60601-2-19 (Particular requirements for the basic safety and essential performance of infant incubators), ISO 10079-1 (Medical suction equipment), etc. Related standards for device in relevant regulatory jurisdiction (Kenya)
2	MRI Compatible Anesthetic machine with ventilator and monitor	Machine should be constructed with sturdy frame of medical grade material / durable material having one drawer /shelfs, mounted on 4 antistatic wheels, with top shelf for keeping the monitor. Should be MRI Compatible Anaesthetic machine for use in MRI Suite (1.5 and 3.0 Tesla). Integrated Magnetic Field Strength Monitor System should be FDA approved or have European CE Gas System: a) Separate cylinder and pipeline pressure gauges for Oxygen (O2), Nitrous oxide (N2O) and Air. b) Provision to attach pin type cylinders one each of O2 and N2O. c) Provision for non-interchangeable gas specific central pipeline inlet for O2, N2O and Air with connecting hoses. d) Dual cascaded rotameter tubes (flow meters) for O2 and N2O, and a single tube for Air. e) Oxygen shortage and failure indicator

		f) N2O supply should be immediately shut off when O2 pressure drops or interrupted. g) O2 ratio controller/inbuilt hypoxic guard to ensure minimum supply of 25%of Oxygen at any given time. h) The breathing system should have outlet for excess gas / pressure relief valve, semi-close mode and mounting for double /single chamber circle absorber.
3	MRI Compatible Injector	Injection Volume: max 200 ml per piston, selectable partial injection volume 0.1-200 ml, programmable in 0.1 ml increments Keep Vein Open: 0.5 ml every 2 minutes Injection Pressure: max 21 bar, programmable from 5 to 21 bar in 1 bar increments Flow Rate: 0.1 - 10 ml/s, programmable in 0.1 ml/s increments, optional selection of fl ow rate or phase duration Number of Phases: 1 to 6 phases Filling Speed: 1 - 5 ml/s, CM/NaCl, programmable in 1ml/s increments Injection and Phase Delay: 1-255 s Injection Profi les: 80 profi les, Remote Control touch screen remote control including power supply FB886 Option 2nd Remote Control option for the use of two remote controls with holder for remote control = Software option enables the use of pre-fi lled syringes via = Adapter for the option "Empty Syringe" (64 ml NaCl) = Adapter MultiHance for the option „Pre-Filled Syringe“ – MultiHance = Adapter Long for 20 ml syringe= Keep Vein Open: every 2 min
4	MRI Compatible syringe pumps	• Should be US FDA or CE or equivalent (Notified body) approved model. Manufacturer should be ISO 9001 & ISO 13485 certified for quality standards. • Shall comply to ISO/IEC 60601-1-2, Electro Magnetic Compatibility (EMC
Lot 13: Radiation Oncology		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Brachytherapy Table	Operating table suitable for use in theatre for major operations. It should be capable of performing lateral tilt, up-down movement, trendelenburg and reverse trendelenburg position, back section refraction and kidney bridge. The movement should be electrohydraulic with manual option control system 1. Composition 1.1. Main unit 2. Physical Specifications 2.1. Main Unit 2.1.1. Table top Approx. Length 2000 X width 600 mm 2.1.2. X-ray Permeable 2.2. Head rest Detachable 2.3. Leg rests Detachable/separable 2.4. Material of main unit Made of scratch resistant, hard wearing and easy to clean material 2.5. Height of table top Adjustable, mechanical operated, 600mm to 1100mm 2.6. Table top movements 2.6.1. Trendelenburg Forward: 25o, Reverse: 25o 2.6.2. Lateral – tilt ~20o both to the left and right 2.6.3. Back- section refraction 90o 2.6.4. Table top turn 180o 2.6.5. Main unit movements Mobile with antistatic castors with braking mechanism 2.7. Maximum load weight 250 Kg 3. Accessories To be provided as startup kits. 3.1. Mattress High density type easy to clean, 3” thickness with 4 sections, breathable, waterproof that does not stick to the table 3.2. Arm board with mattress 1 piece 3.3. Shoulder support with pads 2 pieces 3.4. Foot board 1 set

		3.5. Knee crutches 2 pieces 3.6. Screen frame 1 piece 3.7. Body support with pads 2 pieces 4. I. V. pole, adjustable height 1piece Orthopedic attachment 1 piece 4.1. Manufacturing standards ISO 13485, ISO 9001 4.2. Product conformity standards EU-93/42/EEC, CE and FDA approved
2	Brachytherapy Unit	Systems designed to perform radiotherapy by administering a radioisotope directly into tissue (e.g., tumor, intravascular) to prevent or reduce tissue proliferation. These systems typically include a radiation delivery unit, a source safe, applicators, and controls. Brachytherapy systems (e.g., remote after loading systems) are used to treat cancer and other types of abnormal proliferative tissue (e.g., intravascular restenosis), minimizing the radiation dose to surrounding tissue and avoiding hospital staff exposure to radiation. 1. General Specifications Brachytherapy unit complete with Planning system • Radioactive Source – Brachytherapy Unit • Iridium-192, metallic • Cylindrical configuration Source cable • Iridium-192 pellet- HDR: 0.6 mm diameter, 3.5 mm active length; PDR: 0.6 mm diameter, 0.5 mm active length • Capsule- HDR: 0.9 mm diameter, 4.52 mm length; PDR: 0.9 mm diameter, 2.97 mm length • Nominal activity- HDR: 370 GBq (10 Ci)*; PDR: 37 GBq (1 Ci) • Air Kerma Rate (HDR): 0.063 Gy/h (±5%) for 555 GBq at 1 m • Iridium-192 source encapsulated in stainless steel • Capsule welded to a flexible stainless steel cable • Distance from distal cable tip to the beginning of the active pellet- HDR: 0.67 mm; PDR: 2.07 mm (To ensure consistent “cable tip to source center” distance for HDR and PDR sources) • Cable diameter: 0.9 mm • Maximum extension length: 130 cm • The most distal 200 mm section of the cable is an ultraflexible cable. • Source manufactured according to ISO1677, ISO2919, ISO/TR4826, ISO9978 resulting in ISO source classification: C63333 • Electrical safety of medical devices standard IEC 60601-1 • Collateral standards of IEC 60601-1 specific to afterloaders IEC 60601-2-17 • IAEA and US DOT-7A. Source placement • Treatment channels • Dwells per channel • Step size: default 5 mm, programmable from 1-10 mm, in 1 mm increments • Minimum radius of curvature at the distal end of the catheter: 1.3 cm in a ring probe of diameter 2.6 cm and in a 5 Fr bronchial catheter • Method of source movement: commences at most distal dwell positions and steps back Afterloader shielding • Safe material: Tungsten • Maximum storage capacity of safe: 555 GBq (15 Ci) • Maximum Air Kerma Rate 1 m from afterloader: does not exceed 3 µGy/h for maximal load • Radiation shielding: Conforms to International • Electrotechnical Commission requirements (IEC 60601-2-17) ICRP codes and applicable NRC standards in the USA Room shielding • Controlled by local codes and conditions of operation • Approximately 4 cm of lead or 35 cm of concrete is generally required Electrical Power Requirements • System power rating: 240V / 50 Hz models available; 100 VA • In the event of a power failure, the afterloader is powered through the internal batteries to allow the source to retract to the safe. Environmental requirements • Operating temperature range: +15 to +35°C • Humidity range: 30% to 75% (non- condensing)

		• 36.1.3 Air pressure: 70 kPa - 110 kPa • 36.1.4 Weight & dimensions 130 kg 105 cm H x 51 cm W x 57.5 cm D Equipment classification • Type of protection against electric shock: CLASS 1 • Degree of protection against electric shock: TYPE B • Degree of protection against harmful ingress of water: IP 40 • Equipment not suitable for use in the presence of a flammable anaesthetic mixture with air or with oxygen or nitrous oxide • Class of operation: CONTINUOUS Safety equipment (emergency container) • Emergency source container is designed to hold most applicators directly • 38.1.2Minimum shielding: 26 mm lead • 38.1.3 Minimum diameter (inner plastic container): approximately 60 mm • 38.1.4 Container height (internal): 270 mm Radiation source and transfer mechanism: i. The system should be capable of using Co-60 / Ir-192 source. ii. Mention the source half-life and clinical working life Co-60/Ir 192 source during supply. Minimum half life of Co60 should be 5year and 3 months for Ir 192. iii. Mention the diameter of source and its characteristics of clinical usage, transfer guarantee, declaration to supply Co-60 and Ir 192 for a minimum period of 10 year and usability. iv. The source cable connection must be tested to withstand maximum number of transfers per source. The source transfer guarantee must be high to ensure optimal usage of each individual source. (Higher is preferred) v. The source cable must be a multi strand type and must be able to negotiate treatment curvature of 1 cm radius. vi. The source cable should have a safe movement (forward/backward) with a source positional accuracy of ±1 mm and must be controlled by stepper motors. vii. The source drive out length from indexer should be mentioned along with variable step size (Smaller is preferred) and treatment length (higher is preferred) viii. The source transfer guarantee must be enhanced in such a way that each source – must be utilized for an extended period of time (higher is preferred).Provision for manual retraction of source in the event of power failure to be available. ix. In case of source offered is Co-60 then 2 nos. based on the useful clinical life/if Ir192 then 30 sources be offered including all the charges, disposal and including the import duty charges for use at hospital for a period of min 10 years. x. The source should be dispatched as and when required by the hospital and all paper work relating to the source import has to be provided to the hospital for necessary approval. xi. The cost of radioactive source for second five years should be quoted separately. xii. Specify that insurance, Freight and cost of the sources for both onward and return of used source should be borne by the company. The clearance and transport of the source and the reexport/disposal of the decayed sources for a period of 10 years must also be included in the offer with Guarantee letter from the company to take back the decayed source should be included.A high dose rate remote after loading Brachytherapy system capable of performing intracacitary. Intra luminal, interstial, intra operative and surface mould application. i. The HDR system should be microprocessor based with PC control unit. ii. The HDR system must be from a well Established company with a Documented history of Reliability. iii. The HDR system manufactures should have ISO/FDA/CE/Type approval radiation board sytem must have a “check cable” that automatically checks the operation of the complete system prior to treatment, the check cable must also be possible to use as a “Dummy” source to allow simulation of particular source locations. v. The system needs to be flexible for use in all type implants and the source integrity must be certified for maximum source transfers. Detailed specifications of HDR system

		a) Treatment Unit – HDR i. Treatment unit should be on wheels for easy mobility within the room. ii. Treatment unit should be have telescopic head to adjust for various heights/separate stepper motors to control the dummy check cable and radiation source cable. Patient treatment should be radiolucent for X ray imaging. iii. A safe to contain the radiation source which complies with international safety regulations. iv. Treatment unit should have a integrated radiation detector (GM tube type). v. Multichannel indexer with a minimum of 20 channels and above having an automatic/optical verification of channel number and applicator connection should be offered. vi. The source must be retractable in the event of an emergency/power failure by following methods: • By an independent DC motor. • Manual source retraction through hand crank. Also status to be displayed under power failure (using backup source). vii. Battery back-up and a detailed circuit for checking the battery condition viii. Mention the safety features and also measure to be taken during source struck. b) Control Unit i. Stand alone and independent PC based control unit with colour monitor, keyboard, mouse, printer for hardcopy (capable of printing entire treatment protocol), built in audio card, network card and back-up media. ii. Control unit should have user friendly console and a graphical user interface and should contain an extensive reporting facility, iii. Control unit software should run on Windows Application. Software to be upgraded as and when its released by manufacturer. iv. Control unit should have a self testing including battery, indexer/RAM. v. Control unit must allow storage of multiple standards and keep track of patients for fractioned treatment. vi. Access must be limited to authorized users with password protection. vii. The treatment times must be automatically corrected for the decay of the source. viii. Wide treatment length should be covered with adjustable minimum step source size. ix. Display of Total reference Air Kerma and dose. x. The control unit should contain: • An inbuilt protection circuit to prevent treatment without proper applicator connection and proper indexer locking • Online extensive display of status codes with an indication of the action required. • Large patient database should be provided with a backup option to an external storage device. • Control unit should contain an built-in log book and all events should be recorded. □ The Brachytherapy system supplied should be provided with all treatment licenses and connectivity licenses to Record and Verify System. Treatment Planning System: • The HDR Brachytherapy system should have a dedicated 3D treatment planning system compatible to HDR unit so that the planning can be transferred directly network for execution to the independent HDR machine control computer linked to it. • The Radiotherapy treatment planning system should be fully computerized, integrated system having hardware and software to perform all kinds of Brachytherapy planning calculations, isodose plotting and display of patient files and other related parameters. Software to be upgraded as and when it's released. Software should include dose optimization. Hardware: i. Workstation

		The treatment planning system should have a separate computer (in addition to the control of the HDR Brachytherapy machine) and should have a most modem graphics workstation working at 3GHz speed or higher speed with CPU, fast processor with min 2 GB of Ram memory and it should have a Hard disk with large storing capacity of 500 Giga Bytes of more of memory and external mass storage unit of 1 Tera Bytes of External hard drive & CD – R&W with keyboard and must. It should have all Brachytherapy dose calculation Algorithms supported by the vendor. II. Digital Radiography should be available with unit. iii. Display/terminal The system should have at least two display monitor 19" (TFT/LCD screen with high resolution for good Visualization) for planning and contouring in different terminals. iv. Printer/Plotter The system should have a fast multi – colour plotter to print out various data's and Isodose curves. It should be possible to print out entire treatment protocol. v. Ports The system should have the 1 parallel, 2 serial and Ethernet port for Networking and SCSI ports to connect SCSI devices like scanner, magnetic tape drive and DVD/CD drive
3	Multiple Energy Linac (High Energy Linear Accelerator)	Radiotherapy systems designed to produce electron beams of varying energies low to high-energy photons using a linear accelerator (linac) as a generator. A linear accelerator consists of a modulator, an electron gun, a radio-frequency power source (either a magnetron or a klystron), and an accelerator guide. The range of the energy levels provided by linacs is very wide, from 4- to 6-megavolt (MV) photons for low-energy units to 25 MV photons and up to 22 mega-electronvolt electrons in high-energy units. These systems also include control units, filters, and collimators. Low-energy linear accelerator highenergy systems are used to treat deep-seated neoplasms and tumors of the pelvis and thorax Linear Accelerator technology requirements: The Machine must have the latest technology such as: 1. Three dimensional Conformal Radiotherapy (3D CRT) 2. Intensity Modulated Radiation Therapy (IMRT) Photon Energies and Beam data photon energy- Low: 6MV; High: 15MV Electron energies :- 6MeV to 18MeV with minimum of five energy ranges. Dose Rate: Variable in steps. Should quote the maximum dose rate available with the Vendor for both photon beams. Arc Therapy facilities: a. The accelerator must be able to deliver a preset dose over a preset arc of 3600 or any fraction thereof. A range of variable dose rates should be available. b. The maximum variation in integrated dose delivered over an arc between 450 and 900 shall not exceed ± 3% or 1MU, whichever is greater. The maximum variation in integrated dose delivered over any arc of 900 or greater shall not exceed ± 2% or 1 MU, whichever is greater. c. Gantry rotation shall be possible clockwise and counter clockwise for arc therapy. The MU/degree shall automatically be computed. Field Size: Specify the maximum percent difference of average dose for the longitudinal and transverse axes of the field at 100cm SSD and 10cm depth at four orthogonal gantry angles for all field sizes from 10 cm2 to 40cm2. Wedge Systems: A dynamic/virtual/ motorized wedge system providing various angles must be provided. The hard wedges with 15,30,45 and 60 degrees must also be provided as optional. Patient table: The patient table must be of extended travel range providing a lateral travel range of + 25 cm a longitudinal travel range of 150 cm and a vertical travel range of at least 100cm. The patient table should also have the following features:

		• Fully carbon fiber table top. • Emergency off buttons on the both sides of couch. • A complete line of indexed Immobilization accessories. Collimator Jaws: • Both X and Y collimator should be independent and should have asymmetrical collimation. • Automatic delivery of multiple Co-planner fields in sequence should be possible in the Linear Accelerator. Radiation Leakage • Radiation leakage limits shall be within appropriate regulatory agency guidelines as follows. • Photon leakage. The photon leakage rate at any point one meter from the target outside the cone defined by the primary X-ray collimator shall be less than 0.1% of the absorbed dose at the isocenter. Collimator transmission. The movable collimators shall not permit transmission of radiation exceeding 0.5% of the central axis dose at Dmax measured in air. • No surface accessible to the operator should be radioactive such that the dose rate in contact with that surface exceeds 50 mrem/hr - Portal Dosimetry package should be provided. Oncology Information and networking system 1. Complete networking system 2. Record & verify system 3. Transfer of all parameters from simulator & treatment planning system of the Accelerator for automatic treatment setup & deliver should be provide 4. Transfer of Fluoroscopy images from simulator to portal imaging system for Comparison should be provided. 5. Transfer & Execution of MLC position parameters for normal treatment & IMRT treatment including step & shoot & sliding window (Dynamic) techniques from Treatment planning system should be complete and full networking system between Linear Accelerator, HDR Brachytherapy unit, TPS, MLC, EPID and CT scanner should be provided. 6. Prospective & retrospective 4D CT image acquisition for performing respiratory gated radiotherapy. 7.The linear accelerator vendor would provide one set of hardware of the respiratory management system and Photon Ionization Chamber • A transmission ionization chamber shall be used for the photon mode. The chamber shall incorporate completely separate collection electrodes consisting of two plates for dose monitoring and a quadrant plate for field symmetry Dual channels • The dosimetry system shall utilize two completely independent channels for monitoring accumulated dose (i.e a primary and a redundant channel.) A dose rate channel and a channel for monitoring differential field symmetry shall be provided. The redundant channel will terminate an exposure of no more than 40 MU higher than the machine setting. The system shall also provide a backup timer with a minimum significant time setting of 0.01 minute. The backup time shall be automatically calculated and set at a user specified value above expected duration of the treatment. Monitor chamber • The dose monitoring chambers shall be sealed and shall operate independent of temperature and pressure. The dosimetry electronics shall incorporate circuitry to permit interrogation of the accumulated dose, dose rate and symmetry channels prior to each patient treatment. This interrogate function shall check cable continuity, electrical calibration and interlock trip levels before each treatment. All dosimetry and patient safety – related interlocks must be sensed and controlled by hardware. Primary software sensing and control of safety-related interlocks is not acceptable. • The dosimeters shall be reproducible to within ±2% or 1 monitor unit, whichever is greater, at any fixed gantry angle form 0 to 360 degrees.

		• The linearity of the dosimeters shall be ±1% or 1 monitor unit, whichever is greater, for accumulated doses between 50 and 999 monitor units. Back up counter • The integral dose shall be retained on a counter which indicates the monitor units delivered to that time with the unexpected loss of power or malfunction of the accelerator or dose measuring system. The dose shall be retained for at least 20 minutes after power interruption. Dose rate • The reproducibility of the dosimeters shall be ±1% or 1 monitor unit, whichever is greater, at a fixed dose rate. With variations in the dose rate from minimum to maximum, the reproducibility of the dosimeters shall be ±2%. Please specify the dose rate range over which the latter specification is valid. Energy • The dosimetry system shall monitor the beam energy and shall terminate irradiation should energy change by more than ±3% from the nominal 6MV value. -Last man outswitch to be provided to ensure safety. 2.2 User's interface a. The main Host computer should have a 19 inches or more high resolution LCD TFT color monitor with 1024 x 1024 matrix display b. The system should have image storage capacity of 100 GB for at least 2,00,000 images in 256x256 matrix. c. The reconstruction speed should be at least 1300 or more for full FOV 256 matrix. d. The main console should have facility for music system for patient in the magnet room. The system should have DVD / CD / flash drive archiving facility. The system should be provided with auto DVD writer. e. Two way intercom system for patient communication. f. MRI System should be DICOM ready in all parameters with no additional requirement of license for connectivity to any PACS/HIS and Radiotherapy treatment planning system. Multileaf Collimator (MLC): • A multileaf collimator shall be provided with multiple leaves giving wide field coverage • The isocentre resolution of the leafs should be 1 cm and less • MLC should be capable of executing all IMRT Treatments • MLC system must be capable of performing all types of IMRT treatments such as multiple static fields, step and shoot, dynamic treatments. • All accessories including hardware and the necessary licenses needed for IMRT treatments in Linear accelerator should be offered. • Maximum field size shall be no less than 40 x 40 cm. • X- ray transmission through leaf shall not exceed 4% of the central axis dose at Dmax, and X- ray transmission shall not exceed 0.5% of the central axis dose at Dmax for the smallest rectangular field outside a shaped MLC field. This specification shall apply to both photon energies. • Positional accuracy shall be netter than +1% • Time for all leaves to travel from fully opened to fully closed shall be no greater than 14 seconds, as timed from when the leaves start moving. Leaf velocity shall be atleast 1.54 cm /second. IGRT Systems • Latest hardware and software should be provided for IGRT system Latest flat panel detectors should be provided (Please specify resolution) The system must be capable of performing MV-MV imaging and Fully integrated with latest R&V system and TPS. Digital Portal Imaging: • The portal Imaging system shall replace the necessity of port films, therefore the system must be capable of producing Images at 6 MV

		photon energy • The system shall be using latest solid state amorphous silicon electronic portal imaging device. • The imaging system should be retractable motorized counterweight mounted supports arm fixed on the counterweight, should be able to take images at any gantry angles from control room. • Removable type portal imaging systems will not be preferred • Portal imaging system should be fully integrated with the Linear accelerator gantry Software and/ or standard of communication(where ever required The system must provide software to perform the following functions: i. Operating System The system should have a latest enhanced operating system which offers multitasking, multiuser facilities.
4	Radiotherapy Treatment Planning System	Radiotherapy systems designed to produce electron beams of varying energies low to high-energy photons using a linear accelerator (linac) as a generator. A linear accelerator consists of a modulator, an electron gun, a radio-frequency power source (either a magnetron or a klystron), and an accelerator guide. The range of the energy levels provided by linacs is very wide, from 4- to 6-megavolt (MV) photons for low-energy units to 25 MV photons and up to 22 mega-electronvolt electrons in high-energy units. These systems also include control units, filters, and collimators. Low-energy linear accelerator highenergy systems are used to treat deep-seated neoplasms and tumors of the pelvis and thorax Linear Accelerator technology requirements: The Machine must have the latest technology such as: 1. Three dimensional Conformal Radiotherapy (3D CRT) 2. Intensity Modulated Radiation Therapy (IMRT) Photon Energies and Beam data photon energy- Low: 6MV; High: 15MV Electron energies :- 6MeV to 18MeV with minimum of five energy ranges. Dose Rate: Variable in steps. Should quote the maximum dose rate available with the Vendor for both photon beams. Arc Therapy facilities: a. The accelerator must be able to deliver a preset dose over a preset arc of 3600 or any fraction thereof. A range of variable dose rates should be available. b. The maximum variation in integrated dose delivered over an arc between 450 and 900 shall not exceed ± 3% or 1MU, whichever is greater. The maximum variation in integrated dose delivered over any arc of 900 or greater shall not exceed ± 2% or 1 MU, whichever is greater. c. Gantry rotation shall be possible clockwise and counter clockwise for arc therapy. The MU/degree shall automatically be computed. Field Size: Specify the maximum percent difference of average dose for the longitudinal and transverse axes of the field at 100cm SSD and 10cm depth at four orthogonal gantry angles for all field sizes from 10 cm2 to 40cm2. Wedge Systems: A dynamic/virtual/ motorized wedge system providing various angles must be provided. The hard wedges with 15,30,45 and 60 degrees must also be provided as optional. Patient table: The patient table must be of extended travel range providing a lateral travel range of + 25 cm a longitudinal travel range of 150 cm and a vertical travel range of at least 100cm. The patient table should also have the following features: • Fully carbon fiber table top. • Emergency off buttons on the both sides of couch. • A complete line of indexed Immobilization accessories. Collimator Jaws: • Both X and Y collimator should be independent and should have asymmetrical

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5	Radiotherapy/Ct Simulator	Radiotherapy simulation systems that perform radiographic and/or fluoroscopic imaging to determine, document, and externally mark the area to be treated. These systems combine technologies from both therapeutic and diagnostic radiology; they consist of a radiographic CT fluoroscopic simulator that includes an x-ray system and a mechanical system (collimator, gantry, table, controls) that mimics the movement of a linear accelerator and/or a cobalt unit CT scanner should have 1. Whole body 2. Multi-slice scanner with very fast scanning time (minimum 16 slices at a time) 3. Ability to perform large studies with narrow slice thickness for production of good quality DRR 4. High heat capacity anode for larger data sets 5. Directly cooled anode preferable (to eliminate delay in anode heating & enable fast acquisition scans) 6. Wide aperture preferably 78 cm or more 7. Scanned Field of View (SFOV) > 60 cms 8. Number of detectors in the x-y plane to scan the full 60 cm field of view 9. Extended reconstructed FOV (RFOV) of >70-80cms 10.True SFOV to be provided 11.Gantry • Should have tilt of ± 30 degrees • Gantry must support rotations of 0.5 second or less 12.Provide Internal-positioning lights 13.Provide facility for voice and visual breathing instructions 14.The gantry must have laser positioning lights with a positioning accuracy of ± 1mm or better. 15.Effective and accurate connectivity between CT simulator and RTPS (Radiotherapy treatment planning system) - essential X-ray System a) High frequency X-ray generator with power rating of at least 80kW or more. b) This should in the range of 90 kV to 140 kV or better. c) The mA range must be from 20 mA to 600mA or better depending on kV, with step size of 5mA or better. d) Heat capacity: > 7 MHU e) Peak Anode heat dissipation rate of at least 700 kHU / min or better. f) X-ray tube should have dual focal spot. Please mention the size of the focal spots g) X-Ray tube with anode heat storage capacity of at least 7 MHU h) Automatic selection of the focal spot should be possible i) Optimizing x-ray tube voltage (kV) to patient size and shape should be possible. j) The adjustment of tube current to patient attenuation, but the adjustment of kV protocol optimization. Detectors a) The detector system should be a high performance, low noise, high data density, active response data acquisition system. b) The detectors should be solid state. c) It should be free from repeated calibrations. d) Number of Detector elements: to be specified (number per row to be mentioned) Scan parameters a) Slice thickness should be user selectable from 1 mm to 10 mm. b) KV: 90 - 140kV or better

		c) mA: 20 - 600mA in increments of 5mA or better. d) Scan time of 0.5 second or less for full 360 degree rotation. Other options (sub-second scan time) must be quoted e) Retrospective reconstruction should be possible on raw data files with change in parameters such as FOV. f) The following scanning modes should be possible: Scano-gram, Axial,Spiral. g) The scanogram length should be more than 1500mm long and the width must be at least 600mm. h) It must be possible to obtain the scanogram from AP or PA or left to right or right to left directions. i) The accuracy of slice prescription from the scanogram should be ± 0.5mm or better. j) The accuracy of distance measurements in the scanogram. (taken at isocenter distance) must be better than ± 0.5mm or better than twice the pixel dimension. k) Accuracy of slice location < 1mm. l) Reference scan should be possible on an arbitrary slice with the proposed treatment volume. m) High contrast spatial resolution: It should be at least 15 lp/cm maximum at 0%MTF. n) Low contrast detestability: 5mm or less @ 0.3% using 20cm CATPHAN on 10mm slice thickness. o) The CT number accuracy must be better than ± 4 HU for water and ± 10 HU for air. Necessary phantoms to check the spatial resolution of the scanner should be provided. A special phantom to check the electron density – HU relationship for the different body tissues must be provided. Image Quality a) The reconstruction matrix must be 512 x 512 or higher. The reconstruction time should be as less as possible. Simultaneous scanning and reconstruction should be possible. It should be possible to do: b) Spatial resolution (minimum parameters): • High contrast: better than 15 line pair per centimeter (at 0 % MTF) & • Low contrast: 5mm at 3% resolution c) Simultaneous scanning & routine analysis. d) Simultaneous scanning & archiving and / or hard copying and e) Simultaneous scanning and transfer to second console / workstation. f) The system must have automatic mA control software that automatically adjusts mA for patient size, adjust mA along the z-axis, modulates mA during rotation. Spiral Parameters a) Different selection of pitch should be possible, in 0.1 increments. Please mention the pitch available. Mention the single run coverage and the table scannable range. b) Inter Scan Delay in different group of spiral should not be more than 5 sec. c) Intra-plan delay of 5 sec or more should be possible d) Retrospective reconstruction should be possible on raw data files with change in parameters such as FOV e) The following scanning modes should be possible: Scanogram, Axial, Spiral, Cine and biopsy mode Pilot scan: The pilot scan field size should be more than 1500 mm long. The reconstruction time for pilot scan should be 3 secs for a 512 matrix and 5 secs for a matrix of larger size Reference scan should be possible on an arbitrary slice within the proposed treatment volume Specify the table speed to the scan in terms of Z-axis coverage. Couch a) The couch top must be a carbon fibre, flat bed type. It must be a Stateof-the-Art;indexed couch top matching the Medical College's linear accelerators' couch tops to facilitate accurate treatment delivery with ease and convenience.

		b) The couch top material must be carbon fibre with minimum dimensions of 235cm x 40cm, having horizontal moving range of 160 cm or more. c) The speed of horizontal movement must be variable with a maximum speed of at least 100mm per second. d) The accuracy (reproducibility) of the table tope must be better than ±0.25mm. e) The scannable horizontal range should be at least 150cm or more. f) The couch must meet the following vertical movement ranges: 55 to 95cm or better when outside the gantry; within the gantry it must have a moving range of 20cm; the minimum height outside the gantry must be specified. g) It must be able to take a maximum weight of 180kg or more without any change in stated performance specifications (like the positioning accuracy). h) Couch should be suitable for all kinds of radiotherapy immobilization system i) Laser system facility for radiation therapy placement of treatment fields and marking of radiation field portals on patient's skin is required without moving the couch. j) he The CT-simulator should have at least three laser sets for marking the field reference points, consists of a single overhead moving laser to project the sagittal plane, two moving lasers to project coronal plane and two moving lasers to project the axial plane. This should eliminate the need for manual couch movements. k) The CT scanner should also have conventional in-built lasers for positioning the patient along with all positional devices. Support for respiratory management system: a) Seam less integration to the interface of the linear accelerator respiratory management system. b) The CT scanner firm is required to provide all licenses and necessary interface hardware for seamless integration for the purpose of gated & IGRT radiotherapy. Computer Hardware a. 2a. Computer System for the CT scanner i. State-of-the-Art, high end main computer system, must be provided. With all the relevant software and manuals and licences for Virtual simulation CT scan RT planning 2D/3D/4D/IMRT/IGRT/ whole body SRS/SRT). ii. The connectivity, compatibility for the same to existing Radiotherapy Network and planning system in the department (i.e., Teletherapy (2D/3D/IMRT/IGRT/SRS/SRT) / Brachytherapy HDR/LDR) must be ensured by the CT sim vendor. iii. All necessary Licenses shall be provided or obtained by the vendor for ensuring the smooth operation towards Virtual simulation for (2D/3D/4D/IMRT/IGRT/ whole body SRS/SRT) is to be ensured by the vendor. iv. The system must have parallel processors; RAM size must be at least 4 GS or better. v. There must be two monitors in the console and they must be 19" TFT flat screen LCD monitors. One of these will be used for acquisition and the other will be used for review and processing. vi. The hard disk capacity of the main computer system must be at least 140GB or more. vii. In the hard disk meant for image storage, the number of uncompressed 512 x 512 images that can be stored should be at least 250,000 or more. The maximum possible hard disk capacity must be provided. viii. For archiving, DVD writer should be provided for providing copies of individual studies. Please supply 1000 rewritable DVD's. ix. All necessary accessory hard ware like UPS for computers, printers and consumables (DVD / DAT cartridges) to be specified and provided. b. The CT-Simulator system should be fully DICOM complaint and any other relevant image protocols meant for (i.e., Teletherapy (2D/3DjIMRT/IGRT/SRS/SRT) / Brachytherapy HDR/LDR). The DICOM/ /image should support the following: i. Dicom 3.0 Print service class as a user.

		ii. Dicom 3.0 Storage class as a user. iii. Dicom 3.0 Storage class as a provider. iv. Dicom 3.0 Send / Receive v. Dicom 3.0 Query / Retrieve service class as a user. vi. Dicom 3.0 Query / Retrieve service class as a provider. vii. Dicom compliance statement should be provided. A bi-directional speaker communication must be provided between the operator and the patient. Computer System for Moving Laser System a) The laser system provided must be 3 moving lasers for marking the isocenter without moving the table top. b) Following the isocenter localization in the CT simulator workstation, the isocenter coordinate will be sent directly to the computer system that is controlling the movements of the lasers. This computer in turn should drive all the lasers, so that without moving the table top, the lasers point to the isocenter. c) Complete quality assurance tool (as stated above) must be provided. d) The control computer system must be latest Windows based system with Pentium 4 processor or higher. Connectivity a. The entire CT Simulation system must be interconnected (all the workstations, laser systems, printers etc.) and must be integrated into the department's treatment planning system for smooth transferring of images (for Teletherapy (2D/3D/IMRT/IGRT/SRS/SRT) / Brachytherapy HDR/LDR) and DICOM-RT structures. b) The system should be networking with all radiotherapy treatment planning system in the department. Quality Assurance and Acceptance tests: a) All QA and Acceptance to be done before commissioning as per radiation borad / FDA guidelines b) All QA & Dosimeter, Maintenance tools (Hardware and software) to be provided c) Target localization: < 1 pixel Tolerance d) DRR accuracy: Ray line angular displacement < 0.1 degree tolerance e)Last man out switch to be provided to ensure safety.
Lot 14: Nuclear Medicine		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Immobilization Devices	1. General Description Immobilization devices for RT planning and positioning, foam positioners and plastic mold positioners. 2. Composition 2.1 Immobilization Devices 1 No. 3. Performance Specifications 3.1 Immobilization Devices 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer’s instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
2	Lead Aprons And Radiation Attenuating Gloves	Lead lining, comfortable design, adjustable closures
3	Radiation Shielding	Lead-lined rooms lead aprons

		lead glass windows radiation shielding barriers
4	Shielded Syringe And Needle Handling Devices	Shielded syringe shields, lead-lined containers, remote manipulation.
5	Radioisotope Generators	produce short-lived radioisotopes for diagnostic imaging. Radionuclide extraction system elution mechanism
6	Radiopharmaceutical Dose Calibrator	Suitable for measuring vials and syringes User-definable containers Future dose calculation Quality control tests for the Ionisation chamber: Stability, linearity and null effect Molybdenum breakthrough test Background subtraction Printing user-definable labels Touch screen control Minimum system specifications PC system with Windows XP or higher 1x RS-232 interface for the Ionisation chamber 1x USB interface for the optionally label printer
7	Gamma Camera (Spect Scanner	4.1.1. Be a variable angle dual-head SPECT digital gamma camera. Dual Head Digital SPECT Gamma Camera and Workstation Solution IAEA Specification Dated 09 Nov 2021 4.1.2. Voltage shall be 220V-240V. 4.1.3. At least two (2) workstations. Acquisition and processing shall be included. 4.1.4. Be fully compatible with the End-User's PACS/DICOM System if available. 4.1.5. Have high resolution parallel hole low and high energy collimators. Collimator cart/trays shall be included. 4.1.6. Shall include ECG trigger. 4.1.7. Have adequate connection and compatibility to colour and film printer. 4.2 Technical requirements: The System shall meet the following technical requirements and include: 4.2.1 Detectors: 4.2.1.1 Two rectangular detectors with NaI (Tl) scintillation crystals. 4.2.1.2 Detector crystal thickness of 3/8 in (9.5 mm). 4.2.1.3 Minimum UFOV of (38 to 40) x (51 to 54) cm. 4.2.1.4 At least 55 high quantum efficiency PMT per each head, characterized by improved energy resolution, magnetic shielding, and long-term stability, with 1 ADC/PMT. 4.2.1.5 The System shall be able to image at energies between 60-511 keV, including the possibility to acquire the data in multiple energy windows, both centered on photo-peak and offset. 4.2.1.6 Detectors shall be adequately shielded. 4.2.1.7 At least one of the two detectors shall allow for caudal/cephalic tilt. 4.2.2 Collimators: 4.2.2.1 One set of Low Energy (Tc99m) High Resolution collimators. 4.2.2.2 One set of High Energy (I-131) General Purpose collimators. 4.2.2.3 Collimator cart(s)/tray(s) to store the collimators offered shall be included or the possibility to store the collimators under the bed of the gamma camera. 4.2.3 Gantry: 4.2.3.1 The gantry shall support variable angle configurability of the detectors including 90° and 180°. 4.2.3.2 Gantry-mounted persistence display screen to assist in patient positioning. Dual Head Digital SPECT Gamma Camera and Workstation Solution IAEA Specification Dated 09 Nov 2021 Page 4 of 11 4.2.3.3 The System shall incorporate the ability to acquire contoured and uncontoured WB imaging, and circular and elliptical contoured and uncontoured SPECT acquisition. 4.2.3.4 Remote hand control for heads and table movement. 4.2.4 Patient table:

		4.2.4.1 The patient table shall be composed of a low attenuation pallet and a soft mattress. 4.2.4.2 The patient table shall have motorized vertical motion activated from the hand control. 4.2.4.3 Maximum patient load shall be at least 200 kg. 4.2.4.4 Whole body scan length shall be at least 200 cm. 4.2.4.5 Patient table shall allow examination of seated and standing patients and patients on wheelchairs. 4.2.4.6 Minimum patient table height shall be ≤ 60cm for easy loading/ unloading of patients. 4.2.4.7 Rear bed patient bed pallet support for minimizing of deflection. 4.2.4.8 Paediatric pallet and immobilization kit for paediatric patients. 4.2.4.9 Monitor for patient positioning display, and display of different acquisition parameters (time, count rate and information about detector and patient table position). 4.2.5 Safety features: 4.2.5.1 Emergencies stop buttons on gantry and patient table. 4.2.5.2 Patient contact sensors (touch plates) mounted on each collimator. 4.2.5.3 Gantry linked to the patient table and with necessary sensors to always recognize the patient table position to prevent accidental collisions. 4.2.6 Acquisition workstation: 4.2.6.1 Independent acquisition workstation to be placed in the control room, with hardware and software for acquisitions as well as for quality controls and image display. 4.2.6.2 LCD monitor of at least 19 in. 4.2.6.3 Acquisition of a wide spectrum of studies shall be possible, including: 4.2.6.3.1 Planar static. 4.2.6.3.2 Planar dynamic. 4.2.6.3.3 Planar Whole body. Dual Head Digital SPECT Gamma Camera and Workstation Solution IAEA Specification Dated 09 Nov 2021 Page 5 of 11 4.2.6.3.4 SPECT and whole-body SPECT. 4.2.6.3.5 ECG gated planar and SPECT. 4.2.6.3.6 Automatic body contouring system. 4.2.7 Processing workstation: 4.2.7.1 The processing workstation shall be of the latest technology, with adequate storage capacity and be separated from the acquisition workstation. 4.2.7.2 Full DICOM 3.0 compatibility (send/receive, print, archiving, query/retrieve, work list) with RIS/HIS and PACS connectivity. 4.2.7.3 CD-DVD RW drive with ability to archive data to CD and DVD in DICOM. 4.2.7.4 Capability of connecting external hard drive for archiving DICOM data. 4.2.7.5 Two (2) LCD color monitors, min. 24” and 1920x1200 resolution. 4.2.7.6 Adequate connection and compatibility to colour printer. 4.2.8 Processing software: Clinical processing software and comprehensive protocols for a wide spectrum of static, dynamic, WB, SPECT and ECG gated SPECT studies, including: 4.2.8.1 Gated cardiac blood pool imaging (MUGA); 4.2.8.2 Cardiac SPECT (Myocardial perfusion imaging) including phase analysis. 4.2.8.3 Cardiac gated SPECT (Gated myocardial perfusion imaging). 4.2.8.4 Cardiac fist pass. 4.2.8.5 At least on cardiac quantification software package e.g., Emory cardiac toolbox, Cedars Sinai or Michigan 4DM SPECT. 4.2.8.6 SPECT bone and general. 4.2.8.7 Cerebral perfusion imaging (SPECT). 4.2.8.8 Dynamic renal analysis (3 phase, diuretic). 4.2.8.9 Static renal analysis (DMSA). 4.2.8.10 GI analysis including 4.2.8.10.1 Salivary gland quantification. 4.2.8.10.2 Esophageal transit. 4.2.8.10.3 Gallbladder ejection fraction. 4.2.8.10.4 Gastric emptying. 4.2.8.10.5 Liver SPECT and functional imaging. 4.2.8.11 Lung ventilation and perfusion imaging.

		4.2.8.12 Quantitative lung analysis. Dual Head Digital SPECT Gamma Camera and Workstation Solution IAEA Specification Dated 09 Nov 2021 Page 6 of 11 4.2.8.13 Thyroid imaging quantification. 4.2.8.14 Whole body bone (99mTc and 131I). 4.2.8.15 Parathyroid imaging quantification analysis. 4.2.8.16 Kidney analysis. 4.2.8.17 Geometric mean. 4.2.8.18 FBP and Iterative reconstruction incorporating validated algorithms for measured and calculated attenuation correction, scatter correction, and compensation for detector system response. 4.2.8.19 Software for semi- and fully automatic image fusion with CT, MRI and PET DICOM images. 4.2.8.20 Software needed for QC and calibrations of the System, including: 4.2.8.20.1 Energy calibration (peaking). 4.2.8.20.2 Pulse height analysis. 4.2.8.20.3 Uniformity. 4.2.8.20.4 COR 4.2.8.20.5 Daily/weekly QC software 4.2.9 Ancillary equipment: 4.2.9.1 ECG trigger for acquisition of gated studies. 4.2.9.2 A means of support for the patient's shoulders and arms such as is used for myocardial SPECT. 4.2.9.3 Low-attenuation removable head support for brain SPECT permitting immobilization of the head. 4.2.9.4 Fast cardiac acquisition, with hardware and software to reduce patient dose and exam time to up to 4 minutes or at least 50%. 4.2.9.5 4-Quadrant bar phantom. 4.2.9.6 Jaszczak SPECT phantom. 4.2.9.7 Equipment and phantoms needed to perform manufacturer's defined quality control tests and calibrations, including: 4.2.9.7.1 Energy calibration (peaking) 4.2.9.7.2 PMT tuning. 4.2.9.7.3 Uniformity. 4.2.9.7.4 COR. 4.2.9.8 Color laser printer (at least 2400 dpi resolution) with network connection. 4.2.9.9 UPS (3000 – 5000 VA) to support the full System for adequate time to allow for proper shut-down of the System (at least 5 minutes in standby mode). Dual Head Digital SPECT Gamma Camera and Workstation Solution 4.2.10 Additional technical Requirements: The System shall meet the following technical requirements: 4.2.10.1 NEMA performance parameters: 4.2.10.1.1 Intrinsic flood field uniformity with 20% energy window and 20kcps for Tc-99m. 4.2.10.1.1.1. 4UFOV Integral ≤ 3.8%. 4.2.10.1.1.2. UFOV Differential ≤ 2.8%. 4.2.10.1.2 Intrinsic energy resolution (FWHM) at 140 keV:<10%. 4.2.10.1.3 Intrinsic spatial resolution (FWHM) with 20% energy window and 20kcps for Tc-99m. 4.2.10.1.4 UFOV: 4.2.10.1.5 FWHM < 4.1 mm. 4.2.10.1.6 FWTM <7.2 mm. 4.2.10.1.7 CFOV. 4.2.10.1.8 FWHM < 3.9 mm. 4.2.10.1.9 FWTM < 7.1 mm. 4.2.10.1.10 Intrinsic spatial linearity: UFOV: 4.2.10.1.10.1. Absolute: ≤ 0.5 mm. 4.2.10.1.10.2. Differential: ≤ 0.1mm. 4.2.10.1.11 Intrinsic Count rate at 20% count loss: ≥ 300 kcps. 4.2.10.1.12 System sensitivity (LEHR at 10 cm): >200 cpm/µCi 4.2.11 Optional Items and Accessories: The Contractor shall be able to supply and deliver the following items if so requested by the IAEA or the End-User: 4.2.11.1 One set of Medium Energy (In-111, Ga-67, Lu-177) General Purpose collimators. US FDA and CE approved

8	Glove Boxes And Hot Cells	Lead shielding, robotic manipulators, sealed transfer systems.
9	Patient Radiation Monitoring System	Badge dosimeters, data logging, dose reporting.
10	Pet-Ct Scanner	Patient Handling System • Width: 42 cm (16 in) • Length: 379 cm (149 in) • Weight: 693 kg (1528 lb) • Maximum Patient Weight: 204 kg (449 lb) • Horizontal Scan Range (Head First): 156 cm (61.4 in) • Horizontal Scan Range (Feet First): 182 cm (71.1 in) • Horizontal Bed Travel: 269.5 cm (106 in) • Vertical Bed Travel: 53 - 107 cm (20-42 in) • ACPlus: Standard Detector Assembly • Detector Material Lutetium: Oxyorthosilicate (LSO) • Crystal Dimensions: 4.0 x 4.0 x 20 mm • Crystal's Per Detector Block: 169 • Number of Detector Blocks: 144 • Photomultiplier Tubes (PMTs): 4 per block • Detector Ring Diameter: 830 mm • Detectors Per Ring: 624 • Number of Detector Rings: 24 • Total Number of Detectors: 24336 • Transaxial Field of View: 585 mm • Axial Field of View: 162 mm • Number of Image Planes: 81 • Plane Spacing: 2 mm Performance - Transaxial resolution (NEMA 2001) • FWHM @ 1 cm 6.5 mm (4.6 mm) • FWHM @ 10 cm 7.5 mm (5.8 mm) Performance - Axial resolution (NEMA 2001) • FWHM @ 1 cm 6.5 mm (4.6 mm) • FWHM @ 10 cm 7.5 mm (5.8 mm) • Sensitivity @ 425keV 4.9 cps/kBq • Uniformity 5% variatin • Count rate peak NECR 85 kcps @ 33kBq/c CT Volume Aquisition • Max. No. of CT slices 16 • Number of detector rows 24 • Elements 16128 • Channels per slice 1344 • Number of projections up to 2320 (1/360 • CT Transverse Scan Field 50 cm • CT Rotation times 0.42, 0.5, 0.75, 1.0, 1.5s • CT Temporal resolution down to 105 ms Tube Assembly • Maximum generator power 60kW • Tube DURA Akron Q • Tube current 28 - 500 mA • Tube voltages 80, 120, 140 kV • Tube anode heat storage capacity: 5.3 MHU • Focal spot size according to IEC 60 336: 0.5 x 0.7 mml7 and 0.8 x 1.2 mml7 Image Quality • Low-Contrast Detectability: Technique: 20 cm Ø Catphan 120 kV, 0.75 s, 10 mm) Spiral 5 mm / 3 HU / 19 mGy+ at 180 mAs Sequence 5 mm / 3 HU / 20 mGy+ at 190 mAs High-Contrast Resolution (Technique: 150 mA/ 120 kV, 0.75 s, 1mm) 0% MTF ± 10% 30 lp/cm 0.17 mm, 2% MTF ± 10% 24 lp/cm 0.21 mm
11	Thyroid Uptake System	Gamma probe, thyroid uptake probe, computer interface.
Lot 15: Cardiology		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	ECG (Electrocardiography)	Digital isolation technology and signal processing solution, digital filter Patient management, name and age and id. Detail analysis report. Multi-language options: German, French, Italian, Turkish Built-in lithium rechargeable battery, wide thermal printing system USB and LAN socket. Memory : Built-in memory or mini SD Memory card. Store more than 1000 pieces of archive Auto-measurement, auto-analysis, and auto interpretati1 2. Composition 2.1 ECG Machine 3. Performance Specifications ECG Machine

		4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
2	Exercise Stress Test (Treadmill Test)	1. General Description 1.1. System should be PC based 1.2. The system should be supplied with a compatible NIBP system 1.3. Should be capable of Integration with Gas Exchange equipment 1.4. Company should make spares available for the entire life of the system. 1.5. Quality certifications like ISO-9001:2008, ISO-13485:2012 or equivalent a) Fully interfaced - controllable from software and Non interfaced – Independent mode with Programmable Controller b) Controllable speed of 0.16-24 Km/H c) Variable inclination (grade) from 0 – 25% d) Adequate walking area ~ 1600 mm X 560 mm e) Controlled by optically isolated RS 232 or USB f) Heavy duty AC motor 4 HP (6 HP peak) drive g) Emergency stop feature h) Power requirement 240 V,50 Hz, 15 A 2. Specification for Acquisition / Stress Test Software 2.1. Automatic Arrythmia detection, print & capture : VBP and SVPB 2.2. Real time and retrospective J Point and isoelectric identification 2.3. User initiated and automatic capture of events 2.4. User defined Exercise Protocols 2.5. Real time Super imposition QRST Complex 2.6. Should acquire data from 12 Lead simultaneously 2.7. Should have notch filter around 50 Hz 2.8. Retrospective ECG & Arrythmia analysis even during Test 2.9. Scroll back during the Test 2.10. Should be capable of displaying real-time or stored ECG tracings. 2.11. Should display and regularly update ECG 12 leads, 12 medians, 1 expanded median, HR, BP, METS, Stage time, test time, protocol name, stage name, speed and grade of treadmill. 2.12. Should have automatic stage print out facility at the end of each exercise 2.13. Should have capability to display real-time ST running trend. 2.14. Should have ability to display trend graph for HR, BP, ST level, ST slope and J amplitude 2.15. Should have automatic detection, display, storage and review of rhythm events 2.16. Should be able to display ECG in various formats like 3 Lead + 12 Median; 6 Lead + 12 Median; 12 Lead + 12 Median 2.17. Should have base line correction (BLC) for stable baseline during test 2.18. Should run various test protocols like Bruce, Modified Bruce, Balke, Ellested, Naughton and user defined protocols. 2. Composition 2.1 Treadmill Stress Test Machine 1 No. 3. Performance Specifications 3.1 Treadmill Stress Test Machine 4 Quality standards 256 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil

3	Holter Monitoring	1. General Description Overall · CPU : 16 bit single chip · SRAM : 512 K Bytes · LCD Resolution : 112 dot × 72 dot (graphics) · Recording time : Continuous 24 hours · Internal Clock : RTC · Backup battery : Lithium battery Service life six (6) years or more · Patient EVENT recording : EVENT switch Records up to twelve (12) times / min · Recording media : Multimedia card (MMC-64) · ECG signal recording unit Number of recording channels : bi-polar 2/3 channels, unipolar 2/3 channel Input impedance : 10 MΩ or more CMRR : 60 dB or more Gain ratio : 300x (A/D input) : 300x (Monitor output) Frequency response : 0.05/0.67～40Hz Monitor output : 300 mV/1mV Quantifying bit number : 10 bits Sampling frequency : 125 Hz Dynamic range : ±5.00mV Minimum resolution : ±9.76μV · Pacemaker pulse detection Detection channel : given 1 channel · Acceleration sensor : 3 axial directions (static position · information detection) · Switches : 2 units (EVENT, ON◎ENTER) · Buzzer : 1 unit (separate excitation) · Power supply : one AAA battery · Dimensions (W×H×D mm) : 65×62×18 · Weight (g) : 78g (incl. battery and multimedia card) 2. Specifications of MMC Multimedia Card (MMC-128) · Memory capacity : 128 M Byte · Interface : MMC System Standard · Dimensions (W×D×H mm) : 24×1.4×32 · Weight (g) : 1.5g · Backup battery : Not required · Card type : MMC System Standard · Service life (Electrical) : Rewritable 100,000 times (Approx. 247 years / everyday use) · (Mechanical) : Endures Load/Eject 10,000 times (Approx. · 7 years/ 4-Load/Eject a day) · Error Rate : 52.8FIT · Mean Time Between Failures (MTBF): 18,914,171 hours · Vibration-resistance (Operating) : 15 Gpp (MAX) (Non operating) : 15 Gpp (MAX) · Shock resistance (Operating) : 500G (MAX) (Non operating) : 500G (MAX) · Acceptable card : Fukuda Denshi encoded. Commercially · produced multi media cards are not usable. Environmental conditions Operating environments Temperature : +10°C - +40°C (50°F to 140°F) Relative humidity : 30-85% (No condensation) Storage environments Temperature : -10°C - +60°C (14°F to 140°F) Relative humidity : 10-95% (No condensation) 2. Composition 2.1 Holter Monitor 1 No. 3. Performance Specifications 3.1 Holter Monitor 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 258 10.2 Equipment System Nil
Lot 16: General Theatre		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Blood/Fluid Warmers	Main Description 1.1. Delivers blood and intravenous fluid to the patient at norm thermic temperature at wide range of flow rates from gravity flow rates to 50-5,000 ml/hr. 2.1.1. Should be able to warm fluid/blood to a temperature range of 37-40 degree C 2.1.2. Should be able to maintain or warm fluid/blood at a flow rate of 2.5 L/min 2.1.3. Should have a digital temperature display of fluid 2.1.4. Should have inbuilt water tank/ dry in line heating system to warm the infused fluid/blood 2.1.5. Should have a warm water column or heated sleeve up to the patient end to maintain the temperature up to the point of entry into the vein 2.1.6. Alarms for disconnections, less water and over temperature 2.1.7. Should be useful for both in adult and Pediatric patients

2	Electrocautery Unit	Description: An electrocautery unit is a medical device that uses high-frequency electrical currents to cut or coagulate tissues during surgery, ensuring precise incisions and hemostasis. Specifications: Typically includes adjustable power settings, various modes (cutting, coagulation), and user friendly controls. 2. Composition 2.1 Electrocautery Unit 3. Performance Specifications Electrocautery Unit 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 189 10.2 Equipment System Nil
3	Electrosurgical Unit	1. General Description High frequency electro surgical (diathermy) machine suitable for general surgery. The unit should be microprocessor based and capable of performing cutting, coagulation and blend functions at varying power output and complete with foot switch, electrodes and a cart (trolley). 2. Composition 2.1 Main unit 3. Performance Specifications 3.1 Main Unit 3.1.1 Output power Nominal high frequency output of about 300W adjustable up and down with touch button keys or convenient controls. With automatic output regulation against excess impedance (TUR) 3.1.2 Cutting: Monopolar, bipolar and blend functions Activation by finger-switch and/or foot switch 3.1.3 Coagulation Monopolar, bipolar, low forced and spray Activation by finger switch and / or foot switch 3.1.4 Bipolar Very low voltage 3.1.5 Wave form Modulated pulse or Hemostatic or equivalent 3.1.6 Display Digital Read out 3.1.7 Active patient electrode Active patient electrode with standard electrode handle, with finger switch and connecting cable, reusable and autoclavable at 134oC 3.1.8 Patient plate Patient (in different) plate, reusable rubber With connecting cable, autoclavable at 134oC 3.1.9 Foot Switch Two pedal foot switch for cut and coagulation water proof, explosion proof, cable length about 5 m. 3.1.10 Safety/ alarm devices Dosage rate control Audible and visual alarm Leakage current Audible and visual alar Patient plate split Audible and visual alarm Short circuit Audible and visual alarm 4 Physical characteristics 4.1 Main unit Mounted on mobile cart 5 Operating environment 5.1 Power Requirements 240V, A/C 50 Hz, Single phase, 3 Pin Plug, 3m longcord with PE 5.2 Ambient temperature 10o C to 40o C 5.3 Relative humidity 20% to 90% 6 Accessories: To be provided as startup kits. 6.1 Standard electrode handle, with finger switch and connectingcable, reusable 3 Pcs 6.2 Monopolar standard surgical electrode set consisting of stainless steel container or plastic container complete with standard electrode set (blades, lancet, knives, needles, wire loops, balls and plates). 2 Sets 6.3 Bipolar forceps withconnecting cable, reusable 3 Pcs 6.4 Standard assorted sizes of bipolar forceps, 1 Set reusable 6.5 Patient (in different) plate, reusable rubber With connecting cable 2 Pcs 6.6 Foot Switch-Monopolar 1 Pc 6.7 Foot Switch-Bipolar Earth plate 6.8 Bipolar Cable 2 Pcs Monopolar 6.9 Active PatientElectrode 2 Set 7 Quality standards 7.1 Manufacturing standards ISO 13485, ISO9001 7.2 Product conformitystandards EU-93/42/EEC, IEC 60601-1, EN 740CE or equivalent 2. Composition 2.1 Electrosurgical Unit 3. Performance Specifications Electrosurgical Unit 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally 190 standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil

4	Head Light Source	Dual Everlast batteries provide hours of cordless power and can be hot-swapped for infinite use Integrated lightweight batteries in the head strap eliminate tethering cords and provide a comfortable fit Three light options (100k, 200k, or 300k LUX) shine a beam from 10 mm up to 200 mm in size1 193 2. Composition 2.1 Head Light Source 3. Performance Specifications Head Light Source 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
5	Operating Theatre Table plus accessories for various specialities	Headrests: Adjustable headrests for supporting the patient's head and neck during various surgical procedures. Armboards: Padded armboards to provide support for the patient's arms and allow proper positioning during surgery. Shoulder Supports: Supports designed to stabilize and position the patient's shoulders, especially in procedures involving the upper body. Leg Holders: Leg holders with adjustable straps to secure the patient's legs and maintain the desired position during surgery. Body Straps: 200 Straps or restraints to secure the patient's body in place on the operating table. Lateral Supports: Adjustable lateral supports to prevent lateral movement and provide stability during certain procedures. Kidney Elevators: Kidney-shaped elevators to raise and support the patient's torso for procedures requiring access to the lower abdomen or pelvis. Traction Devices: Traction devices and attachments for orthopedic procedures, allowing controlled limb traction. Perineal Posts: Perineal posts or stirrups for gynecological and urological procedures, providing optimal access to the perineal area. Chest and Hip Rolls: Supportive rolls or cushions for the chest or hips to maintain patient positioning and prevent pressure points. Radiolucent Attachments: Radiolucent attachments or carbon-fiber components for compatibility with imaging equipment during fluoroscopy or X-ray-guided procedures. C-Arm Compatible Base: A base designed to accommodate C-arm machines for intraoperative imaging. Table Pads: Sterile and disposable or reusable table pads to maintain a clean and hygienic surgical environment. Fluid Collection System: A system to collect and manage fluids during surgeries, preventing spillage and maintaining a dry surgical field. Electrocautery and Instrument Trays: Trays or mounts for holding electrocautery devices, surgical instruments, and other necessary tools. Table Extensions: Extensions to increase the length or width of the operating table, accommodating larger patients or complex surgical setups. Accessory Rails: Rails along the sides of the table for attaching various accessories, such as IV poles, anesthesia screens, and additional equipment. Control Panels: User-friendly control panels for adjusting the height, tilt, and other positions of the operating table. 2. Composition 2.1 Ot Table Accessories 3. Performance Specifications OT Table Accessories 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 201 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
6	Radiant Warmer	1) Configuration: Atleast 60 degree angle adjustment must be possible in the heat source and it should provide shielding to the infant in case of breakage of tubes/bulbs, All surfaces to be made of corrosion resistant material. 2) Noise (in dBA): Auditory alarm shall have a sound level of at least 65 dBA at a distance of 3 m from the front of the infant radiant warmer, and the sound level of the alarm

		shall not exceed 80 dBA on the mattress. 3) Heat dissipation: Should maintain upto 36.5 degree temp and the heat disbursed through a exhaust fan or other provisions, so that effect of UV light is not disturbed. 4) Mobility, portability: Yes, on castors (2 of the castors should have breaks; castor size can be at least 4inch). ENERGY SOURCE: 1) Power Requirements: 220 to 240V, 50 Hz 2) Battery operated: Power failure indication during power fail 3) Tolerance (to variations, shutdowns): ± 10% of input 4) Protection: OVP, earth leakage protection 1) Accessories a. Should have SS IV pole(sturdy; non rusting; medical grade stainless steel; adjustable to a max height of 6 feet from the ground level) b. Monitor tray(fixed or swiveling) c. Storage trays 2. Composition 2.1 Radiant Warmer 3. Performance Specifications Radiant Warmer 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
7	Operating Microscope	. Detailed Specifications 1.1. CLASSIFICATION: CLASS 1 or equivalent 1.2. MAGNIFICATION: 6:1 motorized zoom activated through hand control ,foot switch control panel 1.3. WORKING DISTANCE :motorized focus +manual override 1.4. FOCUSING: min 224 or less – max 470 mm or more. 1.5. EYE PIECE : wide field eye piece for eyeglass wearers dioptre setting -5 d or less to + 5 d or more with adjustable eyecup interpupillar distance 55-75 mm 1.6. OBJECTIVE : multifocal length min 224 or less max 470 mm or more motorized focus with manual over ride 1.7. MAIN ILLUMINATION :should be 300 w xenon / LED arc – indirect type illumination with stand by xenon with changeover facility 1.8. FIELD DIAMETER :17-143 mm /10 x eyepiece 1.9. MAGNIFICATION RANGE: 1.5-1.2 x or more /10 x eyepiece. 1.10. CONTROL UNIT: graphic LED/LCD display having facility for adjusting speed of zoom and focus. 1.11. TYPE /STAND SYSTEM : floor stand with electromagnetic brakes modular/ integrated (compact design) configuration for each application 1.12. HAND GRIPS: controls for zoom focusing, recording, light intensity, adjustment, joy stick control preferable for finer adjustments of the microscope. 1.13. A sepsis for all controls: sterilize/disposable protective glass encasement for objective sterilization components for all drive knobs /drapes. 1.14. OBSERVER: coordinated stereo co observation .stereo –co observation system for cranial procedures with additional observer unit at 180* for final procedures 1.15. CONFORMITY: should comply with CE or equivalent standard to assure quality and safety of the system. 1.16. ACCESSORIES : should have camera with integrated HD recording system –DVD digital recording system ,DVD burning ,USB storage device ,video format dvi, DICOM COMPATIBILITY, FIRE WIRE INPUT/OUTPUT, video compression MPEG 4 still image JPEG/ TIFF/ BMPO/ GIFF 1.17. POWER SUPPLY : 220-240 vac +/- 10% 50 Hz 1.18. FEATURES : automated illumination brightness ,auto zoom synchronized illumination 1.19. VASCULAR FLUORESCENCE: should have vascular fluorescence (ICG 1.20. Shall supply 32" or above LCD/LED monitor.Should be CE or equivalent 2. Composition 2.1 Operating Microscope 3. Performance Specifications : Operating Microscope 4 Quality standards

		4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
9	Operating Theatre Lamp, Ceiling Mounted (Dual Dome)	1) Configuration: Atleast 60 degree angle adjustment must be possible in the heat source and it should provide shielding to the infant in case of breakage of tubes/bulbs, All surfaces to be made of corrosion resistant material. 2) Noise (in dBA): Auditory alarm shall have a sound level of at least 65 dBA at a distance of 3 m from the front of the infant radiant warmer, and the sound level of the alarm shall not exceed 80 dBA on the mattress. 3) Heat dissipation: Should maintain upto 36.5 degree temp and the heat disbursed through a exhaust fan or other provisions, so that effect of UV light is not disturbed. 4) Mobility, portability: Yes, on castors (2 of the castors should have breaks; castor size can be at least 4inch). ENERGY SOURCE: 1) Power Requirements: 220 to 240V, 50 Hz 2) Battery operated: Power failure indication during power fail 3) Tolerance (to variations, shutdowns): ± 10% of input 4) Protection: OVP, earth leakage protection 1) Accessories a. Should have SS IV pole(sturdy; non rusting; medical grade stainless steel; adjustable to a max height of 6 feet from the ground level) b. Monitor tray(fixed or swiveling) c. Storage trays 2. Composition 2.1 Radiant Warmer 3. Performance Specifications Radiant Warmer 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
10	Patient Monitor theatre	Portable Bedside monitor suitable for use in ICU. Should be capable of continuous measuring/ monitoring of the following parameters in adults, neonatal and pediatric. Should be CE or equivalent ● SpO2 ● Temperature ● Blood pressure IBP& NIBP ● ECG ● Respiration ● ETCO2 ● Pulse Rate 2. Composition 2.1 Patient Monitor 3. Performance Specifications Patient Monitor 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil

11	Anaesthesia Machine	1. General Description Inhalation anaesthetic machine wiAuth electronic ventilator complete with all accessories for low and high flow anaesthesia, adult, paediatric and infant application. It should include a patient monitor unit. 2. Composition 2.1 Main unit 1 Unit Electronic Ventilator 1 Unit Patient Monitor 1 Unit Accessories complete start-up kit 1 Set 3. Performance Specifications 3.1 Main Unit 3.1.1 Anesthetic trolley with minimum 2 drawers and a table top, with yokes for Oxygen (O2) and Nitrous Oxide (N2O) portable cylinder and support for circle systems including hoses and absorbers and support for central pipeline gas system. Model on current production 3.1.2 Anesthetic trolley With minimum of 2 drawers 3.1.3 Wheels With castors, two with brakes 3.1.4 Gas delivery system 3 gas delivery system (O2, N2O and air) with both inlets for central gas pipeline system, and separate portable cylinders. 3.1.5 Yokes To support portable Oxygen (O2) and Nitrous Oxide (N2O) cylinders, 11 liters each 3.1.7 Portable Nitrous Oxide (N2O) cylinder connection Pin Index type 3.1.8 Pressure regulators and gauges for O2 and N2O Intergraded in the trolley 3.1.9 Central gas pipeline system Standard BS connections and colour codes for O2, N2O, and Air, 3.1.10 Flow Meter Seperate flow meter for O2, N2O & Air 3.1.11 Breathing Circle System Capable of performing Open, Semi- Open, Semi-Closed and Closed system 3.1.12 All patient connecting hoses Corrugated, Transparent, autoclavable (134oC), φ 22 mm, with ISO connectors 3.1.13 CO2 absorber Integrated, complete with Soda lime and switch for Magill's circuit. 3.1.14 Accessories: To be provided as startup kits. Adult Breathing circuit for ventilator 2 Unit Paediatric Breathing circuit for ventilator 2 Unit Face Mask, Adult, Sizes 1, 2, 3 transparent type 2 Sets Face Mask, Paeds, Sizes 1, 2, 3 transparent type 2 Sets Breathing Bag Adult (2 L) 2 Sets Breathing Bag Paeds (1L) 2 Sets Breathing Bag Baby (0.5L) 2 Sets Magill's circuit complete with adult mask 2 Sets Aynes Paed circuit 2 Sets CO2 absorber gas out let 3.2 Vaporizer Minimum Halothane and Isoflurane or other vaporizers 3.2.1 Compensation Temperature, pressure and flow compensated 3.2.3 Range About 0.2% to 4% 3.2.4 Accuracy ± 0.15% 3.2.5 Keyed filler according to ISOstandards 3.2.6 Adjustment Large hand wheel with Zero Lock 3.2.7 Ambient Temperature 15oC to 35oC at Normal pressure 3.3 Safety controls 3.3.1 O2 supply failure audible alarm with reset 3.3.2 Hypoxyguard Minimum O2 25%: Shut off supply N2O Shut off 3.3.3 3.3.4 O2 Flush Gas Supply Above 30 L/ Min 2-6 bars 3.4 Ventilator 3.4.1 Type Microprocessor controlled and electrical/gas driven 3.4.2 Application Suitable for adult, paediatric and infant application without changing parts between patient types 3.4.3 Ventilation with ambient air possible 3.4.4 Modes Minimal manual, spontaneous, IPPV, PCV,SIMV +PS 3.4.5 Ventilator Parameter Tidal Volume: IPPV 20 to 1400 mL P max (PEEP + 10) Up to 70hPa PEEP about 1 to 20mbar Frequency: about 3 to 60/min Insp flow Max 150l/min Pinsp (PEEP + 5) Up to 70kPa I: E ratio 5:1 to 1:5 In case of failure Switch to room air automatically 3.5 Display colour display minimum 6" 3.5.1 Display parameters Minute Volume Tidal Volume Rate Pressure Peak Response, PEEP,FiO2 Graphic Trends 3.6 Patient monitor To be mounted on the anesthetic machine 3.6.1 Parameters Pulse rate 212 SpO2 Temperature: 2 probes Blood pressure (NIPB and IPB) ECG 3 leads 3.6.2 Display Colour Display minimum 10" 5 Parameter display 3.6.3 Accessories: To be provided as startup kits. SpO2 , Adult Sensor, Ped Sensor Reusable 2 Pieces SpO2 , Paediatric Sensor, Reusable 2 Pieces SpO2 , Infant Sensor, Reusable 2 Pieces Temperature 2 Probes BP cuff, Large adult, reusable 2 Piece BP cuff, adult, reusable 2 Piece BP cuff, Small adult, reusable 2 Piece BP cuff, Paed, reusable 2 Piece BP cuff, Thigh, reusable 2 Piece ECG 3 Leads Soda lime 2 Piece 3 containers of 5liter each 4 Physical characteristics 4.1 Main unit mobile on casters Outer dimensions Compact design 5 Operating environment 5.1 Power Requirements 240V, A/c 50 Hz, Single phase, 3 Pin Plug, 3m long cord with PE Ambient temperature 10o C to 40o C Relative humidity 20% to 90% 6 Backup Power supply 6.1 Internal battery Internal battery 7 Quality standards 7.1 Manufacturing standards ISO 13485, ISO 9001 Product conformity standards EU-93/42/EEC, IEC 60601-1, EN 740 CE and FDA approved 2. Composition 2.1 Anesthesia Machine 3. Performance Specifications Anesthesia Machine 4 Quality standards Manufacturing standards 4.1 ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 5 Conformity to standards Delivery point See Schedule CE marked or any other equal or recognized international document

		5.1 For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training User Training 7.1 On site user training on operation and daily up keep 7.2 8 Maintenance training Technical documentations User manuals On-site maintenance training on preventive maintenance 8.1 1 Set 9 Commissioning Testing and commissioning of the devices to the satisfaction of the user. 9.1 10 Warranty Equipment 10.1 Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
12	Laparoscopic tower and Instrument Set	1. General Description Camera System: High-definition (HD) or 4K camera for clear visualization. Digital signal processing for image enhancement. In-built or external camera head with adjustable focus. Light Source: High-intensity LED light source for optimal illumination. Adjustable light settings for different procedures. Insufflator: 271 Pneumoperitoneum management system for maintaining a stable pneumoperitoneum during laparoscopic surgery. Adjustable insufflation pressure and flow rate. Electrosurgical Unit (ESU): Integration with an electrosurgical generator for cutting and coagulation during surgery. Hand or footswitch controls for hands-free operation. CO2 and Smoke Evacuation System: Efficient removal of smoke and excess CO2 during laparoscopic procedures. Suction/Irrigation System: Integrated suction and irrigation capabilities for maintaining a clear field of view. Monitor and Display: High-resolution flat-panel display for real-time visualization. Multiple video outputs for additional displays. User Interface: User-friendly touch screen or control panel for easy operation. Programmable settings for customized preferences. Trolley or Tower Design: Compact and ergonomic design for easy maneuverability. Cable management system for a tidy workspace. Compatibility: Compatibility with various laparoscopic instruments and accessories. Integration with existing hospital systems if required. Electrical Safety: Compliance with electrical safety standards. Grounding and safety features to ensure the safety of both patients and healthcare professionals. Sterilization and Infection Control: Materials and design suitable for sterilization procedures. Infection control features to prevent cross-contamination. 2. Composition 2.1 Laparoscopic Tower And Instrument Set 1 No. 3. Performance Specifications 3.1 Laparoscopic Tower And Instrument Set 4 Quality standards 4.1 Manufacturing standards ISO/ FDA/CE or any other equal and recognized internationally standards 4.2 Conformity to standards CE marked or any other equal or recognized international document 5 Delivery point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and setup of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 1 Set 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
13	Bone drill	1. General Description Bone Drill 2. Composition 301 2.1 Bone Drill 1 No. 3. Performance Specifications 3.1 Bone Drill Motor speed should be at least 80,000 rpm, operating pressure up to 100-200 psi (variable) 4 Quality standards 4.1 Manufacturing standards or Conformity to standards ISO 13485/USFDA/WHO GMA/CE or any other equal and recognized international standards 5 Delivery Point 5.1 See Schedule For inspection and testing 6 Installation and testing Complete installation and set-up of the machine as per manufacturer's instructions 7 Training 7.1 User Training On site user training on operation and daily up keep 7.2 Maintenance training On-site maintenance training on preventive maintenance 8 Technical documentations 8.1 User manuals 2 Sets 9 Commissioning 9.1 Testing and commissioning of the devices to the satisfaction of the user. 10 Warranty 10.1 Equipment Minimum of one year after commissioning on all parts. 10.2 Equipment System Nil
Lot 17: Medical Gases		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**

1	Medical Air Plant - for 300 Bedded Hospital)	1. General Description Medical gases system, consisting of an Oxygen generating plant, a vacuum plant, plant house, Piping System, and electrical system for a 300 bedded hospital. 2. Composition 2.1 Oxygen plant 2.2 Vacuum Plant 2.3 Plant House 2.4 Medical gases Piping System 2.5 Bedside Electrical system 3. Performance Specifications 3.1 Oxygen plant PSA System 3.1.1 Capacity 120m3/hour at 4 bars 3.1.2 Purity Min 95% pure Oxygen at all flow rates 3.1.3 Surge tanks Provided 3.1.4 Air filters Provided, including CO filters, replaceable air and oil filters 3.1.5 Safety devices Provided 3.1.6 Oxygen Purity Monitor Provided, 24 hour monitor, recorded , shut down if O2 concentration is less than 95 % 3.1.7 Compressor Provided at 4 bar to the piping system 3.1.8 Manifold Provided for 8 cylinders complete with gas control station for 8 cylinders, regulators, alarm system and shut off valves to ISO standards. Back up cylinders Provided, 8 No. 6.8m3 each, Bull nose type 3.2 Vacuum plant Duo type, complete with vacuum gauge, bacterial filters, safety devices and piping to the piping system 3.3 Medical gases piping system Provided for piping system for oxygen and vacuum from plant house to the 300 beds Pipe wok to comply with ISO standards 3.3.1 Vacuum terminal BS standards 3.3.2 Oxygen terminals BS standards, 3.3.2 Safety devices Provided to ISO standards 3.4 Plant house Provided to accommodate to medical gases plant 3.4.1 Ventilation Adequate ventilation provided 3.4.2 Contamination No risk of contamination between PSA air intake and vacuum air outlet 3.5 Electrical system Provided, Bedhead units for each bed. Bedhead unit Each Bedhead unit to consist of 8 electrical sockets, Data Networking, Nurse call system, Examination light, 2 Oxygen terminal and 2 vacuum terminal and 1 Medical air terminal. All outlets are BS standards, 4 Quality standards 4.1 Manufacturing standards IEC 60601-1, ISO 9001 or any other internationally recognized standards 4.2 Conformity to standards CE approved 5 Installation and testing Complete installation and setup of system as per manufacturer's instructions 6 Training 6.1 User Training On site user training on operation and daily up keep 6.2 Maintenance training Onsite maintenance training on preventive maintenance 7 Technical documentations 7.1 User manuals 2 Sets 7.2 Service Manual 2 Set 7.3 Drawings 2 Sets 8 Commissioning 8.1 Testing and commissioning of the machine to the satisfaction of the user. 9 Warranty Comprehensive maintence for 7 years

3	Medical Air Plant - (for 100 Bedded Hospital)	1. General Description Medical gases system, consisting of an Oxygen generating plant, a vacuum plant, plant house, Piping System, and electrical system for 100 bedded hospital 2. Composition 2.1 Oxygen plant 2.2 Vacuum Plant 2.3 Plant House 2.4 Medical gases Piping System 2.5 Bedside Electrical system 3. Performance Specifications 3.1 Oxygen plant PSA System 3.1.1 Capacity 40m3/hour at 4 bars 3.1.2 Purity Min 95% pure Oxygen at all flow rates 3.1.3 Surge tanks Provided 3.1.4 Air filters Provided, including CO filters, replaceable air and oil filters 3.1.5 Safety devices Provided 3.1.6 Oxygen Purity Monitor Provided, 24 hour monitor, recorded , shut down if O2 concentration is less than 95 % 3.1.7 Compressor Provided at 4 bar to the piping system 3.1.8 Manifold Provided for 4 cylinders complete with gas control station for 4 cylinders, regulators, alarm system and shut off valves to ISO standards Back up cylinders Provided, 4 No. 6.8m3 each, Bull nose type 3.2 Vacuum plant Duo type, complete with vacuum gauge, bacterial filters, safety devices and piping to the piping system 3.3 Medical gases piping system Provided for piping system for oxygen and vacuum from plant house to the beds. Pipe wok to comply with ISO standards 3.3.1 Vacuum terminal Provided to BS standards 3.3.2 Oxygen terminals Provided to BS standards 3.3.2 Safety devices Provided to ISO standards 3.4 Plant house Provided to accommodate to medical gases plant 3.4.1 Ventilation Adequate ventilation provided 3.4.2 Contamination No risk of contamination between PSA air intake and vacuum air outlet 3.5 Electrical system Provided, Bedhead unit. (For each Bed) Bedhead unit Each Bedhead unit to consist of 8 electrical sockets, Data Networking, Nurse call system, Examination light, 2 Oxygen terminal and 2 vacuum terminal and 1 Medical air terminal. All outlets are BS standards, 4 Quality standards 4.1 Manufacturing standards IEC 60601-1, ISO 9001 or any other internationally recognized standards 4.2 Conformity to standards CE approved 5 Installation and testing Complete installation and setup of system as per manufacturer's instructions 6 Training 6.1 User Training On site user training on operation and daily up keep 6.2 Maintenance training Onsite maintenance training on preventive maintenance 7 Technical documentations 7.1 User manuals 2 Sets 7.2 Service Manual 2 Set 7.3 Drawings 2 Sets 8 Commissioning 8.1 Testing and commissioning of the machine to the satisfaction of the user. 9 Warranty Comprehensive maintenance for 7 years

Lot 18: CSSD		
Lease Item No	**Name of Lease Items or Related Service**	**Technical Specifications and Standards**
1	Autoclave 250Litres	1.1 Main Unit Hirzontal 1.1.1 Application: For sterilization of hospitals porous and non- porous Loads. 1.1.2 Sterilization agent: Saturated steam with inbuilt steam generator 1.1.3 Sterilization cycle: Fully automatic with Pre – vacuum, heating (steam pulsating), sterilization (holding), post vacuum (drying). With inbuilt printer capable of printing each successful sterilization cycle 1.1.4 Sterilization: 121oC to 137oC, selectable programs for different kind temperature range of loads 1.1.5 Pressure equalization: By sterile HEPA filter, replaceable 1.2 Sterilization chamber design and capacity: Horizontal type, 250 litres, all high grade stainless steel construction 1.2.1 Sterilization Chamber door: Fully automatic, hydraulic, vertical or horizontal sliding. 1.3 Control unit: Microprocessor based controlling all operational cycles With large LCD or similar display of cycle progress i.e. temperature, pressures and time. With different programmable cycle programs for different type of loads. 1.4 Steam generator: In built, Electrical heating three phase 415V, 50 Hz 1.5 Water to steam generator: De- carbonated water to safe guard heating element. Suitable RO filter units to be installed 1.6 Safety features: The autoclave should have major safety features such as: Safety pressure relief valve: Door lock under pressure
2	21L Ultrasonic washer	1. General Description For cleaning and disinfection of instruments, construct from robust non corrosive material. Internal tank constructed from high grade stainless steel. With temperature control and cleaning time control. 2.1Capacity internal tank Minimum 21 litres 2.2Technology Microprocessor control 2.3Heating Electric with adjustable temperature up to 93o C 2.4Cleaning time Adjustable 2.5Transducer Ultrasound, adjustable energy 2.6Display LCD water proof 2.7Power Single phase 240 V, 50Hz 3Quality standards 3.1Manufacturing Standards EN ISO 9001:2008– Quality System ISO 13485:2003 – Quality systems – Medical devices

PART 3 - CONTRACT

SECTION VII - GENERAL CONDITIONS OF CONTRACT

1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

a) "Contract" means the Contract Agreement entered into between the Procuring Entity and the Lessor, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein.

b) "Contract Documents" means the documents listed in the Contract Agreement, including any amendments thereto.

c) "Contract Price" means the price payable to the Lessor as specified in the Contract Agreement, subject to such additions and adjustments there to or deductions there from, as may be made pursuant to the Contract.

d) "Day" means calendar day.

e) "Completion" means the fulfillment of the Related Services by the Lessor in accordance with the terms and conditions set forth in the Contract.

f) "GCC" means the General Conditions of Contract.

g) "Lease Items" means all of the infrastructural facilities, plant/equipment vehicles or such other physical items the Lessor is required to lease to the Procuring Entity under the Contract.

h) "Procuring Entity" means the Procuring Entity purchasing the Lease Items and Related Services, as **specified in the SCC.**

i) "Related Services" means the services incidental to the supply of the Lease Items, such as insurance, installation, training and initial maintenance and other such obligations of the Lessor under the Contract.

j) "SCC" means the Special Conditions of Contract.

k) "Subcontractor" means any person, private or government entity, or a combination of the above, to whom any part of the Lease Items to be supplied or execution of any part of the Related Services is subcontracted by the Lessor.

l) "Lessor" means the person, private or government entity, or a combination of the above, whose Tender for the Lease Contract has been accepted by the Procuring Entity and is named as such in the Contract Agreement.

m) "Lessee" means the Procuring Entity whose has accepted the Tender for the Lease Contract and is named as such in the Contract Agreement as "Procuring Entity".

2. Contract Documents

2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.

3. Fraud and Corruption

3.1 The Government of Kenya requires compliance with anti-corruption laws and guidelines and its prevailing sanctions policies and procedures as set forth in Laws of Kenya.

3.2 The Procuring Entity requires the Lessor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the Tendering process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

4 Interpretation

1.1 If the context so requires it, singular means plural and vice versa.

1.2 **Entire Agreement**- The Contract constitutes the entire agreement between the Procuring Entity and the Lesser. and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.

1.3 **Amendment**

No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.

1.4 **Non-waiver**

a Subject to GCC Sub-Clause 4.5 (b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

b Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, dated, and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

1.5 **Severability**

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

2 Language

2.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Lessor and the Procuring Entity, shall be written in the **English Language.** Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the **English Language,** in which case, for purposes of interpretation of the Contract, this translation shall govern.

2.2 The Lessor shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Lessor.

3 Joint Venture, Consortium or Association

3.1 If the Lessor is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Procuring Entity for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Procuring Entity.

4 Eligibility

8.1 The Lessor and its Subcontractors shall have the nationality of an eligible country. A Lessor or Sub-Lessor shall be deemed to have the nationality of a country if it is a citizen or constituted, incorporated, or registered, and operates inconformity with the provisions of the laws of that country.

5 Notices

5.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address specified in the **SCC.** The term “in writing” means communicated in written form with proof of receipt.

5.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.

6 Governing Law

The Contract shall be governed by and interpreted in accordance with the laws of Kenya.
Throughout the execution of the Contract, the Lessor shall comply with the import of Lease Items and services prohibitions in Kenya:

a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country; or

b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of Lease Items from that country or any payments to any country, person, or entity in that country.

7 Settlement of Disputes

7.1 The Procuring Entity and the Lessor shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

7.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, the neither the Procuring Entity or the Lessor may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Lease Items under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the **SCC.**

7.3 Notwithstanding any reference to arbitration herein,

a the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and

b the Procuring Entity shall pay the Lessor any monies due the Lessor.

8 Inspections and Audit by the Procuring Entity

8.1 The Lessor shall keep, and shall make all reasonable efforts to cause its Subcontractors to keep, accurate and systematic accounts and records in respect of the Lease Items in such form and details as will clearly identify relevant time changes and costs.

8.2 Pursuant to paragraph 2.2 e. of Appendix to the General Conditions the Lessor shall permit and shall cause its subcontractors and sub consultants to permit, the Procuring Entity and/or persons appointed by the Procuring Entity or by other statutory bodies of the Government to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Procuring Entity. The Lessor's and its Subcontractors' and sub consultants' attention is drawn to Sub-Clause 3.1 which provides, interalia, that acts intended to materially impede the exercise of the Procuring Entity's inspection and audit rights constitute a prohibited practice subject to contract termination, as well as to a determination of ineligibility.

9 Scope of Lease Supply

9.1 The Lease Items and Related Services to be supplied shall be as specified in the Schedule of Requirements.

10 Delivery and Documents

10.1 Subject to GCC Sub-Clause 33.1, the Delivery of the Lease Items and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of Lease and other documents to be furnished by the Lessor are specified in the **SCC.**

11 Lessor's Responsibilities

11.1 The Lessor shall supply the Lease Items and Related Services included in the Scope of Supply in accordance with GCC Clause12, and the Delivery and Completion Schedule, as per GCC Clause 13.

12 Contract Price

12.1 Prices charged by the Lessor for the Lease Items supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Lessor in its Tender, with the exception of any price adjustments authorized in the **SCC.**

13 Terms of Payment

13.1 The Contract Price, including any Advance Payments, if applicable, shall be paid as specified below and in the SCC. The currencies in which payments shall be made to the Lessor under this Contract shall be those in which the Tender price is expressed.

13.2 The Procuring Entity shall pay to Lessor the advance payment stated in the SCC upon or before taking possession of the property. Thereafter, the Procuring Entity shall pay the Lessor the sum of stated in the SCC on

or before the day of each month as stated in the SCC until the expiration of this lease.

13.3 If the Procuring Entity fails to pay all amounts due within the number of days specified in the SCC of their due dates, then the Lessor may terminate the contract under this lease and take back possession and control of the Lease Item(s). In the event of termination for non-payment, the Procuring Entity shall remain liable for the balance due under this lease.

13.4 If the Procuring Entity fails to make a payment on or before its due date, a late fee of an amount specified in the SCC shall be due and payable immediately to Lessor.

13.5 In the event that the Procuring Entity fails to pay the Lessor any payment by its due date or within the period set forth in the SCC, the Procuring Entity shall pay to the Lessor interest on the amount of such delayed payment at the rate shown in the SCC, for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.

14 Taxes and Duties

14.1 The Lessor shall be responsible for paying all taxes levied in Kenya.

15 Performance Security

15.1 If required as specified in the SCC, the Lessor shall, within twenty-eight (28) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount specified in the **SCC.**

15.2 The proceeds of the Performance Security shall be payable to the Procuring Entity as compensation for any loss resulting from the Lessor's failure to complete its obligations under the Contract.

15.3 As specified in **the SCC**, the Performance Security, if required, shall be denominated in Kenya Shillings; and shall be in one of the formats stipulated by the Procuring Entity in **the SCC**, or in another form at acceptable to the Procuring Entity.

15.4 The Performance Security shall be discharged by the Procuring Entity and returned to the Lessor not later than twenty-eight (28) days following the date of Completion of the Lessor's performance obligations under the Contract, including any warranty obligations, unless specified otherwise in the **SCC.**

16 Copyright

16.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Procuring Entity by the Lessor herein shall remain vested in the Lessor, or, if they are furnished to the Procuring Entity directly or through the Lessor by any third party, including Lessors of materials, the copyright in such materials shall remain vested in such third party

17 Confidential Information

17.1 The Procuring Entity and the Lessor shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Lessor may furnish to its Sub-Lessor such documents, data, and other information it receives from the Procuring Entity to the extent required for the Sub Lessor to perform its work under the Contract, in which event the Lessor shall obtain from such Sub Lessor an undertaking of confidentiality similar to that imposed on the Lessor under GCC Clause 20.

17.2 The Procuring Entity shall not use such documents, data, and other information received from the Lessor for any purposes unrelated to the contract. Similarly, the Lessor shall not use such documents, data, and other information received from the Procuring Entity for any purpose other than the performance of the Contract.

17.3 The obligation of a party under GCC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:

a the Procuring Entity or the Lessor need to share with other arms of Government or other bodies participating in the financing of the Contract; such parties shall de disclosed in the **SCC;**

b now or hereafter enters the public domain through no fault of that party;

c can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or

d otherwise lawfully becomes available to that party from a third party that has no obligation of

confidentiality.

17.4 The above provisions of GCC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties here to prior to the date of the Contract in respect of the Supply or any part thereof.

17.5 The provisions of GCC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.

18 Subcontracting

18.1 The Lessor shall notify the Procuring Entity in writing of all subcontracts awarded under the Contract if not already specified in the Tender. Such notification, in the original Tender or later shall not relieve the Lessor from any of its obligations, duties, responsibilities, or liability under the Contract.

18.2 Subcontracts shall comply with the provisions of GCC Clauses 3 and 7.

19 Specifications and Standards

Technical Specifications and Drawings

a) The Lease Items and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section VI, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Lease Items' country of origin.

b) The Lessor shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Procuring Entity, by giving a notice of such disclaimer to the Procuring Entity.

c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Procuring Entity and shall be treated in accordance with GCC Clause 33.

20 Packing and Documents

No parking services and documents are needed, and if any, they are specified **in the SCC**, and in any other instructions ordered by the Procuring Entity.

21 Insurance

22.1 Unless otherwise specified in the **SCC,** the Lease Items supplied under the Contract shall be fully insured by the Lessor - in a freely convertible currency from an eligible country - against loss or damage incidental to use, transportation, storage, and delivery, in a manner specified in the **SCC.**

22 Transportation and Incidental Services

22.1 The Lessor may be required to provide any or all of the following services, including additional services, if any, specified **in SCC:**

a Performance or supervision of on-site assembly and/or start-up of the supplied Lease Items;

b Furnishing of tools required for assembly and/or maintenance of the supplied Lease Items;

c furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Lease Items;

d performance or supervision or maintenance and/or repair of the supplied Lease Items, for a period of time agreed by the parties, provided that this service shall not relieve the Lessor of any warranty obligations under this Contract; and

e training of the Procuring Entity's personnel, at the Lessor's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Lease Items.

22.2 Prices charged by the Lessor for incidental services, if not included in the Contract Price for the Lease Items, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Lessor for similar services

23 Inspections and Tests

23.1 The Lessor shall at its own expense and at no cost to the Procuring Entity carry out all such tests and/or inspections of the Lease Items and Related Services as are specified in the **SCC.**

23.2 The inspections and tests may be conducted on the premises of the Lessor or its Subcontractor, at point of delivery, and/or at the Lease Items' final destination, or in another place in Kenya as specified in the **SCC.** Subject to GCC Sub-Clause 26.3, if conducted on the premises of the Lessor or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Procuring Entity.

23.3 The Procuring Entity or its designated representative shall be entitled to attend the tests and/or inspections referred to in GCC Sub-Clause 26.2, provided that the Procuring Entity bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

23.4 Whenever the Lessor is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Procuring Entity. The Lessor shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Procuring Entity or its designated representative to attend the test and/or inspection.

23.5 The Procuring Entity may require the Lessor to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Lease Items comply with the technical specification codes and standards under the Contract, provided that the Lessor's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Lessor's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

23.6 The Lessor shall provide the Procuring Entity with are port of the results of any such test and/or inspection.

23.7 The Procuring Entity may reject any Lease Items or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Lessor shall either rectify or replace such rejected Lease Items or parts thereof or make alterations necessary to meet the specifications at no cost to the Procuring Entity, and shall repeat the test and/or inspection, at no cost to the Procuring Entity, upon giving a notice pursuant to GCC Sub-Clause 26.4.

23.8 The Lessor agrees that neither the execution of a test and/or inspection of the Lease Items or any part thereof, nor the attendance by the Procuring Entity or its representative, nor the issue of any report pursuant to GCC Sub-Clause 26.6, shall release the Lessor from any warranties or other obligations under the Contract.

24 Liquidated Damages

25.1 Except as provided under GCC Clause 32, if the Lessor fails to deliver any or all of the Lease Items by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Procuring Entity may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage specified in the **SCC** of the delivered price of the delayed Lease Items or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage specified in those **SCC.** Once the maximum is reached, the Procuring Entity may terminate the Contract pursuant to GCC Clause 35.

25 Warranty

25.1 The Lessor warrants that all the Lease Items are in conformity with the specifications of the Lease Items and are in good condition for use under the Lease agreement.

25.2 The Procuring Entity will be entitled to refuse acceptance of any Lease Items not meeting the warranty under ITT 28.1 and demand for replacements.

26 Patent Indemnity

26.1 The Lessor shall, subject to the Procuring Entity's compliance with GCC Sub-Clause 29.2, indemnify and hold harmless the Procuring Entity and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Procuring Entity may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:

a The installation of the Lease Items by the Lessor or the use of the Lease Items in the country where the Site is located; and

b the sale in any country of the products produced by the Lease Items.

Such indemnity shall not cover any use of the Lease Items or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Lease Items or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Lessor, pursuant to the Contract.

26.2 If any proceedings are brought or any claim is made against the Procuring Entity arising out of the matters referred to in GCC Sub-Clause 29.1, the Procuring Entity shall promptly give the Lessor a notice thereof, and the Lessor may at its own expense and in the Procuring Entity's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

26.3 If the Lessor fails to notify the Procuring Entity within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Procuring Entity shall be free to conduct the same on its own behalf.

26.4 The Procuring Entity shall, at the Lessor's request, afford all available assistance to the Lessor in conducting such proceedings or claim, and shall be reimbursed by the Lessor for all reasonable expenses incurred in so doing.

26.5 The Procuring Entity shall indemnify and hold harmless the Lessor and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Lessor may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Procuring Entity.

27 Limitation of Liability

27.1 Except in cases of criminal negligence or willful misconduct,

a The Lessor shall not be liable to the Procuring Entity, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Lessor to pay liquidated damages to the Procuring Entity, and

b The aggregate liability of the Lessor to the Procuring Entity, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the Lessor to indemnify the Procuring Entity with respect to patent infringement.

28 Change in Laws and Regulations

29.1 Unless otherwise specified in the Contract, if after the date of 28 days prior to date of Tender submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in Kenya (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Lessor has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GCC Clause 15.

29 Force Majeure

29.1 The Lessor shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

29.2 For purposes of this Clause, “Force Majeure” means an event or situation beyond the control of the Lessor that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Lessor. Such events may include, but not be limited to, acts of the Procuring Entity in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

29.3 If a Force Majeure situation arises, the Lessor shall promptly notify the Procuring Entity in writing of such condition and the cause thereof. Unless otherwise directed by the Procuring Entity in writing, the Lessor shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

30 Change Orders and Contract Amendments

30.1 The Procuring Entity may at any time order the Lessor through notice in accordance GCC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

a drawings, designs, or specifications, where Lease Items to be furnished under the Contract are to be specifically manufactured for the Procuring Entity;

b the method of shipment or packing;

c the place of delivery; and

d the Related Services to be provided by the Lessor.

30.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Lessor's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Lessor for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Lessor's receipt of the Procuring Entity's change order.

30.3 Prices to be charged by the Lessor for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Lessor for similar services.

30.4 **Value Engineering:** The Lessor may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;

a the proposed change(s), and a description of the difference to the existing contract requirements;

b a full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs) the Procuring Entity may incur in implementing the value engineering proposal; and

c a description of any effect(s) of the change on performance/functionality.

30.5 The Procuring Entity may accept the value engineering proposal if the proposal demonstrates benefits that:

a accelerates the delivery period; or

b reduces the Contract Price or the life cycle costs to the Procuring Entity; or

c improves the quality, efficiency or sustainability of the Lease Items; or

d yields any other benefits to the Procuring Entity, without compromising the necessary functions of the Facilities.

30.6 If the value engineering proposal is approved by the Procuring Entity and results in:

a a reduction of the Contract Price; the amount to be paid to the Lessor shall be the percentage specified **in the SCC** of the reduction in the Contract Price; or

b an increase in the Contract Price; but results in a reduction in lifecycle costs due to any benefit described in

c to (d) above, the amount to be paid to the Lessor shall be the full increase in the Contract Price.

30.7 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

31 Extensions of Time

31.1 If at any time during performance of the Contract, the Lessor or its subcontractors should encounter conditions impeding timely delivery of the Lease Items or completion of Related Services pursuant to GCC Clause 13, the Lessor shall promptly notify the Procuring Entity in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Lessor's notice, the Procuring Entity shall evaluate the situation and may at its discretion extend the Lessor's time for performance, in which case the extension shall be ratified by the parties by amendment of the Contract.

31.2 Except in case of Force Majeure, as provided under GCC Clause 32, a delay by the Lessor in the performance of its Delivery and Completion obligations shall render the Lessor liable to the imposition of liquidated damages pursuant to GCC Clause 26, unless an extension of time is agreed upon, pursuant to GCC Sub-Clause 34.1.

32 Termination

32.1 Termination for Default

a The Procuring Entity, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Lessor, may terminate the Contract in whole or in part:

i. if the Lessor fails to deliver any or all of the Lease Items within the period specified in the Contract, or within any extension thereof granted by the Procuring Entity pursuant to GCC Clause 34;

ii. if the Lessor fails to perform any other obligation under the Contract; or

iii. if the Lessor, in the judgment of the Procuring Entity has engaged in Fraud and Corruption, as defined in paragraph 2.2a of the Appendix to the GCC, in competing for or in executing the Contract.

b In the event the Procuring Entity terminates the Contract in whole or in part, pursuant to GCC Clause 35.1(a), the Procuring Entity may procure, upon such terms and in such manner as it deems appropriate, Lease Items or Related Services similar to those undelivered or not performed, and the Lessor shall be liable to the Procuring Entity for any additional costs for such similar Lease Items or Related Services. However, the Lessor shall continue performance of the Contract to the extent not terminated.

32.2 Termination for Insolvency.

The Procuring Entity may at any time terminate the Contract by giving notice to the Lessor if the Lessor becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Lessor, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Procuring Entity

33.3 Termination for Convenience.

a) The Procuring Entity, by notice sent to the Lessor, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Procuring Entity's convenience, the extent to which performance of the Lessor under the Contract is terminated, and the date upon which such termination becomes effective.

b) The Lease Items that are complete and ready for shipment within twenty-eight (28) days after the Lessor's receipt of notice of termination shall be accepted by the Procuring Entity at the Contract terms and prices. For the remaining Lease Items, the Procuring Entity may elect:

i) to have any portion completed and delivered at the Contract terms and prices; and/or

ii) to cancel the remainder and pay to the Lessor an agreed amount for partially completed Lease Items and Related Services and for materials and parts previously procured by the Lessor.

33 Assignment

36.1 Neither the Procuring Entity nor the Lessor shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

34 Import Restrictions

37.1 Notwithstanding any obligation under the Contract to complete all import formalities, any import restrictions attributable to the Procuring Entity, to Kenya, or to the use of the products/Lease Items, systems or services to be supplied, which arise from trade regulations from a country supplying those products/Lease Items, systems or services, and which substantially impede the Lessor from meeting its obligations under the Contract, shall release the Lessor from the obligation to provide deliveries or services, always provided, however, that the Lessor can demonstrate to the satisfaction of the Procuring Entity that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the import of the products/Lease Items, systems or services under the terms of the Contract. Termination of the Contract on this basis shall be for the Procuring Entity's convenience pursuant to Sub-Clause 35.3.

Section VIII - Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement and/or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions herein shall prevail over those in the GCC.

[The Procuring Entity shall select insert the appropriate wording using the samples below or other acceptable wording, and delete the text in italics],

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
GCC 1.1(h)	The Procuring Entity is: **Ministry of Health, State Department for Medical Services**
	The Final Destination(s) is/are: ***The various Public Health Facilities within the Republic Of Kenya***
GCC 4.2	The meaning of the trade terms shall be as prescribed by Incoterms. If the meaning of any trade term and the rights and obligations of the parties thereunder shall not be as prescribed by Incoterms, they shall be as prescribed by: *[exceptional; refer to other internationally accepted trade terms]*
	The version edition of Incoterms shall be ***INCOTERMS 2020***
GCC 8.1	For **notices**, the Procuring Entity's address shall be: Attention: ***Principal Secretary, State Department for Medical Services*** Postal address **P.O Box 30016-00100 Nairobi** Physical Address (full Location Address- ***Afya House, Cathedral Road-Nairobi*** Electronic mail address*: ps.medical@health.go.ke*
GCC 10.2	The rules of procedure for arbitration proceedings pursuant to GCC Clause 10.2 shall be as follows: *[The Tendering document should contain one clause to be retained in the event of a Contract with a foreign Lessor and one clause to be retained in the event of a Contract with a Lessor who is a national of Kenya. At the time of finalizing the Contract, the respective applicable clause should be retained in the Contract. The following explanatory note should therefore be inserted as a header to GCC 10.2 in the Tendering document.* *"Clause 10.2 (a) shall be retained in the case of a Contract with a foreign Lessor and clause 10.2 (b) shall be retained in the case of a Contract with a national of Kenya"]* ***(a) Contract with foreign Lessor:*** *[For contracts entered into with foreign Lessors, International commercial arbitration may have practical advantages over other dispute settlement methods. Among the rules to govern the arbitration proceedings, the Procuring Entity may wish to consider the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules of 1976, the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC), the Rules of the London Court of International Arbitration or the Rules of Arbitration Institute of the Stockholm Chamber of Commerce.]* (i) ***If the Procuring Entity chooses the UNCITRAL Arbitration Rules, the following sample clause should be inserted:*** GCC 10.2 (a)—Any dispute, controversy or claim arising out of or relating to this Contract, or breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force. (ii) ***If the Procuring Entity chooses the Rules of ICC, the following sample clause should be inserted:*** GCC 10.2 (a)—All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules. (iii) ***If the Procuring Entity chooses the Rules of Arbitration Institute of Stockholm Chamber of Commerce, the following sample clause should be inserted:*** GCC 10.2 (a)—Any dispute, controversy or claim arising out of or in connection with this

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
	Contract, or the breach termination or invalidity thereof, shall be settled by arbitration in accordance with the Rules of the Arbitration Institute of the Stockholm Chamber of Commerce. (iv) ***If the Procuring Entity chooses the Rules of the London Court of International Arbitration, the following clause should be inserted:*** GCC 10.2 (a)—Any dispute arising out of or in connection with this Contract, including any question regarding its existence, validity or termination shall be referred to and finally resolved by arbitration under the Rules of the London Court of International Arbitration, which rules are deemed to be incorporated by reference to this clause. ***(b) Contracts with Lessor who is a national of Kenya:*** In the case of a dispute between the Procuring Entity and a Lessor who is a national of Kenya, the dispute shall be referred to arbitration in accordance with the laws of Kenya.
GCC 13.1	Details of Shipping and other Documents to be furnished by the Lessor are *[insert the required documents, such as a negotiable bill of lading, a non-negotiable sea way bill, an airway bill, a railway consignment note, a road consignment note, insurance certificate, Manufacturer's or Lessor's warranty certificate, inspection certificate issued by nominated inspection agency, Lessor's factory shipping details etc.]*. The above documents shall be received by the Procuring Entity before arrival of the Lease Items and, if not received, the Lessor will be responsible for any consequent expenses.
GCC 15.1	The prices charged for the Lease Items supplied and the related Services performed *[insert "shall" or "shall not," as appropriate]* be adjustable. If prices are adjustable, the following method shall be used to calculate the price adjustment *[see attachment to these SCC for a sample Price Adjustment Formula]*
GCC 16.2	The Lessor may terminate the contract if the Procuring Entity fails to pay all amounts due within ___N/A_____ days.
GCC 16.3	The advance payment shall be _____N/A_____ The Monthly Payments shall be ___N/A_____ and shall be paid on or before _____ day of each month until the expiration of this lease.
GCC 16.4	The late fee of _____N/A_____ shall be due and payable immediately to the Lessor.
GCC 16.5	The payment-delay period after which the Procuring Entity shall pay interest to the Lessor shall be *[N/A]* days. The interest rate that shall be applied is *[insert number] %*
GCC 18.1	A Performance Security *[insert "shall" be required on As and When Required Basis]* *[If a Performance Security is required, insert "the amount of the Performance Security shall be: [insert amount]* *[The amount of the Performance Security is usually expressed as a percentage of the Contract Price. The percentage varies according to the Procuring Entity's perceived risk and impact of non-performance by the Lessor. A 10% percentage is used under normal circumstances]*
GCC 18.3	If required, the Performance Security shall be in the form of: *["a Demand Bank Guarantee"]* If required, the Performance security shall be denominated in *[insert "a freely convertible currency acceptable to the Procuring Entity" or "the currencies of payment of the Contract, in accordance with their portions of the Contract Price"]*

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract
GCC 18.4	Discharge of the Performance Security shall take place: *[insert date if different from the one indicated in sub clause GCC 18.4]*
GCC 23.	The packing, marking and documentation within and outside the packages shall be: *[insert in detail the type of packing required, the markings in the packing and all documentation required]*
GCC 24.1	The insurance coverage shall be as specified in the Incoterms. If not in accordance with Incoterms, insurance shall be as follows: *[insert specific insurance provisions agreed upon, including coverage, currency and amount]*
GCC 25.1	Responsibility for transportation of the Lease Items shall be **_LESSOR'S_** _____ *[insert "The Lessor is required under the Contract to transport the Lease Items to a specified place of final destination within Kenya, defined as the Project Site, transport to such place of destination in Kenya, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Lessor, and related costs shall be included in the Contract Price"; or any other agreed upon trade terms (specify the respective responsibilities of the Procuring Entity and the Lessor)]*
GCC 25.2	Incidental services to be provided are: *[Selected services covered under GCC Clause 25.2 and/or other should be specified with the desired features. The price quoted in the Tender price or agreed with the selected Lessor shall be included in the Contract Price.]*
GCC 26.1	The inspections and tests shall be: *[insert nature, frequency, procedures for carrying out the inspections and tests]*
GCC 26.2	The Inspections and tests shall be conducted at: *[insert name(s) of location(s)]*
GCC 27.1	The liquidated damage shall be: [*insert number]* % per week
GCC 27.1	The maximum amount of liquidated damages shall be: *[insert number]* %
GCC 33.6	If the value engineering proposal is approved by the Procuring Entity the amount to be paid to the Lessor shall be ___% (insert appropriate percentage. The percentage is normally up to 50%) of the reduction in the Contract Price.

SECTION IX - CONTRACT FORMS

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful tenderer after contract award.

Table of Forms

FORM No 1: NOTIFICATION OF INTENTION TO AWARD

This Notification of Intention to Award shall be sent to each Tenderer that submitted a Tender. Send this Notification to the Tenderer's Authorized Representative named in the Tender Information Form on the format below.

FORMAT

1. For the attention of Tenderer's Authorized Representative

   i) Name: .....*[insert Authorized Representative's name]*

   ii) Address: .....*[insert Authorized Representative's Address]*

   iii) Telephone: .....*[insert Authorized Representative's telephone/fax numbers]*

   iv) Email Address: .....*[insert Authorized Representative's email address]*

   [IMPORTANT: insert the date that this Notification is transmitted to Tenderers. The Notification must be sent to all Tenderers simultaneously. This means on the same date and as close to the same time as possible.]

2. Date of transmission: ..... *[email]*_____ on.....*[date]* _____ *(local time)* This Notification is sent by (*Name and designation*)_____
   _____

3. Notification of Intention to Award
   i) Procuring Entity: .....*[insert the name of the Procuring Entity]*
   ii) Project: .....*[insert name of project]*
   iii) Contract title: .....*[insert the name of the contract]*
   iv) Country: .....*[insert country where ITT is issued]*
   v) ITT No: .....*[insert ITT reference number from Procurement Plan]*

   This Notification of Intention to Award (Notification) notifies you of our decision to award the above contract. The transmission of this Notification begins the Standstill Period. During the Standstill Period, you may:

4. Request a debriefing in relation to the evaluation of your tender

   Submit a Procurement-related Complaint in relation to the decision to award the contract.

   a) The successful tenderer

      i) Name of successful Tender_____
      _____

      ii) Address of the successful Tender _____
      _____

      iii) Contract price of the successful Tender Kenya Shillings_____
      (in words_____)

   b) Other Tenderers

      Names of all Tenderers that submitted a Tender. If the Tender's price was evaluated include the evaluated price as well as the Tender price as read out. For Tenders not evaluated, give one main reason the Tender was unsuccessful.

Lease Item N°	Description of Lease Item and Related Services.	Tender Price as read out	Tender's evaluated price (Note a)	One Reason Why not Evaluated
1				
2				
3				
4				
5				

(Note a) State NE if not evaluated

5. How to request a debriefing

a) DEADLINE: The deadline to request a debriefing expires at midnight on [*insert date*] (*local time*).

b) You may request a debriefing in relation to the results of the evaluation of your Tender. If you decide to request a debriefing your written request must be made within three (5) Business Days of receipt of this Notification of Intention to Award.

c) Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:

i) Attention: [*insert full name of person, if applicable*]

ii) Title/position: [*insert title/position*]

iii) Agency: [*insert name of Procuring Entity*]

iv) Email address: [*insert email address*]

d) If your request for a debriefing is received within the 3 Days deadline, we will provide the debriefing within five (3) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (3) Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.

e) The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.

f) If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Days from the date of publication of the Contract Award Notice.

6. How to make a complaint

a) Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, [*insert date*] (local time).

b) Provide the contract name, reference number, name of the Tenderer, contact details; and address the Procurement-related Complaint as follows:

i) Attention: [*insert full name of person, if applicable*]

ii) Title/position: [*insert title/position*]

iii) Agency: [*insert name of Procuring Entity*]

iv) Email address: [*insert email address*]

c) At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.

d) Further information: For more information refer to the Public Procurement and Disposals Act 2015 and its Regulations available from the Website www.ppra.go.ke or email complaints@ppra.go.ke.

You should read these documents before preparing and submitting your complaint.

e) There are four essential requirements:

i) You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this tendering process, and is the recipient of a Notification of Intention to Award.

ii) The complaint can only challenge the decision to award the contract.

iii) You must submit the complaint within the period stated above.

iv) You must include, in your complaint, all of the information required to support your complaint.

7. Standstill Period

i) DEADLINE: The Standstill Period is due to end at midnight on [*insert date*] (local time).

ii) The Standstill Period lasts ten (14) Days after the date of transmission of this Notification of Intention to Award.

iii) The Standstill Period may be extended as stated in paragraph Section 5 (d) above.

If you have any questions regarding this Notification pleased do not hesitate to contact us. On behalf of the Procuring Entity:

Signature: _____

Name: _____

Title/position: _____

Telephone: _____

Email: _____

FORM NO. 2 - REQUEST FOR REVIEW

FORM FOR REVIEW(r.203(1))

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NO…….OF……..…20……...

BETWEEN

……...…….APPLICANT

AND

……RESPONDENT (Procuring Entity)

Request for review of the decision of the…… (Name of the Procuring Entity of ……dated the…day of ……20…….in the matter of Tender No……..…of ……..20….. for .....(Tender description).

REQUEST FOR REVIEW

I/We……,the above named Applicant(s), of address: Physical address…….P. O. Box No……. Tel. No……..Email ……, hereby request the Public Procurement Administrative Review Board to review the whole/part of the above mentioned decision on the following grounds , namely:

1.

2.

By this memorandum, the Applicant requests the Board for an order/orders that:

1.

2.

SIGNED …….(Applicant) Dated on…….day of ……/…20……

FOR OFFICIAL USE ONLY Lodged with the Secretary Public Procurement Administrative Review Board on……day of ……....20…..……

SIGNED

Board Secretary

FORM NO 3: LETTER OF AWARD

[letter head paper of the Procuring Entity]

.....*[date]*

To: .....*[name and address of the Contractor]*

This is to notify you that your Tender dated *[date]* for execution of the..... *[name of the Contract and identification number, as given in the Contract Data]* for the Accepted Contract Amount..... *[amount in numbers and words] [name of currency]*, as corrected and modified in accordance with the Instructions to Tenderers, is hereby accepted by…… *(name of Procuring Entity)*.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using, for that purpose, one of the Performance Security Forms included in Section VIII, Contract Forms, of the Tender Document.

Authorized Signature: .....

Name and Title of Signatory: .....

Name of Procuring Entity: .....

Attachment: *Contract Agreement*

FORM N0. 4 LETTER OF AWARD

[use letterhead paper of the Procuring Entity]

…….*[date]*

To: ……*[name and address of the Lessor]*

Subject: ***Notification of Award Contract No***……

This is to notify you that your Tender dated……*[insert date]* for the Lease Items on the list below is hereby accepted by our Agency.

OFFERED ITEMS AND PRICES

1	**2**	**3**
Lease Item N°	**Description of Lease Item and Related Services.**	**Tender Price**
1		
2		
3		
4		
Total Tender Price		**Xxxx**

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose the of the Performance Security Form included in Section X, Contract Forms, of the Tendering document.

Authorized Signature: ……

Name and Title of Signatory: ……

Name of Agency: ……..

Attachment: Contract Agreement

FORM NO 5 - CONTRACT AGREEMENT

[The successful tenderer shall fill in this form in accordance with the instructions indicated]

THIS AGREEMENT made the *[insert: **number**]* day of *[insert: **month**]*, *[insert: **year**]*.

BETWEEN

(1) *[insert complete name of Procuring Entity* and having its principal place of business at *[insert: address of Procuring Entity]* (herein after called "Procuring Entity"), of the one part;

and

(2) *[insert name of Lessor**]***, a corporation incorporated under the laws of *[insert: country of Lessor**]*** and having its principal place of business at *[insert: address of Lessor]* (herein after called "the Lessor"), of the other part.

3. WHEREAS the Procuring Entity invited Tenders for certain Lease Items and ancillary services, viz., *[insert brief description of Lease Items and Services]* and has accepted a Tender by the Lessor for the supply of those Lease Items and Services, the Procuring Entity and the Lessor agree as follows:

   i) In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.

   ii) The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.
      a) the Letter of Acceptance
      b) the Letter of Tender
      c) the Addenda Nos._____(if any)
      d) Special Conditions of Contract
      e) General Conditions of Contract
      f) the Specification (including Schedule of Requirements and Technical Specifications)
      g) the completed Schedules (including Price Schedules)
      h) any other document listed in GCC as forming part of the Contract

   iii) In consideration of the payments to be made by the Procuring Entity to the Lessor as specified in this Agreement, the Lessor hereby covenants with the Procuring Entity to provide the Lease Items and Services and to remedy defects the rein inconformity in all respects with the provisions of the Contract.

4. The Procuring Entity hereby covenants to pay the Lessor inconsideration of the provision of the Lease Items and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

5. IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of Kenya on the day, month and year indicated above.

For and on behalf of the Procuring Entity

Signed: .....*[insert signature]* in the capacity of .....*[insert title or other appropriate designation]*

In the presence of .....*[insert identification of official witness]*

For and on behalf of the Lessor Signed: .....*[insert signature of authorized representative(s) of the Lessor]*

in the capacity of .....*[insert title or other appropriate designation]*

in the presence of .....*[insert identification of official witness]*

FORM NO. 6 - PERFORMANCE SECURITY [Option 1 - Unconditional Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____ *[insert name and Address of* Procuring Entity*]*

Date: _____ *[Insert date of issue]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the letter head]*

1. We have been informed that _____ (hereinafter called "the Contractor") has entered into Contract No. _____ dated _____ with (*name of Procuring Entity*) _____ (the Procuring Entity as the Beneficiary), for the execution of _____ (herein after called "the Contract").

2. Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

3. At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of _____ (*in words*),[1] such sum being payable in the types and proportions of currencies in which the Contract Price is payable, upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the Contract, without the Beneficiary needing to prove or to show grounds for your demand or the sum specified therein.

4. This guarantee shall expire, no later than the…….. Day of……, 2..…[2], and any demand for payment under it must be received by us at the office indicated above on or before that date.

5. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months] [one year]*, in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."

_____
[Name of Authorized Official, signature(s) and seals/stamps]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

[1] *The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency of the Contract or a freely convertible currency acceptable to the Beneficiary.*

[2] *Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. The Procurement Entity should note that in the event of an Extension of this date for completion of the Contract, the Procurement Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.*

FORM No. 7 - PERFORMANCE SECURITY [Option 2– Performance Bond]

[Note: Procuring Entities are advised to use Performance Security–Unconditional Demand Bank Guarantee instead of Performance Bond due to difficulties involved in calling Bond holder to action]

[Guarantor letterhead or SWIFT identifier code]

Beneficiary: *[insert name and Address of Procuring*

Entity*]* **Date:** *[Insert date of issue]*

PERFORMANCE BOND No.:

Guarantor: [*Insert name and address of place of issue, unless indicated in the letterhead]*

1. By this Bond as Principal (hereinafter called "the Contractor") and] as Surety (hereinafter called "the Surety"), are held and firmly bound unto] as Obligee (hereinafter called "the Procuring Entity") in the amount of for the payment of which sum well and truly to be made in the types and proportions of currencies in which the Contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

2. WHEREAS the Contractor has entered into a written Agreement with the Procuring Entity dated the day of, 20, for in accordance with the documents, plans, specifications, and amendments thereto, which to the extent herein provided for, are by reference made part hereof and are hereinafter referred to as the Contract.

3. NOW, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly and faithfully perform the said Contract (including any amendments thereto), then this obligation shall be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor shall be, and declared by the Procuring Entity to be, in default under the Contract, the Procuring Entity having performed the Procuring Entity's obligations there under, the Surety may promptly remedy the default, or shall promptly:

    1) complete the Contract in accordance with its terms and conditions; or

    2) obtain a tender or tenders from qualified tenderers for submission to the Procuring Entity for completing the Contract in accordance with its terms and conditions, and upon determination by the Procuring Entity and the Surety of the lowest responsive Tenderers, arrange for a Contract between such Tenderer, and Procuring Entity and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Procuring Entity to Contractor under the Contract, less the amount properly paid by Procuring Entity to Contractor; or

    3) pay the Procuring Entity the amount required by Procuring Entity to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.

4. The Surety shall not be liable for a greater sum than the specified penalty of this Bond.

5. Any suit under this Bond must be instituted before the expiration of one year from the date of the issuing of the Taking - Over Certificate. No right of action shall accrue on this Bond to or for the use of any person or corporation other than the Procuring Entity named herein or the heirs, executors, administrators, successors, and assigns of the Procuring Entity.

6. In testimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety has caused these presents to be sealed with his corporate seal duly attested by the signature of his legal representative, this day of 20 .

SIGNED ON_____on behalf of

by_____in the capacity

of in the presence of

SIGNED ON_____on behalf

of by_____in the capacity

of in the presence of

FORM NO. 8 - ADVANCE PAYMENT SECURITY [Demand Bank Guarantee]

[Guarantor letterhead]

Beneficiary: _____*[Insert name and Address of* Procuring Entity*]*

Date: _____*[Insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: *[Insert guarantee reference number]*

Guarantor: [*Insert name and address of place of issue, unless indicated in the letter head]*

1. We have been informed that_____(hereinafter called "the Contractor") has entered into Contract No._____*dated*_____with the Beneficiary, for the execution of_____ (herein after called "the Contract").

2. Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum _____(*in words*_____) is to be made against an advance payment guarantee.

3. At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of_____(*in words*_____)[1] upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

   (a) has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or
   (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Contract or on its account number at……

5. The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the day of_____, 2 ,[2] whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed *[six months] [one year],* in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.

_____

[Name of Authorized Official, signature(s) and seals/stamps]

Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

[1] *The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency of the advance payment as specified in the Contract.*

[2] *Insert the expected expiration date of the Time for Completion. The Procurement Entity should note that in the event of an extension of the time for completion of the Contract, the Procurement Entity would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.*

FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE

(Amended and issued pursuant to PPRA CIRCULAR No. 02/2022)

INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful tenderer pursuant to Regulation 13 (2A) and 13 (6) of the Companies (Beneficial Ownership Information) Regulations, 2020. In case of joint venture, the tenderer must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Tenderer is any natural person who ultimately owns or controls the legal person (tenderer) or arrangements or a natural person on whose behalf a transaction is conducted, and includes those persons who exercise ultimate effective control over a legal person (Tenderer) or arrangement.

Tender Reference No.:_____[*insert identification no*] Name of the Tender Title/Description:_____*[insert name of the assignment]* to:_____*[insert complete name of Procuring Entity]*

In response to the requirement in your notification of award dated___*[insert date of notification of award]* to furnish additional information on beneficial ownership:_____*[select one option as applicable and delete the options that are not applicable]*

I) We here by provide the following beneficial ownership information.

Details of beneficial ownership

	Details of all Beneficial Owners		**% of shares a person holds in the company Directly or indirectly**	**% of voting rights a person holds in the company**	**Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer** (Yes / No)	**Whether a person directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)**
1.	Full Name		Directly---------- % of shares Indirectly---------- % of shares	Directly…… …….% of voting rights Indirectly---------- % of voting rights	1. Having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer: Yes -----No---- 2. Is this right held directly or indirectly?: Direct…… Indirect…….. .	1. Exercises significant influence or control over the Company body of the Company (tenderer) Yes -----No---- 2. Is this influence or control exercised directly or indirectly? Direct…….. Indirect……
	National identity card number or Passport number					
	Personal Identification Number (where applicable)					
	Nationality					
	Date of birth *[dd/mm/yyyy]*					
	Postal address					
	Residential address					
	Telephone number					
	Email address					
	Occupation or profession					
2.	Full Name		Directly---------- % of shares	Directly…… …….% of voting rights	1. Having the right to appoint a majority of the board of the directors or	1. Exercises significant influence or
	National identity card number or					

	Details of all Beneficial Owners		**% of shares a person holds in the company Directly or indirectly**	**% of voting rights a person holds in the company**	**Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer** (Yes / No)	**Whether a person directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)**
	Passport number		Indirectly---------- % of shares	Indirectly---------- % of voting rights	an equivalent governing body of the Tenderer: Yes -----No---- 2. Is this right held directly or indirectly?: Direct…… Indirect……..	control over the Company body of the Company (tenderer) Yes -----No---- 2. Is this influence or control exercised directly or indirectly? Direct…….. Indirect……
	Personal Identification Number (where applicable)					
	Nationality(ies)					
	Date of birth *[dd/mm/yyyy]*					
	Postal address					
	Residential address					
	Telephone number					
	Email address					
	Occupation or profession					
3. **e.t .c**						

II) Am fully aware that beneficial ownership information above shall be reported to the Public Procurement Regulatory Authority together with other details in relation to contract awards and shall be maintained in the Government Portal, published and made publicly available pursuant to Regulation 13(5) of the Companies (Beneficial Ownership Information) Regulations, 2020.(Notwithstanding this paragraph Personally Identifiable Information in line with the Data Protection Act shall not be published or made public). *Note that Personally Identifiable Information (PII) is defined as any information that can be used to distinguish one person from another and can be used to deanonymize previously anonymous data. This information includes National identity card number or Passport number, Personal Identification Number, Date of birth, Residential address, email address and Telephone number.*

III) In determining who meets the threshold of who a beneficial owner is, the Tenderer must consider a natural person who in relation to the company:

(a) holds at least ten percent of the issued shares in the company either directly or indirectly;

(b) exercises at least ten percent of the voting rights in the company either directly or indirectly;

(c) holds a right, directly or indirectly, to appoint or remove a director of the company; or

(d) exercises significant influence or control, directly or indirectly, over the company.

IV) What is stated to herein above is true to the best of my knowledge, information and belief.

Name of the Tenderer: .....[insert complete name of the Tenderer]*_____

*Name of the person duly authorized to sign the Tender on behalf of the Tenderer: ** [insert complete name of person*

duly authorized to sign the Tender]

Designation of the person signing the Tender: ..... [insert complete title of the person signing the Tender]

Signature of the person named above: ..... [insert signature of person whose name and capacity are shown above]

Date this ..... [insert date of signing] day of..... [Insert month], [insert year]

Bidder Official Stamp