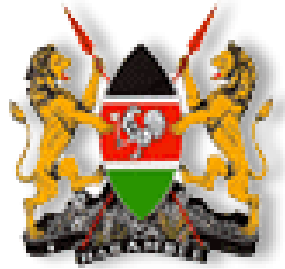


REPUBLIC OF KENYA



MINISTRY OF HEALTH

TENDER NO. MOH/NCD/ONT/001/2018-2019

FOR

**SUPPLY, DELIVERY, INSTALLATION AND
COMMISSIONING OF RADIOTHERAPY EQUIPMENT AND
ACCESSORIES**

TENDER ISSUING DATE: 18TH JUNE, 2019

TENDER CLOSING DATE: 2ND JULY, 2019

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Introduction

- 1.1 This Standard Tender Document has been prepared for use by public entities in Kenya
- 1.2 The following general directions should be observed when using the document.
 - (a) Specific details should be furnished in the Invitation to Tender and in the special conditions of contract. The final documents to be provided to the tenderers should not have blank spaces or give options
 - (b) The Instructions to Tenderers and the general conditions of contract should remain unchanged. Any necessary amendments to these parts should be made through the special conditions of contract and the appendix to instructions to tenderers.
- 1.3 (a) Information contained in the Invitation to Tender shall conform to the data and information in the tender documents to enable potential tenderers to decide whether or not to participate and shall indicate any important tender requirements.
- 1.4 The Invitation to Tender shall be issued as an advertisement in accordance with the regulations or a letter of invitation addressed to tenderers who have expressed interest following the invitation for expression of interest for which the invitation is issued.

SECTION I INVITATION TO TENDER
DATE: 18/06/2019

TENDER REF NO: TENDER NO. MOH/NCD/ONT/001/2018-2019
TENDER NAME: SUPPLY, DELIVERY, INSTALLATION AND
COMMISSIONING OF RADIOTHERAPY
EQUIPMENT AND ACCESSORIES

- 1.1 The **Ministry of Health** invites sealed bids from eligible candidates for **SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF RADIOTHERAPY EQUIPMENT AND ACCESSORIES**
- 1.2 Interested eligible candidates may obtain further information from and inspect the tender documents at **Ministry of Health building, the Supply Chain Management Division on 5th Floor, room 513** during normal working hours.
- 1.3 Completed tender documents are to be enclosed in plain sealed envelopes marked with the tender Number: **MOH/NCD/ONT/01/2018-2019** and Tender Name: **SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF RADIOTHERAPY EQUIPMENT AND ACCESSORIES** and must be deposited in the Tender Box at Afya House, 1st Floor or sent to

THE PRINCIPAL SECRETARY
MINISTRY OF HEALTH
6TH FLOOR, AFYA HOUSE,
P.O BOX 30016-00100, NAIROBI.

so as to be received on or before **Tuesday 2nd July, 2019 at 10.00 a.m.**

- 1.4 Prices quoted should be net inclusive of all taxes and delivery must be in Kenya Shillings and shall remain valid for (150) days from the closing date of the tender.
- 1.5 Tenders will be opened immediately thereafter at the **GTZ Boardroom, Afya House** in the presence of bidders or their representatives who choose to attend.

HEAD, SUPPLY CHAIN MANAGEMENT
FOR: THE PRINCIPAL SECRETARY

SECTION II - INSTRUCTIONS TO TENDERERS

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SECTION II - INSTRUCTIONS TO TENDERERS

2.1 Eligible Tenderers

- 2.1.1 This Invitation for Tenders is open to all tenderers eligible as described in the Invitation to Tender. Successful tenderers shall complete the supply of goods by the intended completion date specified in the Schedule of Requirements Section VI.
- 2.1.2 The procuring entity's employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.
- 2.1.3 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 goods under this Invitation for tenders.
- 2.1.4 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

2. Eligible Goods

- 2.2.1 All goods to be supplied under the contract shall have their origin in eligible source countries.
- 2.2.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially-recognized product results that is substantially different in basic characteristics or in purpose or utility from its components
- 2.2.3 The origin of goods is distinct from the nationality of the tenderer.

3. Cost of Tendering

- 2.3.1 The Tenderer shall bear all costs associated with the preparation and submission of its tender, and the procuring entity, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

2.3.2 The price to be charged for the tender document shall not exceed Kshs.1,000/=

2.3.3 All firms found capable of performing the contract satisfactorily in accordance with the set prequalification criteria shall be prequalified.

2.4. **The Tender Document**

2.4.1 The tender document comprises the documents listed below and addenda issued in accordance with clause 2.6 of these instructions to Tenderers

- (i) Invitation to Tender
- (ii) Instructions to tenderers
- (iii) General Conditions of Contract
- (iv) Special Conditions of Contract
- (v) Schedule of requirements
- (vi) Technical Specifications
- (vii) Tender Form and Price Schedules
- (viii) Tender Security Form
- (ix) Contract Form
- (x) Performance Security Form
- (xi) Bank Guarantee for Advance Payment Form
- (xii) Manufacturer's Authorization Form
- (xiii) Confidential Business Questionnaire

2.4.2 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tender documents. Failure to furnish all information required by the tender documents or to submit a tender not substantially responsive to the tender documents in every respect will be at the tenderers risk and may result in the rejection of its tender.

4. Clarification of Documents

2.5.1 A prospective tenderer requiring any clarification of the tender document may notify the Procuring entity in writing or by post at the entity's address indicated in the Invitation to Tender. The Procuring entity will respond in writing to any request for clarification of the tender documents, which it receives not later than seven (7) days prior to the deadline for the submission of tenders, prescribed by the procuring entity. Written copies of the Procuring entities response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective tenderers that have received the tender document.

2.5.2 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

5. Amendment of Documents

2.6.1 At any time prior to the deadline for submission of tenders, the Procuring entity, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer, may modify the tender documents by amendment.

2.6.2 All prospective candidates that have received the tender documents will be notified of the amendment in writing or by post and will be binding on them.

2.6.3 In order to allow prospective tenderers reasonable time in which to take the amendment into account in preparing their tenders, the Procuring entity, at its discretion, may extend the deadline for the submission of tenders.

6. Language of Tender

2.7.1 The tender prepared by the tenderer, as well as all correspondence and documents relating to the tender exchange by the tenderer and the Procuring entity, shall be written in English language, provided that any printed literature furnished by the tenderer may be written in another language provided they are accompanied by an accurate English translation of the relevant passages in which case, for purposes of interpretation of the tender, the English translation shall govern.

7. Documents Comprising of Tender

2.8.1 The tender prepared by the tenderers shall comprise the following components

- (a) a Tender Form and a Price Schedule completed in accordance with paragraph 2.9, 2.10 and 2.11 below
- (b) documentary evidence established in accordance with paragraph 2.1 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;
- (c) documentary evidence established in accordance with paragraph 2.2 that the goods and ancillary services to be supplied by the tenderer are eligible goods and services and conform to the tender documents; and
- (d) tender security furnished in accordance with paragraph 2.14

8. Tender Forms

2.9.1 The tenderer shall complete the Tender Form and the appropriate Price Schedule furnished in the tender documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.

9. Tender Prices

2.10.1 The tenderer shall indicate on the appropriate Price Schedule the unit prices and total tender price of the goods it proposes to supply under the contract

2.10.2 Prices indicated on the Price Schedule shall include all costs including taxes, insurances and delivery to the premises of the entity.

2.10.3 Prices quoted by the tenderer shall be fixed during the Tender's performance of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to paragraph 2.22

2.10.4 The validity period of the tender shall be 60 days from the date of opening of the tender.

10. Tender Currencies

2.11.1 Prices shall be quoted in Kenya Shillings unless otherwise specified in the Appendix to Instructions to Tenderers.

11. Tenderers Eligibility and Qualifications

2.12.1 Pursuant to paragraph 2.1. the tenderer shall furnish, as part of its tender, documents establishing the tenderers eligibility to tender and its qualifications to perform the contract if its tender is accepted.

2.12.2 The documentary evidence of the tenderers eligibility to tender shall establish to the Procuring entity's satisfaction that the tenderer, at the time of submission of its tender, is from an eligible source country as defined under paragraph 2.1

2.12.3 The documentary evidence of the tenderers qualifications to perform the contract if its tender is accepted shall be established to the Procuring entity's satisfaction;

- (a) that, in the case of a tenderer offering to supply goods under the contract which the tenderer did not manufacture or otherwise produce, the tenderer has been duly authorized by the goods' Manufacturer or producer to supply the goods.
- (b) that the tenderer has the financial, technical, and production capability necessary to perform the contract;
- (c) that, in the case of a tenderer not doing business within Kenya, the tenderer is or will be (if awarded the contract) represented by an Agent in Kenya equipped, and able to carry out the Tenderer's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications.

2.13 Goods Eligibility and Conformity to Tender Documents

2.13.1 Pursuant to paragraph 2.2 of this section, the tenderer shall furnish, as part of its tender documents establishing the eligibility and conformity to the tender documents of all goods which the tenderer proposes to supply under the contract

2.13.2 The documentary evidence of the eligibility of the goods shall consist of a statement in the Price Schedule of the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.

2.13.3 The documentary evidence of conformity of the goods to the tender documents may be in the form of literature, drawings, and data, and shall consist of:

- (a) a detailed description of the essential technical and performance characteristic of the goods;
- (b) a list giving full particulars, including available source and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the goods for a period of two (2) years, following commencement of the use of the goods by the Procuring entity; and
- (c) a clause-by-clause commentary on the Procuring entity's Technical Specifications demonstrating substantial responsiveness of the goods and service to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.

2.13.4 For purposes of the documentary evidence to be furnished pursuant to paragraph 2.13.3© above, the tenderer shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Procurement entity in its

Technical Specifications, are intended to be descriptive only and not restrictive. The tenderer may substitute alternative standards, brand names, and/or catalogue numbers in its tender, provided that it demonstrates to the Procurement entity's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

2.14 Tender Security

2.14.1 The tenderer shall furnish, as part of its tender, a tender security for the amount specified in the Appendix to Invitation to Tenderers.

2.14.2 The tender security shall be in the amount of 0.5 – 2 per cent of the tender price.

2.14.3 The tender security is required to protect the Procuring entity against the risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to paragraph 2.14.7

2.14.4 The tender security shall be denominated in Kenya Shillings or in another freely convertible currency, and shall be in the form of a bank guarantee or a bank draft issued by a reputable bank located in Kenya or abroad, or a guarantee issued by a reputable insurance company in the form provided in the tender documents or another form acceptable to the Procuring entity and valid for thirty (30) days beyond the validity of the tender.

2.14.5 Any tender not secured in accordance with paragraph 2.14.1 and 2.14.3 will be rejected by the Procuring entity as non responsive, pursuant to paragraph 2.22

2.14.6 Unsuccessful Tenderer's tender security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of tender validity prescribed by the Procuring entity.

2.14.7 The successful Tenderer's tender security will be discharged upon the tenderer signing the contract, pursuant to paragraph 2.27 and furnishing the performance security, pursuant to paragraph 2.28

2.14.8 The tender security may be forfeited:

- (b) if a tenderer withdraws its tender during the period of tender validity specified by the procuring entity on the Tender Form; or
- (c) in the case of a successful tenderer, if the tenderer fails:
 - (i) to sign the contract in accordance with paragraph 2.27or

- (ii) to furnish performance security in accordance with paragraph 2.28

2. Validity of Tenders

- 2.15.1 Tenders shall remain valid for 90 days or as specified in the Invitation to Tender after the date of tender opening prescribed by the Procuring entity, pursuant to paragraph 2.18. A tender valid for a shorter period shall be rejected by the Procuring entity as non responsive.
- 2.15.2 In exceptional circumstances, the Procuring entity may solicit the Tenderer's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The tender security provided under paragraph 2.14 shall also be suitably extended. A tenderer may refuse the request without forfeiting its tender security. A tenderer granting the request will not be required nor permitted to modify its tender.

3. Format and Signing of Tender

- 2.16.1 The Procuring entity shall prepare two copies of the tender, clearly marking each "ORIGINAL TENDER" and "COPY OF TENDER," as appropriate. In the event of any discrepancy between them, the original shall govern.
- 2.16.2 The original and all copies of the tender shall be typed or written in indelible ink and shall be signed by the tenderer or a person or persons duly authorized to bind the tenderer to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the tender. All pages of the tender, except for unamended printed literature, shall be initialed by the person or persons signing the tender.
- 2.16.3 The tender shall have no interlineations, erasures, or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

2.17 Sealing and Marking of Tenders

- 2.17.1 The Tenderer shall seal the original and each copy of the tender in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope.
- 2.17.2 The inner and outer envelopes shall:

be addressed to the Procuring entity at the address given in the Invitation to Tender:

bear, tender number and name in the Invitation for Tenders and the words, “DO NOT OPEN BEFORE,” **Tuesday 2nd July 2019 at 10.00 a.m**

2.17.3 The inner envelopes shall also indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared “late”.

2.17.4 If the outer envelope is not sealed and marked as required by paragraph 2.17.2, the Procuring entity will assume no responsibility for the tender’s misplacement or premature opening.

4. Deadline for Submission of Tenders

2.18.1 Tenders must be received by the Procuring entity at the address specified under paragraph 2.17.2 no later than **Tuesday 2nd July 2019 at 10.00 a.m.**

2.18.2 The Procuring entity may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 2.6, in which case all rights and obligations of the Procuring entity and candidates previously subject to the deadline will therefore be subject to the deadline as extended

5. Modification and Withdrawal of Tenders

2.19.1 The tenderer may modify or withdraw its tender after the tender’s submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by the Procuring Entity prior to the deadline prescribed for submission of tenders.

2.19.2 The Tenderer’s modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of paragraph 2.17. A withdrawal notice may also be sent by cable, telex but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.

2.19.3 No tender may be modified after the deadline for submission of tenders.

2.19.4 No tender may be withdrawn 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 Tender Form. Withdrawal of a tender

during this interval may result in the Tenderer's forfeiture of its tender security, pursuant to paragraph 2.14.7

2.19.5 The procuring entity may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.

2.19.6 The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.

2.20 Opening of Tenders

2.20.1 The Procuring entity will open all tenders in the presence of tenderers' representatives who choose to attend, at **10.00 a.m, Tuesday 2nd July 2019** and in the location specified in the Invitation to Tender.

The tenderers' representatives who are present shall sign a register evidencing their attendance.

2.20.2 The tenderers' names, tender modifications or withdrawals, tender prices, discounts and the presence or absence of requisite tender security and such other details as the Procuring entity, at its discretion, may consider appropriate, will be announced at the opening.

2.20.3 The Procuring entity will prepare minutes of the tender opening.

2.21 Clarification of Tenders

2.21.1 To assist in the examination, evaluation and comparison of tenders the Procuring entity may, at its discretion, ask the tenderer for a clarification of its tender. The request for clarification and the response shall be in writing, and no change in the prices or substance of the tender shall be sought, offered, or permitted.

2.21.2 Any effort by the tenderer to influence the Procuring entity in the Procuring entity's tender evaluation, tender comparison or contract award decisions may result in the rejection of the tenderers' tender.

2.22 Preliminary Examination

2.22.1 The Procuring entity will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether

required sureties have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.

2.22.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantify, the unit price shall prevail, and the total price shall be corrected. If the candidate does not accept the correction of the errors, its tender will be rejected, and its tender security forfeited. If there is a discrepancy between words and figures the amount in words will prevail

2.22.3 The Procuring entity may waive any minor informality or non-conformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or effect the relative ranking of any tenderer.

2.22.4 Prior to the detailed evaluation, pursuant to paragraph 2.23 the Procuring entity will determine the substantial responsiveness of each tender to the tender documents. For purposes of these paragraphs, a substantially responsive tender is one, which conforms to all the terms and conditions of the tender documents without material deviations. The Procuring entity's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.

2.22.5 If a tender is not substantially responsive, it will be rejected by the Procuring entity and may not subsequently be made responsive by the tenderer by correction of the non conformity.

2.23 Conversion to Single Currency

2.23.1 Where other currencies are used, the procuring entity will convert these currencies to Kenya Shillings using the selling exchange rate on the rate of tender closing provided by the Central Bank of Kenya.

2.24 Evaluation and Comparison of Tenders

2.24.1 The Procuring entity will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 2.22

2.24.2 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.

2.24.3 A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a contract after notification of

contract award shall be considered for debarment from participating in future public procurement.

2.25 Preference

2.25.1 Preference where allowed in the evaluation of tenders shall not exceed 15%

2.26 Contacting the Procuring entity

2.26.1 Subject to paragraph 2.21 no tenderer shall contact the Procuring entity on any matter related to its tender, from the time of the tender opening to the time the contract is awarded.

2.26.2 Any effort by a tenderer to influence the Procuring entity in its decisions on tender, evaluation, tender comparison, or contract award may result in the rejection of the Tenderer's tender.

2.27 Award of Contract

(a) Post-qualification

2.27.1 In the absence of pre-qualification, the Procuring entity will determine to its satisfaction whether the tenderer that is selected as having submitted the lowest evaluated responsive tender is qualified to perform the contract satisfactorily.

2.27.2 The determination will take into account the tenderer financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 2.12.3 as well as such other information as the Procuring entity deems necessary and appropriate.

2.27.3 An affirmative determination will be a prerequisite for award of the contract to the tenderer. A negative determination will result in rejection of the Tenderer's tender, in which event the Procuring entity will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

6. Award Criteria

2.27.4 The Procuring entity will award the contract to the successful tenderer(s) whose tender has been determined to be substantially responsive and has been determined to be the lowest evaluated tender, provided further that

the tenderer is determined to be qualified to perform the contract satisfactorily.

7. Procuring entity's Right to Vary quantities

2.27.5 The Procuring entity reserves the right at the time of contract award to increase or decrease the quantity of goods originally specified in the Schedule of requirements without any change in unit price or other terms and conditions

8. Procuring entity's Right to Accept or Reject Any or All Tenders

2.27.6 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 thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Procuring entity's action

2.28 Notification of Award

2.28.1 Prior to the expiration of the period of tender validity, the Procuring entity will notify the successful tenderer in writing that its tender has been accepted.

2.28.2 The notification of award will constitute the formation of the Contract but will have to wait until the contract is finally signed by both parties

2.28.3 Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 2.28, the Procuring entity will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 2.14

2.29 Signing of Contract

2.29.1 At the same time as the Procuring entity notifies the successful tenderer that its tender has been accepted, the Procuring entity will send the tenderer the Contract Form provided in the tender documents, incorporating all agreements between the parties.

2.29.2 The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless there is an administrative review request.

2.29.3 Within thirty (30) days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Procuring entity.

2.30 Performance Security

2.30.1 Within Thirty (30) days of the receipt of notification of award from the Procuring entity, the successful tenderer shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the tender documents, or in another form acceptable to the Procuring entity.

2.30.2 Failure of the successful tenderer to comply with the requirements of paragraph 2.27 or paragraph 2.28 shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Procuring entity may make the award to the next lowest evaluated Candidate or call for new tenders.

2.31 Corrupt or Fraudulent Practices

2.31.1 The Procuring entity requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts when used in the present regulations, the following terms are defined as follows;

- (i) “corrupt practice” means the offering, giving, receiving, or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
- (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring entity, and includes collusive practice among tenderer (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;

2.31.2 The procuring entity will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.

2.31.3 Further a tenderer who is found to have indulged in corrupt or fraudulent practices risks being debarred from participating in public procurement in Kenya.

Appendix to Instructions to Tenderers

Notes on the Appendix to the Instruction to Tenderers

1. The Appendix to instructions to tenderers is intended to assist the procuring entity in providing specific information in relation to the corresponding clause in the instructions to Tenderers included in Section II and has to be prepared for each specific procurement.
2. The procuring entity should specify in the appendix information and requirements specific to the circumstances of the procuring entity, the goods to be procured and the tender evaluation criteria that will apply to the tenders.
3. In preparing the Appendix the following aspects should be taken into consideration;
4. The information that specifies and complements provisions of Section II to be incorporated
5. Amendments and/or supplements if any, to provisions of Section II as necessitated by the circumstances of the goods to be procured to be also incorporated
6. Section II should remain un-changed and can only be amended through the Appendix.
7. Clauses to be included in this part must be consistent with the public procurement law and the regulations.

Appendix to Instructions to Tenderers

The following information regarding the particulars of the tender shall complement supplement or amend the provisions of the instructions to tenderers. Wherever there is a conflict between the provision of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers

INSTRUCTIONS TO TENDERERS REFERENCE	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
2.1.1	Open National Tender
2.3.2	The Price to be charged for the tender document shall be FREE . A complete set of the tender document can be obtained from the Ministry of Health, Afya House, Supply Chain Management Office on 5 th Floor, room 513 from Monday to Friday between 9.00 a.m. to 4.00 p.m. upon payment of a non-refundable fee of Kshs. 1,000.00 per document in the form of Cash paid at cash office on second floor. Alternatively tender documents with detailed specifications and all conditions are obtainable from the Ministry of Health Website, (www.health.go.ke) free of charge. Bidders are required to download the tender documents from the said website and immediately email their names and contact details (cell phone number, email address and company name to procurement514health@gmail.com for records and communication of any tender clarifications and addenda.
2.5.1	Interested eligible candidates may obtain further information from and inspect the tender documents at Ministry of Health building, the Supply Chain Management Division on 5th Floor, room 513 from Monday to Friday during normal working hours.
2.7.1	Language: English
2.10.2	Prices indicated shall be inclusive of all Taxes
2.10.3	Prices quoted by the tenderer shall be fixed during the Tender's performance of the contract and not subject to variation on any account.
2.11.1	Prices shall be quoted in Kenya Shillings and shall include the total cost of acquisition. This shall take into account the cost of supply, delivery, installation, testing and commissioning of the equipment. Bidders MUST attach proof/evidence of availability of spare parts in the market. The evidence must include contacts and physical location of the outlets or local partners
2.14.1	Tender Security shall be denominated in Kenya Shillings and Shall be in:

	<p>a) A bank guarantee</p> <p>b) Such insurance guarantee approved by the Public Procurement Regulatory Authority</p>
2.16.1	The Procuring entity shall prepare two copies of the tender, clearly marking each “ORIGINAL TENDER” and “COPY OF TENDER,” as appropriate.
2.18.1	<p>Completed tender documents are to be enclosed in plain sealed envelopes marked with the tender Number: MOH/NCD/ONT/01/2018-2019 and Tender Name: SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF RADIOTHERAPY EQUIPMENT AND ACCESSORIES and must be deposited in the Tender Box at Afya House, 1st Floor or sent to</p> <p>THE PRINCIPAL SECRETARY MINISTRY OF HEALTH 6TH FLOOR, AFYA HOUSE, P.O BOX 30016-00100, NAIROBI.</p> <p>so as to be received on or before Tuesday 2nd July, 2019 at 10.00 a.m.</p>
2.20.1	Tenders will be opened immediately thereafter in the presence of the Candidates or their representatives who choose to attend at Ministry of Health building, GTZ Boardroom at 10.00 a.m.
Other requirements	<p>EVALUATION CRITERIA:</p> <p>Preliminary Evaluation</p> <p>Candidates shall comply with the following MANDATORY requirements;</p> <ol style="list-style-type: none"> a) Submit a copy of Business Name, Registration Certificate or Certificate of Incorporation b) Evidence of physical registered office (attach utility bills/ lease agreement /rental payment receipt/ evidence of ownership of the premises) c) Submit a duly filled Original and Copy of tender document (Bid document MUST be in original and copy and MUST be sequentially serialized (paginated) on every page) Submission of two Tender documents securely bound (Spiral or book) and clearly marked (original and (copy) by the tenderer. No loose documents will be accepted. d) Submit a Duly Filled, signed and stamped form of tender e) Submit a Duly Filled, signed and stamped confidential business questionnaire f) Submit a duly filled, Signed and Stamped delivery schedule g) Submit a duly filled, Signed and Stamped price schedule h) Submit a copy of certified manufacturer’s authorization certificate/letter

- i) Submit a tender security of Kshs. 10,000,000 from a reputable Bank or an Insurance company approved by Public Procurement Regulatory Authority (PPRA). Tender Security validity period must be 30 days after the expiry of the Tender Validity Period
- j) Indicate Tender validity period of 150 days
- k) Submit a copy of valid tax compliance certificate
- l) Submit a copy of PIN certificate
- m) Submit original Bank reference letter for this specific tender
- n) Submit written power-of-attorney indicating person/persons authorized to sign documents on behalf of the tenderer
- o) Submit a copy of certified current CR12
- p) Submit certified copies of Identification Cards for Directors of the firm
- q) Submit Original Highlighted Manufacturers brochure for every item quoted for.
- r) Submitting a written declaration that the bidder has not been debarred from participating in public procurement
- s) Submit a copy of certified audited financial statements for the last three years

NB: Non-compliance on any of the above requirements shall lead to automatic disqualification of the candidate

Technical Evaluation;

The evaluation committee shall evaluate the bids on conformity to the technical specifications provided for by the bidders who are responsive in stage one. Bidders **MUST** submit Manufacturers brochure for every quoted item. The Evaluation Committee will evaluate the brochures for each item quoted to check conformity to the **MINIMUM** technical specifications required by the Ministry of Health for each item. Bidders whose bids do not conform to the **MINIMUM** technical specifications given in the tender document shall be disqualified from further evaluation.

Financial Evaluation

Bids that satisfy the above requirements shall be compared on the basis of unit prices quoted and the lowest priced will be considered lowest evaluated and subsequently recommended for award. **Prevailing market prices will be used to determine the responsiveness.**

SECTION III: GENERAL CONDITIONS OF CONTRACT

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SECTION III - GENERAL CONDITIONS OF CONTRACT

3.1 Definitions

3.1.1 In this Contract, the following terms shall be interpreted as indicated:-

- (a) “The Contract” means the agreement entered into between the Procuring entity and the tenderer, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- (b) “The Contract Price” means the price payable to the tenderer under the Contract for the full and proper performance of its contractual obligations
- (c) “The Goods” means all of the equipment, machinery, and/or other materials, which the tenderer is required to supply to the Procuring entity under the Contract.
- (d) “The Procuring entity” means the organization purchasing the Goods under this Contract.
- (e) “The Tenderer” means the individual or firm supplying the Goods under this Contract.

3.2 Application

These General Conditions shall apply in all Contracts made by the Procuring entity for the procurement installation and commissioning of equipment

3.3 Country of Origin

3.3.1 For purposes of this clause, “Origin” means the place where the Goods were mined, grown or produced.

3.3.2 The origin of Goods and Services is distinct from the nationality of the tenderer.

3.4 Standards

3.4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications.

3.5 Use of Contract Documents and Information

3.5.1 The tenderer shall not, without the Procuring entity’s prior written consent, disclose the Contract, or any provision therefore, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Procuring entity in connection therewith, to any person

other than a person employed by the tenderer in the performance of the Contract.

3.5.2 The tenderer shall not, without the Procuring entity's prior written consent, make use of any document or information enumerated in paragraph 3.5.1 above

3.5.3 Any document, other than the Contract itself, enumerated in paragraph 3.5.1 shall remain the property of the Procuring entity and shall be returned (all copies) to the Procuring entity on completion of the Tenderer's performance under the Contract if so required by the Procuring entity

3.6 Patent Rights

3.6.1 The tenderer shall indemnify the Procuring entity against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Procuring entity's country

3.7 Performance Security

3.7.1 Within thirty (30) days of receipt of the notification of Contract award, the successful tenderer shall furnish to the Procuring entity the performance security in the amount specified in Special Conditions of Contract.

3.7.2 The proceeds of the performance security shall be payable to the Procuring entity as compensation for any loss resulting from the Tenderer's failure to complete its obligations under the Contract.

3.7.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Procuring entity and shall be in the form of a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in Kenya or abroad, acceptable to the Procuring entity, in the form provided in the tender documents.

3.7.4 The performance security will be discharged by the Procuring entity and returned to the Candidate not later than thirty (30) days following the date of completion of the Tenderer's performance obligations under the Contract, including any warranty obligations, under the Contract

3.8 Inspection and Tests

3.8.1 The Procuring entity or its representative shall have the right to inspect and/or to test the goods to confirm their conformity to the Contract specifications. The Procuring entity shall notify the tenderer in writing in

a timely manner, of the identity of any representatives retained for these purposes.

- 3.8.2 The inspections and tests may be conducted in the premises of the tenderer or its subcontractor(s), at point of delivery, and/or at the Goods' final destination. If conducted on the premises of the tenderer or its subcontractor(s), 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.
- 3.8.3 Should any inspected or tested goods fail to conform to the Specifications, the Procuring entity may reject the equipment, and the tenderer shall either replace the rejected equipment or make alterations necessary to make specification requirements free of costs to the Procuring entity.
- 3.8.4 The Procuring entity's right to inspect, test and where necessary, reject the goods after the Goods' arrival shall in no way be limited or waived by reason of the equipment having previously been inspected, tested and passed by the Procuring entity or its representative prior to the equipment delivery.
- 3.8.5 Nothing in paragraph 3.8 shall in any way release the tenderer from any warranty or other obligations under this Contract.

3.9 Packing

- 3.9.1 The tenderer shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract.
- 3.9.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract.

3.10 Delivery and Documents

- 3.10.1 Delivery of the Goods shall be made by the tenderer in accordance with the terms specified by Procuring entity in its Schedule of Requirements and the Special Conditions of Contract.

3.11 Insurance

- 3.11.1 The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacturer or acquisition, transportation, storage, and delivery in the manner specified in the Special conditions of contract.

3.12 Payment

3.12.1 The method and conditions of payment to be made to the tenderer under this Contract shall be specified in Special Conditions of Contract

3.12.2 Payments shall be made promptly by the Procuring entity as specified in the contract

3.13 Prices

3.13.1 Prices charged by the tenderer for goods delivered and services performed under the Contract shall not, with the exception of any price adjustments authorized in Special Conditions of Contract, vary from the prices by the tenderer in its tender.

3.13.2 Contract price variations shall not be allowed for contracts not exceeding one year (12 months)

3.13.3 Where contract price variation is allowed, the variation shall not exceed 10% of the original contract price.

3.13.4 Price variation request shall be processed by the procuring entity within 30 days of receiving the request.

3.14. Assignment

3.14.1 The tenderer shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Procuring entity's prior written consent

3.15 Subcontracts

3.15.1 The tenderer shall notify the Procuring entity in writing of all subcontracts awarded under this Contract if not already specified in the tender. Such notification, in the original tender or later, shall not relieve the tenderer from any liability or obligation under the Contract

3.16 Termination for default

3.16.1 The Procuring entity may, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the tenderer, terminate this Contract in whole or in part

(a) if the tenderer fails to deliver any or all of the goods within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring entity

(b) if the tenderer fails to perform any other obligation(s) under the Contract

- (c) if the tenderer, in the judgment of the Procuring entity has engaged in corrupt or fraudulent practices in competing for or in executing the Contract

3.16.2 In the event the Procuring entity terminates the Contract in whole or in part, it may procure, upon such terms and in such manner as it deems appropriate, equipment similar to those undelivered, and the tenderer shall be liable to the Procuring entity for any excess costs for such similar goods.

3.17 Liquidated Damages

3.17.1. If the tenderer fails to deliver any or all of the goods within the period(s) specified in the contract, the procuring entity shall, without prejudice to its other remedies under the contract, deduct from the contract prices liquidated damages sum equivalent to 0.5% of the delivered price of the delayed items up to a maximum deduction of 10% of the delayed goods. After this the tenderer may consider termination of the contract.

3.18 Resolution of Disputes

3.18.1 The procuring entity and the tenderer shall make every effort to resolve amicably by direct informal negotiation and disagreement or dispute arising between them under or in connection with the contract

3.18.2 If, after thirty (30) days from the commencement of such informal negotiations both parties have been unable to resolve amicably a contract dispute, either party may require adjudication in an agreed national or international forum, and/or international arbitration.

3.19 Language and Law

3.19.1 The language of the contract and the law governing the contract shall be English language and the Laws of Kenya respectively unless otherwise stated.

3.20 Force Majeure

3.20.1 The tenderer shall not be liable for forfeiture of its performance security or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

SECTION IV - SPECIAL CONDITIONS OF CONTRACT

Notes on Special Conditions of Contract

The clauses in this section are intended to assist the procuring entity in providing contract-specific information in relation to corresponding clauses in the General Conditions of Contract.

The provisions of Section IV complement the General Conditions of Contract included in Section III, specifying contractual requirements linked to the special circumstances of the procuring entity and the goods being procured. In preparing Section IV, the following aspects should be taken into consideration.

- (a) Information that complement provisions of Section III must be incorporated and
- (b) Amendments and/or supplements to provisions of Section III, as necessitated by the circumstances of the goods being procured must also be incorporated.

SECTION IV -SPECIAL CONDITIONS OF CONTRACT

- 4.1 Special Conditions of Tender shall supplement the General Conditions of Contract. Whenever there is a conflict, the provisions herein shall prevail over those in the General Conditions of Contract.

INSTRUCTIONS TO TENDERERS REFERENCE	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
3.4.1	Equipment will be supplied as per the provided technical specifications.
3.7.1	On receipt of notification of contract award, the successful tenderer shall furnish the Department with a performance security of 10% of the price quoted for supply, delivery, installation and commissioning of Radiotherapy Equipment and accessories from a reputable Bank or an Insurance company approved by Public Procurement Oversight Authority (PPRA).
3.8.1	Pre-shipping inspection shall be carried out at the manufacturer's premises by the Ministry of Health representatives Upon supply, delivery, installation and commissioning of goods, inspection shall be carried out by Inspection and Acceptance Committee The Ministry of Health will carry out a joint testing and commissioning of the equipment with the supplier to confirm that it meets the specifications specified in the tender document and ensure that it is working as expected upon delivery. The tenderer shall provide all necessary assistance, equipment, human resource and any other support required to ensure successful inspection.
3.8.2	Supply, delivery, installation, commissioning of the equipment shall be at the point of installation namely; Mombasa, Garissa and Nakuru County Referral Hospitals respectively.
3.12.1	Payment shall be made after the equipment is supplied, delivered, installed and commissioned and be inspected and accepted by the Inspection and Acceptance Committee.
3.13.1	Index mechanism to adjust prices will be based on relevant public information. (CPI, inflation, exchange rate and prevailing market prices)
3.16.1	The Tenderer will be automatically disqualified where false or fraudulent Information is given and the Government reserves the right to change the quantities without giving reasons or notice to the supplier.

SECTION V - TECHNICAL SPECIFICATIONS

5.1 General

- 5.1.1 These specifications describe the requirements for goods. Tenderers are requested to submit with their offers the detailed specifications, drawings, catalogues, etc for the products they intend to supply
- 5.1.2 Tenderers must indicate on the specifications sheets whether the equipment offered comply with each specified requirement.
- 5.1.3 All the dimensions and capacities of the equipment to be supplied shall not be less than those required in these specifications. Deviations from the basic requirements, if any shall be explained in detail in writing with the offer, with supporting data such as calculation sheets, etc. The procuring entity reserves the right to reject the products, if such deviations shall be found critical to the use and operation of the products.
- 5.1.4 The tenderers are requested to present information along with their offers as follows:
- (i) Shortest possible delivery period of each product
 - (ii) Information on proper representative and/or workshop for back-up service/repair and maintenance including their names and addresses.

The Technical specifications for the Equipment is as follows:

SPECIFICATIONS FOR RADIOTHERAPY EQUIPMENT AND ACCESSORIES

1. Scope

A pre-installation visit is required by the supplier to ensure full compliance to equipment installation requirements. The contract shall include supply and installation, acceptance testing and commissioning of specified equipment.

2. Applicable documents

The following documents shall be applicable for this Specification to the extent specified hereinafter:

2.1. INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA), "International Basic Safety Standards for Protection against Ionizing Radiation and for the Safety of Radiation Sources", Safety Series No. 115, IAEA, Vienna (1996).

2.2 INTERNATIONAL ELECTROTECHNICAL COMMISSION, Medical Electrical Equipment, Part 2-1: Particular Requirements for the Safety of Electron Accelerators in the Range 1 MeV to 50 MeV, Rep. IEC 601-2-1, IEC, Geneva (1998).

2.3 INTERNATIONAL ELECTROTECHNICAL COMMISSION, Medical electrical equipment - Medical electron accelerators - Functional performance characteristics, IEC 60976-977, IEC, Geneva (1998).

2.4 INTERNATIONAL ATOMIC ENERGY AGENCY (IAEA) Human Health Reports No.10; Radiotherapy Facilities: Master Planning and Concept Design considerations, Subject Classification: 0100- Life Sciences. English STI/PUB/1645;(ISBN: 978-92-0-101914-1).

2.5 Radiation Oncology Physics Hand Book for students and Teachers, AAPM TG-40.

3. REQUIREMENTS FOR RADIOTHERAPY EQUIPMENT

A. LINEAR ACCELERATOR (LINAC) & ITS ACCESSORIES

A dual energy (low and high photon and electron beams) linear accelerator which should be able to perform various specialized treatment techniques such as: Three Dimensional Conformal Radiotherapy (3D CRT); Intensity Modulated Radiation Therapy (IMRT); SRS/SRT with adaptability for future upgrade.

The LINAC components/accessories will include:

1. Gantry and collimator head and their accessories,
2. Treatment couch tables,
3. Control consoles
4. Patient information system
5. Treatment planning system
6. Immobilization package
7. Chiller
8. Power conditioner
9. Area room monitor
10. Lasers
11. Back pointer
12. Intercom
13. CCTV
14. Anti-collision detector
15. Dosimetry package

The specifications for each are as outlined below.

1. Gantry and Collimator Head

The gantry and treatment head should have the following characteristics:

- 1.1. A gantry motorized with isocentric design
- 1.2. A gantry rotation of $\pm 190^\circ$;
- 1.3. A source–isocentre distance (SAD) of 100 cm;
- 1.4. An isocentre height above floor level of ≤ 135 cm;
- 1.5. A head to isocentre clearance (with devices inserted) ≥ 30 cm;
- 1.1.6. Isocentre maximum sphere ≤ 2.0 mm in diameter for all three axes of rotation (collimation, gantry and couch);
- 1.7. Hand-held control of parameters inside the treatment room;
- 1.8. A collimator with:
 - a. Collimator jaw indication either mechanical or electrical with mechanical backup;
 - b. Collimator rotation at least $\pm 100^\circ$ with motorized rotation;
 - c. Asymmetric option
 - d. Scale Conventions

- IEC Scale convention per IEC Publication IEC 60601-2-1
- IEC 1217 Scale convention per IEC Publication IEC 61217
- e. Digital Readouts : • Accuracy: $\pm 0.5^\circ$ • Resolution: 0.1°
- f. Mechanical Scales: Accuracy: $\pm 1.0^\circ$ • Resolution: 1.0° , Target to Surface Distance Indicators

1.9. Optical distance indication range: SAD ± 20 cm, with mechanical backup;

- a. Accuracy: ± 0.1 cm at 100 cm; ± 0.5 cm at 70 cm and 156 cm, Resolution: 0.5 cm
- b. Mechanical Front Pointer: Range: 70-110 cm; Accuracy: ± 0.1 cm at 100 cm; Resolution: 0.2 cm
- c. Isocenter Height (nominal): 129.5 cm

1.10. A transparent shadow tray for secondary collimation (blocks) to support blocks up to 20 kg. To allow treatment at any angle with blocks, it shall be possible to fix the blocking tray to the collimator without use of hand tools. A comprehensive set of standard shielding blocks with a set of at least 100 coded block trays shall be supplied. It shall be possible to use blocks and wedges simultaneously.

1.11. A **Multi Leaf Collimator (MLC)**: The MLC offers 0.5 cm leaf resolution at isocenter for the central 20 cm of the 40 cm x 40 cm field. The MLC operates in static, dynamic, and conformal arc modes. The static mode provides efficient beam shaping for 3D conformal radiation therapy. The dynamic mode enables IMRT with both step-and-shoot and sliding window delivery. The conformal arc mode enables conformal arc therapy in which the leaves always conform to the outer boundary of the target as the gantry rotates around the patient. Offers at least 80 leaves.

1.12. An **MV Imager**: The MV imaging system that allows for verification of patient setups, treatment portals, and Portal Dosimetry. The detector is of modern technology, preferably amorphous silicon has an active imaging area of minimum 30 cm x 30 cm with a pixel resolution of 1024 x 768. Image acquisition is supported before, during, and after treatment. Match and Review IGRT software is included for image analysis. A motorized, robotic arm is used to position and hold the detector. The movements of the arms will allow to position the detector along the X-Y-Z axes, remotely, from within the treatment room and from the console room. The MV imager can be placed at isocentre in order to be used to utilities such as QA verification.

1.13 Photon radiation field

The photon radiation field should have the following characteristics:

- a. The photon energy should be 6/15 MV with Photon Energy Display BJR 11. One energy can be of high dose rate (FFF).
- b. The maximum field size at the isocentre should be ≥ 40 cm \times 40 cm (50% isodose level).
- c. The minimum field size at the isocentre should be ≤ 4 cm \times 4 cm (50% isodose level) (3 cm \times 3 cm is preferred).
- d. Symmetry should be better than $\pm 3\%$. The uniformity should be better than $\pm 3\%$ over 80% of the field.
- e. The light/radiation field congruence should be ≤ 2 mm
- f. A penumbra ≤ 8 mm should be achievable.

g. The output should be variable from 0.5 Gy/min to more than 3 Gy/min at the isocentre (at a depth of Dmax) for a 10 cm × 10 cm field.

h. Nominal wedge angles of 15, 30, 45 and 60° must be available. An extended set of wedge angles (achievable as a single beam) would be preferred. The wedged field size should be at least 20 cm (w) × 30 cm. (Coverage of the full field size in the unwedged direction is preferred.) Insertion of wedges must not restrict the use of secondary collimation. The maximum field size covered by the wedge must be interlocked to the machine. Wedges shall be fixed for rotation of collimator and gantry. It shall be possible to use blocks and wedges simultaneously. Ideally, wedges should be selectable from outside the treatment room either using a motorized wedge or a 'dynamic wedge' created by jaw movements. Note that wedging shall be possible in the direction of the asymmetric collimation.

i. Upper and Lower Independent Collimators: Asymmetrical collimation is provided for upper and lower sets of collimators as:

- Independent, asymmetrical Upper Collimator travel range: >20cm
- Independent, asymmetrical Lower Collimator travel range: >20cm

1.14 Electron Beams

The electron beam should have the following characteristics:

- a. Four (4) electron beams preferably 6, 9, 12 and 15 MeV. The specifications apply to a 15 x 15 cm² electron applicator and 100 cm TSD.
- b. Dose Rate: up to 1000 Mu/min.
- c. Field Sizes: A set of electron applicators to be provided, preferably and not limited to: 6 x 6 cm², 10 x 10 cm², 15 x 15 cm², 20 x 20 cm², and 25 x 25 cm².
- d. Accelerator System Features: RF Power Source- preferred klystron operated in linear amplifier mode and driven by a solid-state oscillator, with power and frequency automatically locked to required operating levels.
- e. Gun: Capable to rapidly and precisely vary output dose rate and turn the beam on or off. This capability is especially important in dynamic dose delivery, where high-speed beam gating and elimination of dark current during beam-off time periods is important.
- f. Accelerator section: preferred standing wave. Spectrum characteristics, with and without use of an energy switch,
- g. Radial and Transverse Steering Systems: ensure basic beam alignment in all modes, as well as gantry orientation. Ion chamber sensors, in conjunction with the steering coils and servo electronics, maintain beam symmetry changes to within 2% under all conditions.

1.15 Dose monitoring

The dose monitoring equipment should include the following:

- a. A dual ionization chamber system with independently monitored high voltage supply;
- b. Reproducible to within ± 2% or 1 monitor unit, whichever is precise at any fixed gantry angle from 0° to 360° at a fixed dose rate;
- c. Linearity shall be between ± 1% or 1 monitor unit, whichever is greater. For accumulated doses between 20 and 999 monitor units;
- d. Interlocks to detect dose rate differences between the two channels;

- e. A high dose rate interlock to prevent an excess dose rate;
- f. A symmetry monitoring system should be included;
- g. The dose monitoring chambers shall operate consistently independent of ambient temperature and pressure;
- h. An independent backup timer to indicate accumulated monitor unit in case of power failure.

2. Treatment Couch tables

The couch table should have the following characteristics:

- a. Treatment Couch with indexed carbon fiber table top.
- b. The turntable rotation limits should be $\pm 90^\circ$.
- c. The lateral motion range of the patient should be better than ± 20 cm
- d. Vertical movement should be motorized, with a minimum height of ~ 63 cm above the floor and maximum height of ~ 40 cm above the isocentre.
- e. The longitudinal range should be ≥ 70 cm.
- f. Table top sag should be ≤ 5 mm with a patient of 80 kg (≤ 3 mm is preferred)
 - Couch positions (except couch top rotation) shall also be displayed at the control console. Accuracy of the scales for vertical, lateral and longitudinal motions shall be within ± 1 mm. Two hand pendants shall be provided.
 - The couch should be motorized in 4 directions and controlled either from the treatment room or the console area. It should be integrated with the control system of the linac in order to allow daily shifts based on acquired MV images.

3. Control consoles

Control consoles should have a general on/off key.

Hand pendants shall have the following characteristics:

- 3.1. Two hand pendants should be supplied;
- 3.2. Treatment room and console position display;
- 3.3. Emergency off switches: one on console and 4 in treatment rooms;
 - For accuracy of patient set-up, digital displays of gantry rotation angle, collimator rotation angle, collimator jaw settings (symmetric and asymmetric), and treatment couch vertical position, lateral position, longitudinal position and turntable rotation angle about isocentre shall be provided both in the treatment room and at the operator console. Accuracy of collimator and gantry angle displays shall be $\pm 0.5^\circ$, with a resolution of 0.1° . Accuracy of collimator jaw position displays shall be ± 1 mm with a resolution of 1 mm. Accuracy of the couch vertical, lateral and longitudinal displays shall be ± 2 mm with a resolution of 1 mm.
 - The Treatment Console should provide a streamlined front end to the delivery system. The console integrates use of the accelerator, MLC, and imager into one application on a single workstation. The Treatment Console uses a DICOM RT interface to communicate with the oncology information system and other information system databases.

4. Patient Information System

- a. The information system will include a server with rack, 8 client workstations (each with a computer of at least 24inch display monitor, at least 500 SSD storage capacity). Each workstation with a UPS:
- b. An open operating system software; windows based;
- c. It will include but not limited to the following features:
 - a. Patient demographic data
 - b. Diagnosis and staging entry
 - c. Agenda and resource planning
 - d. Reporting capability.

5. Treatment Planning System (TPS)

- 5.1. The treatment planning system will include 4 client workstations (Computer; At least 24 inch display monitor, At least 500 SSD storage capacity, At least windows 10); 2 with calculation capabilities to minimum of IMRT planning, but all with contouring capabilities and contouring licenses.
- 5.2. Capable of residing on the same database as the patient information system – OIS;
- 5.3. Windows based.
- 5.4. System should be able to export image and plan data in DICOM standard along with all radiotherapy specific data and private objects, DICOM RT plans and data sets.
- 5.5. System should be able to export DICOM RT data to the linear accelerator.
- 5.6. TPS should be fully integrated with the CT simulator system at the facility. The vendor will be responsible for complete integration.
- 5.7. All requisite import and export licenses should be provided.
- 5.8. Electronic portal imaging device (EPID), fully retractable. Interfaces for electronic data transfer (DRRs, DICOM RT compatible) from available treatment planning systems.
- 5.9. Record & Verify system (R&V), one workstation (computer) at treatment console. Interfaces for electronic data transfer (DICOM RT Plans, MLC positions) from available treatment planning systems.

6. Immobilization package

Immobilization and essential Accessories shall be included with the LINAC.

The supplier should include the following key accessories at a minimum:

- Carbon Fiber Immobilization Devices: Carbon fiber standard baseplates (2), carbon fiber head and shoulder baseplate (2), foam head support (18 pieces), acrylic prone baseplate (1), carbon fiber wingboard (2) carbon fiber breastboard (3), carbon fiber bellyboard (2), foam knee rest (2), foam foot rest (2), water tank (1), vacuum pump (1) and table index bar (6).
- Accessories and Thermoplastic Masks: Thermoplastic head mask (50), thermoplastic head and neck mask (40), thermoplastic head and shoulder mask (40), thermoplastic head mask IMRT (20) thermoplastic head and neck mask IMRT (20), thermoplastic head and shoulder mask IMRT (20), thermoplastic breast mask (20), thermoplastic pelvis mask (20), vacuum bags >40 x 60cm (4), vacuum bags >60 x 80cm (4), bolus 0.5 and 1cm (3 each), skin markers (3) and CT markers (3).
- Head Base plate
- Head support set, position “supine”
- Head support, position “prone”
- Head and neck thermoplastic masks

- Head and Shoulder thermoplastic masks
- Carbon fiber wingboard
- Immobilization board for treating breast and thorax with precise hand immobilization
- Thermoplastic breast mask
- Base plate for Abdomen and Pelvis made of carbon fiber
- Thermoplastic mask for Abdomen and Pelvis
- Knee support device
- Foot support device
- Whole body immobilization vacuum bags 70/100cm
- Whole body immobilization vacuum bags 50/70cm
- Vacuum bags for special size order
- Bolus 0.5cm
- Bolus 1cm
- Table index bar
- Water bath for thermoplastic masks heating
- Vacuum pump

7. Chiller

A chiller to ensure adequate cooling of the linear accelerator should be included in the offer.

8. Power conditioner

A power conditioner to ensure adequate stability of the power of the linear accelerator should be included in the offer.

9. Area Room Monitor

An acoustic or an optical signal for monitoring the radiation dose rate;

10. Lasers

A set of 3 lasers for use in patient centering;

11. Back Pointer

A back pointer — preferably optical;

12. Inter com

An intercommunication device with the patient (two stations);

13. CCTV

A CCTV systems; one with pan, tilt and zoom capability

14. Anti-Collision Detector

The linear accelerator should have protection to avoid collisions with the patient where this could be hazardous to the patient, and collisions with other parts of the accelerator where this could lead to damage or interruption of dynamic treatments.

15. DOSIMETRY PACKAGE

15.1. Plotting Tank System (radiation field analyzer)

15.1.1. 3D Water Tank, acrylic walls, moving range 50x50x40 cm, tank positioning including lifting carriage and water reservoir.

15.1.2. Automated 3D scanning system, including servomotors, control unit, electrometers and connecting cables

15.1.3. Two (2) ~ 0.1 cc cylindrical ionization chambers and holders for fixation to scanning system

15.1.4. PC based Hardware and Software for scanned data acquisition, processing and analysis. The software package should include planning module for generation of beam data in user's available treatment planning system format.

15.1.5. Installation and on-site training of local medical physicists.

15.2. The dosimetry serve system beam performance should meet internationally acceptable standards. The stable time for beam output should not be >0.5 sec and the dose stability error not $>2\%$ in 5 days. The system should allow for a safety interlock activation when longitude and lateral beam symmetry is $\neq 2\%$. The ionization chamber should have a 4-channel structure.

15.3. The system should include the following:

a. 3D water phantom, control software, dual channel electrometer, waterproof scanning ion chambers/detectors, electric lift table, waterproof calibration therapy ion chamber (0.6cc), calibration electrometer, barometer, thermometer, scanning software and a laptop computer,

b. Pack of Gafchromic film with film analyzer software.

c. A solid water phantom with ion chamber inserts.

d. In-vivo dosimetry system; preferably diode detectors & electrometers for available photons & electrons beams.

e. Compatible connectors for detectors/chambers and electrometers. Set of inter-connecting adapters for BNC, TNC, etc. depending on the supplied dosimetry items.

f. At least three (3) 20 meters long connecting cables (low noise) thick version.

g. A 2D Comprehensive LINAC QA Device with Advance Software for Energy Constancy check.

h. CIRS phantom with ion chamber inserts.

i. Check sources

- Radioactive Check Device type CDC for cylindrical detectors
- Adapter for use of "Farmer" type chambers with CDC radioactive check device

- Adapter for use of CC type chambers with CDC radioactive check device

- **Isocentre check device**

- o Base plate

- o Disk phantom for isocenter check (base plate required)

j. Thermometer & Barometer

- o Digital Barometer

- o Laboratory Thermometer.

B. HDR BRACHYTHERAPY UNIT & ITS ACCESSORIES

1. Radioactive source

- a. Iridium-192, metallic
- b. Cylindrical configuration
- c. Iridium-192 pellet- HDR: 0.6 mm diameter, 3.5 mm active length;
- d. Capsule- HDR: 0.9 mm diameter, 4.52 mm length; PDR: 0.9 mm diameter, 2.97 mm length;
- e. Nominal activity- HDR: 370 GBq (10 Ci)*; PDR: 37 GBq (1 Ci);
- f. Air Kerma Rate (HDR): 0.063 Gy/h ($\pm 5\%$) for 555 GBq at 1 m

In addition, the brachytherapy unit should have the following accessories;

2. Source cable:

- a. Iridium-192 source encapsulated in stainless steel
- b. Capsule welded to a flexible stainless steel cable
- c. 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)
- d. Cable diameter: 0.9 mm
- e. Maximum extension length: 130 cm
- f. The most distal 200 mm section of the cable is an ultra-flexible cable.
- g. Source manufactured according to ISO1677, ISO2919, ISO/TR4826, ISO9978 resulting in ISO source classification: C63333.

3. Transportable options

Transportation options systems have been qualified as a Type A shipping container.

4. After loader

After loader capacity that can be converted to a transportable system for use in multiple locations.

Meets the commitments of the following standards:

- 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.

5. Cable and drive parameters

- Nominal cable speed zero slip: approximately 60 cm/s
- Source positioning accuracy: ± 1 mm relative to the indexer

6. Source placement

- Treatment channels preferably eighteen (18) 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 for bronchial catheter.

- Method of source movement: commences at most distal dwell positions and steps back.

7. After loader 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 μ Gy/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

8. Electrical Power Requirements

- System power rating: 115 VAC / 60 Hz or 220V / 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.

9. 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

10. 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

11. Safety equipment (emergency container)

- Emergency source container is designed to hold most applicators directly
- 38.1.2 Minimum shielding: 26 mm lead
- 38.1.3 Minimum diameter (inner plastic container): approximately 60 mm
- 38.1.4 Container height (internal): 270 mm

NB.A Brachytherapy Unit with all of the safety features of the 18-channel; Brachytherapy Unit with features using the same source and flexible cable.

12. Standard Brachytherapy Dosimetry/QA equipment and accessories (e.g. applicators) to include:

- i) Fletcher Applicators
- ii) Well-type ion chamber

- iii) Electrometer with cable long enough to connect chamber to electrometer (at least 20m)
- iv) Source check ruler
- v) Survey meter

C. CT SIMULATOR, ACCESSORIES AND QA EQUIPMENT

1. Large Bore CT - RT Simulator

Whole body, multi-slice (allow at least 32 slice per rotation) and high resolution imaging CT scanner system should have following essential features.

2. Gantry

- a. Gantry aperture should be at least 80cm or more.
- b. Gantry tilt should be at least ± 30 degree.
- c. Scan field of view of at least 50cm.
- d. Extended field of view of minimum 60cm for radiotherapy planning should be available.
- e. Gantry must have laser positioning lights with a positioning accuracy of at least ± 1 mm.
- f. Gantry must have remote tilt capability away from patient for efficiency.
- g. Full gantry rotation should be possible.

3. Patient Couch

- a. The scanning couch top must be a fibre flat table top and be able to bear up to 200kg or more. With matching indexing to treatment couch.
- b. The longitudinal range should be ≥ 110 cm; lateral range ≥ 50 cm; and turntable rotation $\geq \pm 100^\circ$.
- c. The vertical movement range should be at least 100cm or more.
- d. Couch top max height should be at least 40cm above isocenter and min height from floor < 70 cm
- e. It should be possible to adjust the table top.

4. Control Console

- a. It should have 19" inch or wider colour monitors.
- b. All functions viz scanning, image display, image reconstruction, film documentation, 3D processing, virtual simulation etc should be possible from the workstation.
- c. An archiving facility for images must be available.
- d. The image reconstruction time should be less than 10ips.

5. X-ray System

- a. High frequency X-ray generator with power rating of at least 50kW or more.
- b. Should be in the range of 80kV to 140kV.
- c. The mA range must be from 10mA to 400mA or better, with step size of 5mA or better.
- d. Peak anode heat dissipation rate of at least 1200kHU/min or better.
- e. Tube heat capacity no less than 5MHU with overheat protect control.
- f. X-ray tube should have dual focal spots. Supplier to indicate the size of the focal spots.

6. Detectors

- a. The detector system should be a high performance, high data density, and active response data acquisition system.
- b. The detectors should be solid state.
- c. There should be multiple rows each with 800 or more detectors for taking a minimum of 16 slices each time.

7. Image Quality

- i) The reconstruction matrix must be at least 556 x 556.

- ii) Simultaneous scanning and reconstruction should be possible. It should be possible to do:
 - Simultaneous scanning and routine analysis.
 - Simultaneous scanning and archiving and / or hard copying.
 - Simultaneous scanning and transfer to second console / workstation.
- iii) The system should have mA control software that adjusts mA for patient size and dose.

8. CT Scanning Parameters

- a. The slice thickness should be user selectable.
- b. Scan time for full 360 degree rotation should not exceed 1sec.
- c. Scan field view should be at least 50cm.
- d. The following scanning modes should be possible at a minimum: Axial, Helical, Cine.
- e. Different selection of pitch should be possible, from 0.5 to 2. Please mention the pitch available.
- f. Inter-scan delay in different groups of should not be more than 2 sec.
- g. Inter-group delay of at least 5 sec or more should be possible.
- h. Reference scan should be possible on an arbitrary slice within proposed treatment volume.
- i. Should allow for table speed of 25mm per rotation or better.
- j. High contrast spatial resolution possible.
- k. Low contrast detectability 5mm or less @ 0.3% using 20cm CATPHAN.
- l. 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.

9. Computer System of CT scanner

- a. State-of-the-art, high end main computer system, must be provided.
- b. There must be two monitors in the console and they must be 19" or wider LCD monitors. One of these will be used for acquisition and the other will be used for review and processing.
- c. The image storage hard disk capacity should allow for at least 250,000 uncompressed 556 images with at least 2500 or better scan seconds of scan data storage capacity. The maximum possible main computer system hard disk capacity must be provided.
- d. For archiving, DVD writer should be provided for providing copies of individual studies.
- e. The archiving system should provide back up for imaging needs of an average radiology facility for 2 years.
- f. All necessary hard ware and consumables (DVD / DAT cartridges) to be specified and provided.
- g. Printer with color laser connected with UPS to be provided.
- h. The system should be fully DICOM complaint and should support the following:
 - Dicom 3.0 Print Service Class
 - Dicom 3.0 Storage Service Class
 - Dicom 3.0 Send / Receive (User / Provider)
 - Dicom 3.0 Query / Retrieve Service Class
 - Dicom 3.0 Media Service Class
 - Dicom 3.0 Dose Report
 - A Dicom compliance statement should be provided

10. Computer System for Moving Laser System

A moving laser system must be provided for marking the isocenter. Following the isocenter localization in the CT simulator workstation, the isocenter coordinate will be sent directly to

the computer system that is controlling the movement of the lasers. This computer in turn should drive all the lasers, so that the lasers point to the isocenter.

11. 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 and DICOM-RT. The system should be networked with the radiotherapy treatment planning system in the department.
- b. Complete import export options and archival facility shall be provided.
- c. Software capability: Perfusion CT, Lung CT, Bone CT, Colonoscopy and CT Angiography.

12. Essential Accessories to be Included with the Unit

- a. Sets of patient positioning accessories namely head holder, positioning kit, mattresses (for diagnostic procedures) must be provided.
- b. UPS: On line UPS with rack for the backup of the entire system (i.e. gantry, computer system, anesthesia delivery system, monitor and defibrillators) for at least 15 minutes and with inverter output transformer.
- c. . Broadband connectivity in console, power panel in the electrical room including power cable from the transformer to the electrical room of the equipment and all IT related devices for connectivity.
- d. Lead Glass: 100cm X 60cm or more with protection of not less than 1.8mm pb for radiation safety.
- e. Quality assurance accessories and phantom: All QA tools (CATPHAN, Laser Alignment, Diagnostic QA tools etc) of international standards must be provided.
- f. Remote diagnostic monitoring: Remote diagnostics tool and software should be included along with internet connection for on-line remote diagnosis. All such running costs will be at supplier's account for the duration of warranty.
- g. High quality and durable supporting furniture, air conditioners for the machine room, control console and for the additional workstations must be provided along with the unit.

13. CT SIMULATION WORK STATION

13.1. General

The workstation should have advanced CT simulation tools for radiation therapy treatment planning with dose calculation engine. All necessary calibration / quality assurance phantom / check device should also be provided, please specify. The workstation should be able to provide complete volume definition and geometric beam placement for radiotherapy. It should have complete compatibility and error-free networking with the CT scanner computer and TPS. The CT Simulator technology should backup the existing Brachytherapy system in the institute pertaining TPS and IMRT Interstitial applications.

13.2. Hardware

- i) Hardware specification should be mentioned clearly. The system should be running on a high-end workstation platform of reputed brand like “Sun Micro System, HP, Dell, CompuTech, Silicon Graphics with at least 4 GB RAM or more. Minimum 128 bits processor with minimum of 275GB hard disk or more.
- ii) Networking with Treatment Planning System – All the software with licenses required should be included.
- iii) Laser Printer should be provided. It should be possible to take printouts on this printer from any of the CT Simulation workstation.

13.3. Software

Complete software performing all the functions of a CT Simulator as per requirement and should have following features:

- i) Image match with DRR image from TPS system (DICOM RT and PTP Link export and import)
- ii) Auto setup simulator with import treatment plan or patient selected.
- iii) Image process and edit.
- iv) Image enhancement, window/level, zoom etc.
- v) Whole screen and multi-image display.
- vi) Annotation tools, measurement of distance and angle.
- vii) System capability to integrate with OIS.
- viii) Facility for multi-modality fusion to accept data from other DICOM compatible and DICOM supporting modalities such as MRI/CT/SPECT/PET should be able to fuse them.

13.4. Respiratory Gating Software

The machine should have respiratory gating capability option.

13.5. Contouring

- i) System must be able to contour in axial, sagittal, coronal and oblique projections.
- ii) It should be possible to do manual, semi-automated, fully automated contouring/segmentation in the images by defining volume of interest.
- iii) System should have tracing tools for match with import image or stored image.
- iv) It should be possible to copy one organ to another with margin, and margins on a single slice, a range of slices or all slices.
- v) It should be possible to display irradiation field parameters and couch parameters.
- vi) It should also be possible set the MLC shape on simulator workstation.
- vii) 2D dose calculation should be possible.

viii) The system should also be able to perform auto trace and opposed field setting.

13.6 3D Viewing Capabilities

- i) Post processing features like volume rendering and 3D reconstruction should be possible.
- ii) It should allow completed 3D volume to be defined including complex 3D volumes and user selectable multi-image views.
- iii) DICOM Radiotherapy plans and data structure with import/export of data should be possible.
- iv) The DICOM compliance statement should be provided.

13.7.Data Import / Export

- i) System should be able to export image and plan data in DICOM standard along with all Radiotherapy specific data and private objects, DICOM RT plans and data sets.
- ii) System should be able to export DICOM RT data to the linear accelerator.
- iii) CT simulator system should be fully integrated with the TPS to be installed. The vendor will be responsible for complete integration.
- iv) All import and export licenses should be provided.

13.8 Standard CT SIM Dosimetry/QA equipment and accessories shall be included to include:

- i) ACR Phantom
- ii) 32 cm CT Phantom
- iii) CATPHAN 640
- iv) CIRS phantom for electron density check
- v) Pencil type ion chamber with electrometer
- vi) CT Laser check tool
- vii) Barometer
- viii) Thermometer

IN ADDITION, THE FOLLOWING ASPECTS SHALL BE INCLUDED IN THE CONTRACT BIDS FOR ALL EQUIPMENT:

1. Safety compliance

Compliance with the safety requirements and the standards of the IEC shall be substantiated by providing the results of type tests along with the quotation.

2. Accompanying documents:

The accompanying documents shall comply with the appropriate international standards. The documentation shall include:

2.1. Performance specifications;

2.2 Operating instructions;

2.3. Installation documentation including data to calculate shielding, masses, forces and momenta, ventilation shafts and conduits for cables, and fittings to anchor the equipment and couch during construction;

- 2.4. Preventive maintenance instructions and service manuals;
- 2.5. Isodose charts.
- 2.6 Set of library of standard plans.

3. Marking

The equipment should have the safety marking as required by international standards.

4. Packing

The equipment shall be packed in accordance with international standards that are applicable for the shipment of this type of equipment.

5. Installation and training

- 5.1. Prior to shipment of the equipment to Kenya, the contractor shall make a pre-installation visit to check the room compliance. The check list used by the contractor to ensure compliance shall be submitted at least 2 weeks before to the customer;
- 5.2. The Contractor shall install the radiotherapy equipment at the Nakuru County Referral, Mombasa County Referral and Garissa County Referral hospitals;
- 5.3. The Contractor shall provide on-site training in the operation of the radiotherapy equipment to local radiotherapy technologists, radiation oncologist and medical physicists, immediately after the installation of the equipment.
- 5.4. The Contractor shall provide first line in-factory training on preventive/corrective maintenance of the radiotherapy equipment to one in-house biomedical technician/engineer, preferable previous to the installation (the duration, location, programme, etc., should be specified).

6. Testing and Acceptance

The Contractor, after the installation of the radiotherapy equipment, shall perform acceptance testing together with a local medical physicist, and shall document the performance parameters and the successful completion of the installation. The compliance with the requirements specified shall be certified in an acceptance protocol that shall be signed by the Contractor and the representative of the hospital.

7. Deliverables Data Items

The following data items shall be delivered in English language:

- 7.1. Installation drawings and instructions, including electrical and shielding requirements prior to installation;
- 7.2. Preparation instructions for the treatment room prior to installation;
- 7.3. Performance specifications of the radiotherapy equipment including the linear accelerator;
- 7.4. Certificate of compliance to relevant IEC standards;

7.5. Preventive maintenance and service manuals;

7.6. Acceptance protocol to document the performance parameters and the successful completion of the installation;

7.7. A final report that shall summarize the work performed, including as an attachment, a copy of all the training material.

7.8. Statement of commitment for continued service support

8. Warranty and service

8.1. A comprehensive warranty should be offered to cover the first **two years**, starting after formal acceptance testing; to cover chillers, UPS, spare parts and portal imaging system. It shall include comprehensive maintenance – once every two months, solve problem on demand, responds to emergency calls;

8.2. Service by the manufacturer at national level should be available; the address of the nearest service location, and the number and qualifications of the maintenance engineers at that location, should be indicated;

8.3. A standard spare parts kit should be included. Specify which spare parts are included and whether they are readily available locally;

8.4. The Contractor shall guarantee that replacement parts are available for at least 10 years after installation of linear accelerator;

8.5. The Contractor shall ensure that service support and further upgrades are available for the type of linear accelerator that is provided.

8.6. Preferably, there shall be direct engagements with the manufacturer.

SECTION V - SCHEDULE OF REQUIREMENTS

NO	ITEM	UNIT	No. of Sites	Delivery schedule
1.	LINEAR ACCELERATOR (LINAC) & ITS ACCESSORIES	Lot	3	
2.	HDR BRACHYTHERAPY UNIT & ITS ACCESSORIES	Lot	3	
3.	CT SIMULATOR, ACCESSORIES AND QA EQUIPMENT AS PER SPECIFICATION	Lot	3	

Name of the tenderer.....

Signature and stamp of tenderer.....

Date.....

SECTION VII - PRICE SCHEDULE FOR GOODS

TENDER NO.MOH/NCD/ONT/001/2018-2019 FOR SUPPLY, DELIVERY, INSTALLATION AND COMMISSIONING OF RADIOTHERAPY EQUIPMENT AND ACCESSORIES

S/No	Description	Unit	Country of origin	No. of Sites	Unit Price	Total Price per item
1	LINEAR ACCELERATOR (LINAC) & ITS ACCESSORIES AS PER SPECIFICATION	Lot		3		
2	HDR BRACHYTHERAPY UNIT & ITS ACCESSORIES AS PER SPECIFICATION	Lot		3		
3	CT SIMULATOR, ACCESSORIES AND QA EQUIPMENT AS PER SPECIFICATION	Lot		3		

Name of the tenderer.....

Signature and stamp of tenderer.....

Date.....

Note:

- 1. In case of discrepancy between unit price and total, the unit price shall prevail.**
- 2. Bidders Must fill all the information required in the table above.**

SECTION VIII - STANDARD FORMS

Notes on the sample Forms

1. Form of Tender - The form of tender must be completed by the tenderer and submitted with the tender documents. It must also be duly signed by duly authorized representatives of the tenderer.
2. Confidential Business Questionnaire Form - This form must be completed by the tenderer and submitted with the tender documents.
3. Tender Security Form - When required by the tender documents the tender shall provide the tender security either in the form included herein or in another format acceptable to the procuring entity.
4. Contract Form - The Contract Form shall not be completed by the tenderer at the time of submitting the tender. The Contract Form shall be completed after contract award and should incorporate the accepted contract price.
5. Performance Security Form - The performance security form should not be completed by the tenderers at the time of tender preparation. Only the successful tenderer will be required to provide performance security in the form provided herein or in another form acceptable to the procuring entity.
6. Bank Guarantee for Advance Payment Form - When Advance payment is requested for by the successful bidder and agreed by the procuring entity, this form must be completed fully and duly signed by the authorized officials of the bank.
7. Manufacturers Authorization Form - When required by the tender documents this form must be completed and submitted with the tender documents. This form will be completed by the manufacturer of the goods where the tenderer is an agent.

8.1 **FORM OF TENDER**

Date _____

Tender No. _____

To: _____

[name and address of procuring entity]

Gentlemen and/or Ladies:

1. Having examined the tender documents including Addenda Nos. *[insert numbers]*.the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply deliver, install and commission (..... *(insert equipment description)* in conformity with the said tender documents for the sum of *(total tender amount in words and figures)* or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Tender.

2. We undertake, if our Tender is accepted, to deliver install and commission the equipment in accordance with the delivery schedule specified in the Schedule of Requirements.

3. If our Tender is accepted, we will obtain the guarantee of a bank in a sum of equivalent to _____ percent of the Contract Price for the due performance of the Contract , in the form prescribed by*(Procuring entity)*.

4. We agree to abide by this Tender for a period of *[number]* days from the date fixed for tender opening of the Instructions to tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. This Tender, together with your written acceptance thereof and your notification of award, shall constitute a Contract, between us. Subject to signing of the Contract by the parties.

6. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____ 20 _____

[signature]

[in the capacity of]

Duly authorized to sign tender for an on behalf of _____

8.2 CONFIDENTIAL BUSINESS QUESTIONNAIRE FORM

You are requested to give the particulars indicated in Part 1 and either Part 2(a), 2(b) or 2 (c) whichever applied to your type of business

You are advised that it is a serious offence to give false information on this form

<i>Part 1 – General:</i>	
Business Name
Location of business premises.
Plot No.....	Street/Road
Postal Address	Tel No. Fax
Nature of Business	E mail
Registration Certificate No.
Maximum value of business which you can handle at any one time – Kshs.
Name of your bankers	Branch

	<p>Part 2 (a) – Sole Proprietor</p> <p>Your name in full Age</p> <p>Nationality Country of origin</p> <ul style="list-style-type: none"> • Citizenship details • 																								
	<p>Part 2 (b) Partnership</p> <p>Given details of partners as follows:</p> <table border="0"> <thead> <tr> <th>Name</th> <th>Nationality</th> <th>Citizenship Details</th> <th>Shares</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>2.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>3.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>4.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> </tbody> </table>	Name	Nationality	Citizenship Details	Shares	1.	2.	3.	4.				
Name	Nationality	Citizenship Details	Shares																						
1.																						
2.																						
3.																						
4.																						
	<p>Part 2 (c) – Registered Company</p> <p>Private or Public</p> <p>State the nominal and issued capital of company-</p> <p>Nominal Kshs.</p> <p>Issued Kshs.</p> <p>Given details of all directors as follows</p> <table border="0"> <thead> <tr> <th>Name</th> <th>Nationality</th> <th>Citizenship Details</th> <th>Shares</th> </tr> </thead> <tbody> <tr> <td>1.....</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>2.....</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>3.....</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>4.....</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>5.....</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> </tbody> </table>	Name	Nationality	Citizenship Details	Shares	1.....	2.....	3.....	4.....	5.....
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1.....																						
2.....																						
3.....																						
4.....																						
5.....																						
Date	Signature of Candidate																								

- If a Kenya Citizen, indicate under “Citizenship Details” whether by Birth, Naturalization or registration.

8.3 TENDER SECURITY FORM

Whereas [*name of the tenderer*]
(hereinafter called "the tenderer") has submitted its tender dated
..... [*date of submission of tender*] for the supply, installation
and commissioning of [*name and/or description of*
the equipment] (hereinafter called "the Tender")
..... KNOW ALL PEOPLE by
these presents that WE of
..... having our registered office at
..... (hereinafter called "the Bank"), are bound unto
..... [*name of Procuring entity*] (hereinafter called "the
Procuring entity") in the sum of for which
payment well and truly to be made to the said Procuring entity, the
Bank binds itself, its successors, and assigns by these presents. Sealed
with the Common Seal of the said Bank this _____ day of _____
_____ 20 _____.

THE CONDITIONS of this obligation are:-

1. If the tenderer withdraws its Tender during the period of tender validity specified by the tenderer on the Tender Form; or
2. If the tenderer, having been notified of the acceptance of its Tender by the Procuring entity during the period of tender validity:
 - (a) fails or refuses to execute the Contract Form, if required; or
 - (b) fails or refuses to furnish the performance security in accordance with the Instructions to tenderers;

We undertake to pay to the Procuring entity up to the above amount upon receipt of its first written demand, without the Procuring entity having to substantiate its demand, provided that in its demand the Procuring entity will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This tender guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

[*signature of the bank*] _____
(Amend accordingly if provided by Insurance Company)

8.4 CONTRACT FORM

THIS AGREEMENT made the _____ day of _____ 20 _____ between [name of Procurement entity] of [country of Procurement entity] (hereinafter called “the Procuring entity) of the one part and [name of tenderer] of [city and country of tenderer] (hereinafter called “the tenderer”) of the other part;

WHEREAS the Procuring entity invited tenders for certain goods] and has accepted a tender by the tenderer for the supply of those goods in the sum of [contract price in words and figures] (hereinafter called “the Contract Price).

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to:
2. The following documents shall be deemed to form and be read and construed as part of this Agreement viz:
 - (a) the Tender Form and the Price Schedule submitted by the tenderer
 - (b) the Schedule of Requirements
 - (c) the Technical Specifications
 - (d) the General Conditions of Contract
 - (e) the Special Conditions of contract; and
 - (f) the Procuring entity’s Notification of Award
3. In consideration of the payments to be made by the Procuring entity to the tenderer as hereinafter mentioned, the tender hereby covenants with the Procuring entity to provide the goods and to remedy defects therein in conformity in all respects with the provisions of the Contract
4. The Procuring entity hereby covenants to pay the tenderer in consideration of the provisions of the goods 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.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

Signed, sealed, delivered by _____ the _____ (for the Procuring entity

Signed, sealed, delivered by _____ the _____ (for the tenderer in the presence of _____

(Amend accordingly if provided by Insurance Company)

8.5 PERFORMANCE SECURITY FORM

To
[*name of Procuring entity*]

WHEREAS [*name of tenderer*] (hereinafter called “the tenderer”) has undertaken , in pursuance of Contract No. _____
_____ [*reference number of the contract*] dated _____ 20 _____
_____ to supply [*description of goods*] (hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the tenderer shall furnish you with a bank guarantee by a reputable bank for the sum specified therein as security for compliance with the Tenderer’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the tenderer a guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the tenderer, up to a total of [*amount of the guarantee in words and figure*] and we undertake to pay you, upon your first written demand declaring the tenderer to be in default under the Contract and without cavil or argument, any sum or sums within the limits of [*amount of guarantee*] as aforesaid, without you needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____ day of _____ 20 _____

Signed and seal of the Guarantors

[*name of bank or financial institution*]

[*address*]

[*date*]

8.6 BANK GUARANTEE FOR ADVANCE PAYMENT FORM

To
[name of Procuring entity]

[name of tender]

Gentlemen and/or Ladies:

In accordance with the payment provision included in the Special Conditions of Contract, which amends the General Conditions of Contract to provide for advance payment, [name and address of tenderer](hereinafter called “the tenderer”) shall deposit with the Procuring entity a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of [amount of guarantee in figures and words].

We, the [bank or financial institutions], as instructed by the tenderer, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the Procuring entity on its first demand without whatsoever right of objection on our part and without its first claim to the tenderer, in the amount not exceeding [amount of guarantee in figures and words]

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

This guarantee shall remain valid in full effect from the date of the advance payment received by the tenderer under the Contract until [date].

Yours truly,

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

8.7 MANUFACTURER’S AUTHORIZATION FORM

To *[name of the Procuring entity]*

WHEREAS*[name of the manufacturer]* who are established and reputable manufacturers of *[name and/or description of the goods]* having factories at *[address of factory]* do hereby authorize *[name and address of Agent]* to submit a tender, and subsequently negotiate and sign the Contract with you against tender No. *[reference of the Tender]* for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Tenders.

[signature for and on behalf of manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent.

8.8 LETTER OF NOTIFICATION OF AWARD

Address of Procuring Entity

To: _____

RE: Tender No. _____

Tender Name _____

This is to notify that the contract/s stated below under the above mentioned tender have been awarded to you.

1. Please acknowledge receipt of this letter of notification signifying your acceptance.
2. The contract/contracts shall be signed by the parties within 30 days of the date of this letter but not earlier than 14 days from the date of the letter.
3. You may contact the officer(s) whose particulars appear below on the subject matter of this letter of notification of award.

(FULL PARTICULARS) _____

SIGNED FOR ACCOUNTING OFFICER

8.9 FORM RB 1

**REPUBLIC OF KENYA
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 of20.....in the matter of Tender No.....of
.....20...

REQUEST FOR REVIEW

I/We.....,the above named Applicant(s), of address: Physical
address.....Fax 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.
- etc.

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

- 1.
- 2.
- etc

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

FIFTH SCHEDULE

SELF DECLARATION FORMS (r 62)

REPUBLIC OF KENYA

PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)

FORM SD1

SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENT AND ASSET DISPOSAL ACT, 2016.

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 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 hereinabove is true to the best of my knowledge, information and belief.

.....

(Title)

(Signature)

(Date)

Bidder Official Stamp

FORM SD2

SELF DECLARATION FORMS (r 62)

REPUBLIC OF KENYA

**PUBLIC PROCUREMENT REGULATORY AUTHORITY (PPRA)
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 hereinabove is true to the best of my knowledge information
and belief.

.....
(Title) (Signature) (Date)

Bidder's Official Stamp

FOURTH SCHEDULE

TENDER-SECURING DECLARATION FORM

(r.22) [The Bidder shall complete this Form in accordance with the instructions indicated]

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

Tender No.: [insert number of bidding process]

To: [insert complete name of Purchaser]

We, the undersigned, declare that:

1. We understand that, according to your conditions, bids must be supported by a BidSecuring Declaration.
2. We accept that we will automatically be suspended from being eligible for bidding 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 Bid during the period of bid validity specified by us in the Bidding 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. We understand that this Bid Securing Declaration shall expire if we are not the successful Bidder, upon the earlier of
 - (a) our receipt of a copy of your notification of the name of the successful Bidder; or
 - (b) thirty days after the expiration of our Tender.
4. We understand that if we are a Joint Venture, the Bid 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 Bid 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 e.t.c)

Name:

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

Dated on day of, [insert date of signing]

Seal or stamp