



**DEPARTMENT OF  
HEALTH**

**SBD 1**

**PART A  
INVITATION TO BID**

**YOU ARE HEREBY INVITED TO BID FOR REQUIREMENTS OF THE LIMPOPO DEPARTMENT OF HEALTH**

BID NUMBER:	<b>HEDP 002/22/23</b>	CLOSING DATE:	<b>09/12/2022</b>	CLOSING TIME:	<b>11:00</b>
DESCRIPTION	<b>SUPPLY, DELIVERY, INSTALLATION, ACCEPTANCE, COMMISSIONING AND MAINTENANCE OF RADIOLOGY AND IMAGING EQUIPMENT IN THE DEPARTMENT OF HEALTH FOR THE PERIOD OF SIXTY (60) MONTHS.</b>				

**BID RESPONSE DOCUMENTS MAY BE DEPOSITED IN THE BID BOX SITUATED AT (STREET ADDRESS)**

DEPARTMENT OF HEALTH, 18 COLLEGE STREET, POLOKWANE, LIMPOPO PROVINCE

THE BID BOX IS GENERALLY OPEN 24 HOURS, 7 DAYS A WEEK.

**BIDDING PROCEDURE ENQUIRIES MAY BE DIRECTED TO**

**TECHNICAL ENQUIRIES MAY BE DIRECTED TO:**

CONTACT PERSON	<b>Ms Simango T.O / Ms Motene N.M</b>	CONTACT PERSON	<b>Dr F Sithole</b>
TELEPHONE NUMBER	<b>015 293 6352 / 015 293 6350</b>	TELEPHONE NUMBER	<b>015 286 1610 &amp; 082 407 8317</b>
FACSIMILE NUMBER	<b>086 597 5073</b>	FACSIMILE NUMBER	
E-MAIL ADDRESS	<b>tintswalo.simango@dhsd.limpopo.gov.za</b>	E-MAIL ADDRESS	

**SUPPLIER INFORMATION**

NAME OF BIDDER					
POSTAL ADDRESS					
STREET ADDRESS					
TELEPHONE NUMBER	CODE		NUMBER		
CELLPHONE NUMBER					
FACSIMILE NUMBER	CODE		NUMBER		
E-MAIL ADDRESS					
VAT REGISTRATION NUMBER					
SUPPLIER COMPLIANCE STATUS	TAX COMPLIANCE SYSTEM PIN:		OR	CENTRAL SUPPLIER DATABASE No:	MAAA
B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE	TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No		B-BBEE STATUS LEVEL SWORN AFFIDAVIT		[TICK APPLICABLE BOX] <input type="checkbox"/> Yes <input type="checkbox"/> No

**[A B-BBEE STATUS LEVEL VERIFICATION CERTIFICATE/ SWORN AFFIDAVIT (FOR EMES & QSEs) MUST BE SUBMITTED IN ORDER TO QUALIFY FOR PREFERENCE POINTS FOR B-BBEE]**

ARE YOU THE ACCREDITED REPRESENTATIVE IN SOUTH AFRICA FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES ENCLOSE PROOF]	ARE YOU A FOREIGN BASED SUPPLIER FOR THE GOODS /SERVICES /WORKS OFFERED?	<input type="checkbox"/> Yes <input type="checkbox"/> No [IF YES, ANSWER QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS BELOW]
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**QUESTIONNAIRE TO BIDDING FOREIGN SUPPLIERS**

IS THE ENTITY A RESIDENT OF THE REPUBLIC OF SOUTH AFRICA (RSA)?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE A BRANCH IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE A PERMANENT ESTABLISHMENT IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
DOES THE ENTITY HAVE ANY SOURCE OF INCOME IN THE RSA?	<input type="checkbox"/> YES <input type="checkbox"/> NO
IS THE ENTITY LIABLE IN THE RSA FOR ANY FORM OF TAXATION?	<input type="checkbox"/> YES <input type="checkbox"/> NO
<b>IF THE ANSWER IS "NO" TO ALL OF THE ABOVE, THEN IT IS NOT A REQUIREMENT TO REGISTER FOR A TAX COMPLIANCE STATUS SYSTEM PIN CODE FROM THE SOUTH AFRICAN REVENUE SERVICE (SARS) AND IF NOT REGISTER AS PER 2.3 BELOW.</b>	

## PART B TERMS AND CONDITIONS FOR BIDDING

<b>1. BID SUBMISSION:</b>	
1.1.	BIDS MUST BE DELIVERED BY THE STIPULATED TIME TO THE CORRECT ADDRESS. LATE BIDS WILL NOT BE ACCEPTED FOR CONSIDERATION.
1.2.	<b>ALL BIDS MUST BE SUBMITTED ON THE OFFICIAL FORMS PROVIDED–(NOT TO BE RE-TYPED) OR IN THE MANNER PRESCRIBED IN THE BID DOCUMENT.</b>
1.3.	THIS BID IS SUBJECT TO THE PREFERENTIAL PROCUREMENT POLICY FRAMEWORK ACT, 2000 AND THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017, THE GENERAL CONDITIONS OF CONTRACT (GCC) AND, IF APPLICABLE, ANY OTHER SPECIAL CONDITIONS OF CONTRACT.
1.4.	<b>THE SUCCESSFUL BIDDER WILL BE REQUIRED TO FILL IN AND SIGN A WRITTEN CONTRACT FORM (SBD7).</b>
<b>2. TAX COMPLIANCE REQUIREMENTS</b>	
2.1	BIDDERS MUST ENSURE COMPLIANCE WITH THEIR TAX OBLIGATIONS.
2.2	BIDDERS ARE REQUIRED TO SUBMIT THEIR UNIQUE PERSONAL IDENTIFICATION NUMBER (PIN) ISSUED BY SARS TO ENABLE THE ORGAN OF STATE TO VERIFY THE TAXPAYER'S PROFILE AND TAX STATUS.
2.3	APPLICATION FOR TAX COMPLIANCE STATUS (TCS) PIN MAY BE MADE VIA E-FILING THROUGH THE SARS WEBSITE <a href="http://WWW.SARS.GOV.ZA">WWW.SARS.GOV.ZA</a> .
2.4	BIDDERS MAY ALSO SUBMIT A PRINTED TCS CERTIFICATE TOGETHER WITH THE BID.
2.5	IN BIDS WHERE CONSORTIA / JOINT VENTURES / SUB-CONTRACTORS ARE INVOLVED, EACH PARTY MUST SUBMIT A SEPARATE TCS CERTIFICATE / PIN / CSD NUMBER.
2.6	WHERE NO TCS IS AVAILABLE BUT THE BIDDER IS REGISTERED ON THE CENTRAL SUPPLIER DATABASE (CSD), A CSD NUMBER MUST BE PROVIDED.
2.7	NO BIDS WILL BE CONSIDERED FROM PERSONS IN THE SERVICE OF THE STATE, COMPANIES WITH DIRECTORS WHO ARE PERSONS IN THE SERVICE OF THE STATE, OR CLOSE CORPORATIONS WITH MEMBERS PERSONS IN THE SERVICE OF THE STATE."

**NB: FAILURE TO PROVIDE / OR COMPLY WITH ANY OF THE ABOVE PARTICULARS MAY RENDER THE BID INVALID.**

SIGNATURE OF BIDDER: .....

CAPACITY UNDER WHICH THIS BID IS SIGNED: .....  
(Proof of authority must be submitted e.g. company resolution)

DATE: .....

**PRICING SCHEDULE – NON-FIRM PRICES  
(PURCHASES)**

**NOTE: PRICE ADJUSTMENTS WILL BE ALLOWED AT THE PERIODS AND TIMES SPECIFIED IN THE BIDDING DOCUMENTS.**

**IN CASES WHERE DIFFERENT DELIVERY POINTS INFLUENCE THE PRICING, A SEPARATE PRICING SCHEDULE MUST BE SUBMITTED FOR EACH DELIVERY POINT**

Name of Bidder.....	Bid number.....
Closing Time 11:00 .....	Closing date.....

OFFER TO BE VALID FOR.....DAYS FROM THE CLOSING DATE OF BID.

-----			
ITEM NO.	QUANTITY	DESCRIPTION	BID PRICE IN RSA CURRENCY **(ALL APPLICABLE TAXES INCLUDED)
-----			
-	Required by:		.....
-	At:		.....
-	Brand and model		.....
-			
-	Country of origin		.....
-	Does the offer comply with the specification(s)?		*YES/NO
-	If not to specification, indicate deviation(s)		.....
-	Period required for delivery		.....
-	Delivery:		*Firm/not firm

\*\* "all applicable taxes" includes value- added tax, pay as you earn, income tax, unemployment insurance fund contributions and skills development levies.

\*Delete if not applicable

## PRICE ADJUSTMENTS

### A NON-FIRM PRICES SUBJECT TO ESCALATION

IN CASES OF PERIOD CONTRACTS, NON FIRM PRICES WILL BE ADJUSTED (LOADED) WITH THE ASSESSED CONTRACT PRICE ADJUSTMENTS IMPLICIT IN NON FIRM PRICES WHEN CALCULATING THE COMPARATIVE PRICES

2. IN THIS CATEGORY PRICE ESCALATIONS WILL ONLY BE CONSIDERED IN TERMS OF THE FOLLOWING FORMULA:

$$Pa = (1 - V)Pt \left( D1 \frac{R1t}{R1o} + D2 \frac{R2t}{R2o} + D3 \frac{R3t}{R3o} + D4 \frac{R4t}{R4o} \right) + VPt$$

Where:

Pa = The new escalated price to be calculated.  
 = 85% of the original bid price. **Note that Pt must always be the original bid price and not an escalated price.**  
 = Each factor of the bid price eg. labour, transport, clothing, footwear, etc. The total of the various factors D1, D2...etc. must add up to 100%.  
 = Index figure obtained from new index (depends on the number of factors used).  
 R1o, R2o = Index figure at time of bidding.  
 = 15% of the original bid price. This portion of the bid price remains firm i.e. it is not subject to any price escalations.

The following index/indices must be used to calculate your bid price:

Index..... Dated.....      Index..... Dated.....      Index..... Dated.....

Index..... Dated.....      Index..... Dated.....      Index..... Dated.....

FURNISH A BREAKDOWN OF YOUR PRICE IN TERMS OF ABOVE-MENTIONED FORMULA. THE TOTAL OF THE VARIOUS FACTORS MUST ADD UP TO 100%.

FACTOR (D1, D2 etc. eg. Labour, transport etc.)	PERCENTAGE OF BID PRICE

**PRICES SUBJECT TO RATE OF EXCHANGE VARIATIONS**

Please furnish full particulars of your financial institution, state the currencies used in the conversion of the prices of the items to South African currency, which portion of the price is subject to rate of exchange variations and the amounts remitted abroad.

PARTICULARS OF FINANCIAL INSTITUTION	ITEM NO	PRICE	CURRENCY	RATE	PORTION OF PRICE SUBJECT TO ROE	AMOUNT IN FOREIGN CURRENCY REMITTED ABROAD
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		
				ZAR=		

Adjustments for rate of exchange variations during the contract period will be calculated by using the average monthly exchange rates as issued by your commercial bank for the periods indicated hereunder: (Proof from bank required)

AVERAGE MONTHLY EXCHANGE RATES FOR THE PERIOD:	DATE DOCUMENTATION MUST BE SUBMITTED TO THIS OFFICE	DATE FROM WHICH NEW CALCULATED PRICES WILL BECOME EFFECTIVE	DATE UNTIL WHICH NEW CALCULATED PRICE WILL BE EFFECTIVE

**BIDDER'S DISCLOSURE****1. PURPOSE OF THE FORM**

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

**2. Bidder's declaration**

2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest<sup>1</sup> in the enterprise, employed by the state? **YES/NO**

2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

2.2.1 If so, furnish particulars:

.....  
 .....

2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract?

**YES/NO**

2.3.1 If so, furnish particulars:

.....  
 .....

**3 DECLARATION**

I, the undersigned, (name)..... in submitting the accompanying bid, do hereby make the following statements that I certify to be true and complete in every respect:

<sup>1</sup> the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium<sup>2</sup> will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.
- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA

SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN

MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....  
Signature

.....  
Date

.....  
Position

.....  
Name of bidder

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<sup>2</sup> Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

This document must be signed and submitted together with your bid

## THE NATIONAL INDUSTRIAL PARTICIPATION PROGRAMME

### INTRODUCTION

The National Industrial Participation (NIP) Programme, which is applicable to all government procurement contracts that have an imported content, became effective on the 1 September 1996. The NIP policy and guidelines were fully endorsed by Cabinet on 30 April 1997. In terms of the Cabinet decision, all state and parastatal purchases / lease contracts (for goods, works and services) entered into after this date, are subject to the NIP requirements. NIP is obligatory and therefore must be complied with. The Industrial Participation Secretariat (IPS) of the Department of Trade and Industry (DTI) is charged with the responsibility of administering the programme.

### 1. PILLARS OF THE PROGRAMME

- 1.1 The NIP obligation is benchmarked on the imported content of the contract. Any contract having an imported content equal to or exceeding US\$ 10 million or other currency equivalent to US\$ 10 million will have an NIP obligation. This threshold of US\$ 10 million can be reached as follows:
  - (a) Any single contract with imported content exceeding US \$10 million; or
  - (b) Multiple contracts for the same goods, works or services each with imported content exceeding US \$3 million awarded to one seller over a 2 year period which in total exceeds US \$10 million; or
  - (c) A contract with a renewable option clause, where should the option be exercised the total value of the imported content will exceed US \$10 million.
  - (d) Multiple suppliers of the same goods, works or services under the same contract, where the value of the imported content of each allocation is equal to or exceeds US\$ 3 million worth of goods, works or services to the same government institution, which in total over a two (2) year period exceeds US\$10 million.
- 1.2 The NIP obligation applicable to suppliers in respect of sub-paragraphs 1.1 (a) to 1.1 (c) above will amount to 30 % of the imported content whilst suppliers in respect of paragraph 1.1 (d) shall incur 30% of the total NIP obligation on a *pro-rata* basis.
- 1.3 To satisfy the NIP obligation, the DTI would negotiate and conclude agreements such as investments, joint ventures, sub-contracting, licensee production, export promotion, sourcing arrangements and research and development (R&D) with partners or suppliers.
- 1.4 A period of seven years has been identified as the time frame within which to discharge the obligation.



## **2 REQUIREMENTS OF THE DEPARTMENT OF TRADE AND INDUSTRY**

- 2.1 In order to ensure effective implementation of the programme, successful bidders (contractors) are required to, immediately after the award of a contract that is in excess of **R10 million** (ten million Rands), submit details of such a contract to the DTI for reporting purposes.
- 2.2 The purpose for reporting details of contracts in excess of the amount of R10 million (ten million Rands) is to cater for multiple contracts for the same goods, works or services; renewable contracts and multiple suppliers for the same goods, works or services under the same contract as provided for in paragraphs 1.1.(b) to 1.1. (d) above.

## **3 BID SUBMISSION AND CONTRACT REPORTING REQUIREMENTS OF BIDDERS AND SUCCESSFUL BIDDERS (CONTRACTORS)**

- 3.1 Bidders are required to sign and submit this Standard Bidding Document (SBD 5) together with the bid on the closing date and time.
- 3.2 In order to accommodate multiple contracts for the same goods, works or services; renewable contracts and multiple suppliers for the same goods, works or services under the same contract as indicated in sub-paragraphs 1.1 (b) to 1.1 (d) above and to enable the DTI in determining the NIP obligation, successful bidders (contractors) are required, immediately after being officially notified about any successful bid with a value in excess of R10 million (ten million Rands), to contact and furnish the DTI with the following information:
- Bid / contract number.
  - Description of the goods, works or services.
  - Date on which the contract was accepted.
  - Name, address and contact details of the government institution.
  - Value of the contract.
  - Imported content of the contract, if possible.
- 3.3 The information required in paragraph 3.2 above must be sent to the Department of Trade and Industry, Private Bag X 84, Pretoria, 0001 for the attention of Mr Elias Malapane within five (5) working days after award of the contract. Mr Malapane may be contacted on telephone (012) 394 1401, facsimile (012) 394 2401 or e-mail at [Elias@thedti.gov.za](mailto:Elias@thedti.gov.za) for further details about the programme.

## **4. PROCESS TO SATISFY THE NIP OBLIGATION**

- 4.1 Once the successful bidder (contractor) has made contact with and furnished the DTI with the information required, the following steps will be followed:
- a. the contractor and the DTI will determine the NIP obligation;
  - b. the contractor and the DTI will sign the NIP obligation agreement;
  - c. the contractor will submit a performance guarantee to the DTI;
  - d. the contractor will submit a business concept for consideration and approval by the DTI;
  - e. upon approval of the business concept by the DTI, the contractor will submit detailed business plans outlining the business concepts;
  - f. the contractor will implement the business plans; and
  - g. the contractor will submit bi-annual progress reports on approved plans to the DTI.

4.2 The NIP obligation agreement is between the DTI and the successful bidder (contractor) and, therefore, does not involve the purchasing institution.

Bid number ..... Closing date:.....

Name of bidder.....

Postal address .....

.....

Signature..... Name (in print).....

Date.....

## PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL PROCUREMENT REGULATIONS 2017

This preference form must form part of all bids invited. It contains general information and serves as a claim form for preference points for Broad-Based Black Economic Empowerment (B-BBEE) Status Level of Contribution

**NB: BEFORE COMPLETING THIS FORM, BIDDERS MUST STUDY THE GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN RESPECT OF B-BBEE, AS PRESCRIBED IN THE PREFERENTIAL PROCUREMENT REGULATIONS, 2017.**

### 1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to all bids:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

a) The value of this bid is estimated to exceed R50 000 000 (all applicable taxes included) and therefore the **90 / 10** preference point system shall be applicable; or

1.3 Points for this bid shall be awarded for:

- (a) Price; and
- (b) B-BBEE Status Level of Contributor.

1.4 The maximum points for this bid are allocated as follows:

	POINTS
<b>PRICE</b>	<b>90</b>
<b>B-BBEE STATUS LEVEL OF CONTRIBUTOR</b>	<b>10</b>
<b>Total points for Price and B-BBEE must not exceed</b>	<b>100</b>

1.5 Failure on the part of a bidder to submit proof of B-BBEE Status level of contributor together with the bid, will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.

1.6 The purchaser reserves the right to require of a bidder, either before a bid is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the purchaser.

### 2. DEFINITIONS

- (a) **“B-BBEE”** means broad-based black economic empowerment as defined in section 1 of the Broad-Based Black Economic Empowerment Act;
- (b) **“B-BBEE status level of contributor”** means the B-BBEE status of an entity in terms of a code of good practice on black economic empowerment, issued in terms of section 9(1) of the Broad-Based Black Economic Empowerment Act;
- (c) **“bid”** means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of goods or services, through price quotations, advertised competitive bidding processes or proposals;
- (d) **“Broad-Based Black Economic Empowerment Act”** means the Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003);

- (e) **“EME”** means an Exempted Micro Enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (f) **“functionality”** means the ability of a tenderer to provide goods or services in accordance with specifications as set out in the tender documents.
- (g) **“prices”** includes all applicable taxes less all unconditional discounts;
- (h) **“proof of B-BBEE status level of contributor”** means:
  - 1) B-BBEE Status level certificate issued by an authorized body or person;
  - 2) A sworn affidavit as prescribed by the B-BBEE Codes of Good Practice;
  - 3) Any other requirement prescribed in terms of the B-BBEE Act;
- (i) **“QSE”** means a qualifying small business enterprise in terms of a code of good practice on black economic empowerment issued in terms of section 9 (1) of the Broad-Based Black Economic Empowerment Act;
- (j) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;

### 3 POINTS AWARDED FOR PRICE

#### 3.4 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc}
 \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\
 P_s = 80 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right) & \text{or} & P_s = 90 \left( 1 - \frac{P_t - P_{\min}}{P_{\min}} \right)
 \end{array}$$

Where

- P<sub>s</sub> = Points scored for price of bid under consideration
- P<sub>t</sub> = Price of bid under consideration
- P<sub>min</sub> = Price of lowest acceptable bid

### 4 POINTS AWARDED FOR B-BBEE STATUS LEVEL OF CONTRIBUTOR

- 4.4 In terms of Regulation 6 (2) and 7 (2) of the Preferential Procurement Regulations, preference points must be

awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

B-BBEE Status Level of Contributor	Number of points (90/10 system)	Number of points (80/20 system)
1	10	20
2	9	18
3	6	14
4	5	12
5	4	8
6	3	6
7	2	4
8	1	2
Non-compliant contributor	0	0

## 5 BID DECLARATION

5.4 Bidders who claim points in respect of B-BBEE Status Level of Contribution must complete the following:

## 6 B-BBEE STATUS LEVEL OF CONTRIBUTOR CLAIMED IN TERMS OF PARAGRAPHS 1.4 AND 4.1

6.4 B-BBEE Status Level of Contributor: . = .....(maximum of 10 or 20 points)

(Points claimed in respect of paragraph 7.1 must be in accordance with the table reflected in paragraph 4.1 and must be substantiated by relevant proof of B-BBEE status level of contributor.

## 7 SUB-CONTRACTING

7.4 Will any portion of the contract be sub-contracted?

(*Tick applicable box*)

YES		NO	
-----	--	----	--

7.4.1 If yes, indicate:

- What percentage of the contract will be subcontracted.....%
- The name of the sub-contractor.....
- The B-BBEE status level of the sub-contractor.....
- Whether the sub-contractor is an EME or QSE

(*Tick applicable box*)

YES		NO	
-----	--	----	--

- Specify, by ticking the appropriate box, if subcontracting with an enterprise in terms of Preferential Procurement Regulations,2017:

Designated Group: An EME or QSE which is at last 51% owned by:	EME √	QSE √
Black people		
Black people who are youth		
Black people who are women		
Black people with disabilities		
Black people living in rural or underdeveloped areas or townships		
Cooperative owned by black people		
Black people who are military veterans		
<b>OR</b>		
Any EME		
Any QSE		

8 **DECLARATION WITH REGARD TO COMPANY/FIRM**

8.4 Name of company/firm:.....

8.5 VAT registration number:.....

8.6 Company registration number:.....

8.7 **TYPE OF COMPANY/ FIRM**

- ☐ Partnership/Joint Venture / Consortium
- ☐ One person business/sole propriety
- ☐ Close corporation
- ☐ Company
- ☐ (Pty) Limited

[TICK APPLICABLE BOX]

8.8 **DESCRIBE PRINCIPAL BUSINESS ACTIVITIES**

.....  
.....  
.....  
.....

8.9 **COMPANY CLASSIFICATION**

- ☐ Manufacturer
- ☐ Supplier
- ☐ Professional service provider
- ☐ Other service providers, e.g. transporter, etc.

[TICK APPLICABLE BOX]

8.10 Total number of years the company/firm has been in business:.....

8.11 I/we, the undersigned, who is / are duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the B-BBE status level of contributor indicated in paragraphs 1.4 and 6.1 of the foregoing certificate, qualifies the company/ firm for the preference(s) shown and I / we acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 6.1, the contractor may be required to furnish documentary proof to the satisfaction of the purchaser that the claims are correct;
- iv) If the B-BBEE status level of contributor has been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the purchaser may, in addition to any other remedy it may have –
  - (a) disqualify the person from the bidding process;
  - (b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;
  - (c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;
  - (d) recommend that the bidder or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted by the National Treasury from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and
  - (e) forward the matter for criminal prosecution.

WITNESSES

1. ....

2. ....

.....  
SIGNATURE(S) OF BIDDERS(S)

DATE: .....

ADDRESS .....

.....

.....

## SWORN AFFIDAFIT – B-BBEE EXEMPTED MICRO ENTERPRISE

---

I the undersigned,

Full name & Surname	
Identity Number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a member / director / owner of the following enterprise and am duly authorized to act on its behalf:

Enterprise Name	
Trading Name	
Registration Number	
Enterprise Address	

3. I hereby declare under oath that:

- The enterprise is \_\_\_\_\_ % black owned;
- The enterprise is \_\_\_\_\_ % black woman owned;
- Based on the management accounts and other information available on the \_\_\_\_\_ financial year, the income did not exceed R10,000,000.00 (ten million rands);
- Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box.**

100% black owned	<b>Level One</b> (135% B-BBEE procurement recognition)	
More than 51% black owned	<b>Level Two</b> (125% B-BBEE procurement recognition)	
Less than 51% black owned	<b>Level Four</b> (100% B-BBEE procurement recognition)	

4. The entity is an empowering supplier in terms of **the dti** Codes of Good Practice
5. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
6. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: \_\_\_\_\_

Date: \_\_\_\_\_

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Commissioner of Oaths  
Signature & stamp



## SWORN AFFIDAVIT – B-BBEE QUALIFYING SMALL ENTERPRISE

I the undersigned

Full name & Surname	
Identity Number	

Hereby declare under oath as follows:

1. The contents of this statement are to the best of my knowledge a true reflection of the facts.
2. I am a member / director / owner of the following enterprise and am duly authorized to act on its behalf:

Enterprise Name	
Trading Name	
Registration Number	
Enterprise Address	

3. I hereby declare under oath that:

- The enterprise is \_\_\_\_\_ % black owned;
- The enterprise is \_\_\_\_\_ % black woman owned;
- Based on the management accounts and other information available on the \_\_\_\_\_ financial year, the income did not exceed R50,000,000.00 (fifty million rands);
- The entity is an Empowering Supplier in terms of clause 3.3 (a) or (b) or (c) or (d) or as amended 3.3. € (select one) \_\_\_\_\_ of the dti Codes of Good Practice.
- Please confirm on the table below the B-BBEE level contributor, **by ticking the applicable box**

100% black owned	<b>Level One</b> (135% B-BBEE procurement recognition)	
More than 51% black owned	<b>Level Two</b> (125% B-BBEE procurement recognition)	
(a) At least 25% of cost of sales, (excluding labour costs and depreciation) must be procurement from local producers or suppliers in South Africa; for the services industry include labour costs but capped at 15%	(b) Job creation-50% of jobs created are for black people, provided that the number of black employees in the immediate prior verified B-BBEE measurement is maintained	
(b) At least 25% transformation of raw material / beneficiation which include local manufacturing, production and / or assembly, and/ or packaging	(d) At least 12 days per annum of productivity deployed in assisting QSE and EME beneficiaries to increase their operation or financial capacity	
(e) At least 85% of labour costs should be paid to South African employees by service industry entities.		

4. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
5. I know and understand the contents of this affidavit and I have no objection to take the prescribed oath and consider the oath binding on my conscience and on the owners of the enterprise which I represent in this matter.
6. The sworn affidavit will be valid for a period of 12 months from the date signed by commissioner.

Deponent Signature: \_\_\_\_\_

Date: \_\_\_\_\_

\_\_\_\_\_  
Commissioner of Oaths  
Signature & stamp

**GOVERNMENT PROCUREMENT**  
**GENERAL CONDITIONS OF CONTRACT**

**NOTES**

The purpose of this document is to:

- (i) Draw special attention to certain general conditions applicable to government bids, contracts and orders; and
- (ii) To ensure that clients be familiar with regard to the rights and obligations of all parties involved in doing business with government.

In this document words in the singular also mean in the plural and vice versa and words in the masculine also mean in the feminine and neuter.

- . The General Conditions of Contract will form part of all bid documents and may not be amended.
- . Special Conditions of Contract (SCC) relevant to a specific Bid, should be compiled separately for every bid (if applicable) and will supplement the General Conditions of Contract. Whenever there is a conflict, the provisions in the SCC shall prevail.

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### General Conditions of Contract

<b>1. Definitions</b>	<p>The following terms shall be interpreted as indicated:</p> <ol style="list-style-type: none"> <li>1.1 <b>"Closing time"</b> means the date and hour specified in the bidding documents for the receipt of bids.</li> <li>1.2 <b>"Contract"</b> means the written agreement entered into between the purchaser and the supplier, as recorded in the contract form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.</li> <li>1.3 <b>"Contract price"</b> means the price payable to the supplier under the contract for the full and proper performance of his contractual obligations.</li> <li>1.4 <b>"Corrupt practice"</b> means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution.</li> <li>1.5 <b>"Countervailing duties"</b> are imposed in cases where an enterprise abroad is subsidised by its government and encouraged to market its products internationally.</li> <li>1.6 <b>"Country of origin"</b> means the place where the goods were mined, grown or produced or from which the services are supplied. Goods are produced when, through manufacturing, processing or substantial and major assembly of components, a commercially recognised new product results that is substantially different in basic characteristics or in purpose or utility from its components.</li> <li>1.7 <b>"Day"</b> means calendar day.</li> <li>1.8 <b>"Delivery"</b> means delivery in compliance of the conditions of the contract or order.</li> <li>1.9 <b>"Delivery ex stock"</b> means immediate delivery directly from stock actually on hand.</li> <li>1.10 <b>"Delivery into consignees store or to his site"</b> means delivered and unloaded in the specified store or depot or on the specified site in compliance with the conditions of the contract or order, the supplier bearing all risks and charges involved until the supplies are so delivered and a valid receipt is obtained.</li> <li>1.11 <b>"Dumping"</b> occurs when a private enterprise abroad market its goods on own initiative in the RSA at lower prices than that of the country of origin and which have the potential to harm the local industries in the RSA.</li> <li>1.12 <b>"Force majeure"</b> means an event beyond the control of the supplier and not involving the supplier's fault or negligence and not foreseeable. Such events may include, but is not restricted to, acts of the purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions and freight embargoes.</li> <li>1.13 <b>"Fraudulent practice"</b> means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of any bidder, and includes collusive practice among bidders (prior to or after bid submission) designed to establish bid prices at artificial non-competitive levels and to deprive the bidder of the benefits of free and open competition.</li> </ol>
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	<p>1.14 <b>"GCC"</b> means the General Conditions of Contract.</p> <p>1.15 <b>"Goods"</b> means all of the equipment, machinery, and/or other materials that the supplier is required to supply to the purchaser under the contract.</p> <p>1.16 <b>"Imported content"</b> means that portion of the bidding price represented by the cost of components, parts or materials which have been or are still to be imported (whether by the supplier or his subcontractors) and which costs are inclusive of the costs abroad, plus freight and other direct importation costs such as landing costs, dock dues, import duty, sales duty or other similar tax or duty at the South African place of entry as well as transportation and handling charges to the factory in the Republic where the supplies covered by the bid will be manufactured.</p> <p>1.17 <b>"Local content"</b> means that portion of the bidding price which is not included in the imported content provided that local manufacture does take place.</p> <p>1.18 <b>"Manufacture"</b> means the production of products in a factory using labour, materials, components and machinery and includes other related value-adding activities.</p> <p>1.19 <b>"Order"</b> means an official written order issued for the supply of goods or works or the rendering of a service.</p> <p>1.20 <b>"Project site,"</b> where applicable, means the place indicated in bidding documents.</p> <p>1.21 <b>"Purchaser"</b> means the organization purchasing the goods.</p> <p>1.22 <b>"Republic"</b> means the Republic of South Africa.</p> <p>1.23 <b>"SCC"</b> means the Special Conditions of Contract.</p> <p>1.24 <b>"Services"</b> means those functional services ancillary to the supply of the goods, such as transportation and any other incidental services, such as installation, commissioning, provision of technical assistance, training, catering, gardening, security, maintenance and other such obligations of the supplier covered under the contract.</p> <p>1.25 <b>"Written" or "in writing"</b> means handwritten in ink or any form of electronic or mechanical writing.</p>
<b>2. Application</b>	<p>2.1 These general conditions are applicable to all bids, contracts and orders including bids for functional and professional services, sales, hiring, letting and the granting or acquiring of rights, but excluding immovable property, unless otherwise indicated in the bidding documents.</p> <p>2.2 Where applicable, special conditions of contract are also laid down to cover specific supplies, services or works.</p> <p>2.3 Where such special conditions of contract are in conflict with these general conditions, the special conditions shall apply.</p>
<b>3. General</b>	<p>3.1 Unless otherwise indicated in the bidding documents, the purchaser shall not be liable for any expense incurred in the preparation and submission of a bid. Where applicable a non-refundable fee for documents may be charged.</p> <p>3.2 With certain exceptions, invitations to bid are only published in the Government Bid Bulletin. The Government Bid Bulletin may be obtained directly from the Government Printer, Private Bag X85, Pretoria 0001, or accessed electronically from <a href="http://www.treasury.gov.za">www.treasury.gov.za</a></p>
<b>4. Standards</b>	<p>4.1 The goods supplied shall conform to the standards mentioned in the bidding documents and specifications.</p>
<b>5. Use of contract documents and information; inspection.</b>	<p>5.1 The supplier shall not, without the purchaser's prior written consent, disclose the contract, or any provision thereof, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the purchaser in connection therewith, to any person other than a person employed by the supplier in the performance of the contract. Disclosure to any such employed person shall be made in confidence and shall extend only so far as may be necessary for purposes of such performance.</p> <p>5.2 The supplier shall not, without the purchaser's prior written consent, make use of any document or information mentioned in GCC clause 5.1 except for purposes of performing the contract.</p>

	<p>5.3 Any document, other than the contract itself mentioned in GCC clause 5.1 shall remain the property of the purchaser and shall be returned (all copies) to the purchaser on completion of the supplier's performance under the contract if so required by the purchaser.</p> <p>5.4 The supplier shall permit the purchaser to inspect the supplier's records relating to the performance of the supplier and to have them audited by auditors appointed by the purchaser, if so required by the purchaser.</p>
<b>6. Patent rights</b>	<p>6.1 The supplier shall indemnify the purchaser against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the goods or any part thereof by the purchaser.</p>
<b>7. Performance Security</b>	<p>7.1 Within thirty (30) days of receipt of the notification of contract award, the successful bidder shall furnish to the purchaser the performance security of the amount specified in SCC.</p> <p>7.2 The proceeds of the performance security shall be payable to the purchaser as compensation for any loss resulting from the supplier's failure to complete his obligations under the contract.</p> <p>7.3 The performance security shall be denominated in the currency of the contract, or in a freely convertible currency acceptable to the purchaser and shall be in one of the following forms:</p> <ul style="list-style-type: none"> <li>(a) a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in the purchaser's country or abroad, acceptable to the purchaser, in the form provided in the bidding documents or another form acceptable to the purchaser; or</li> <li>(b) a cashier's or certified cheque</li> </ul> <p>7.4 The performance security will be discharged by the purchaser and returned to the supplier not later than thirty (30) days following the date of completion of the supplier's performance obligations under the contract, including any warranty obligations, unless otherwise specified in SCC.</p>
<b>8. Inspections, tests and analyses</b>	<p>8.1 All pre-bidding testing will be for the account of the bidder.</p> <p>8.2 If it is a bid condition that supplies to be produced or services to be rendered should at any stage during production or execution or on completion be subject to inspection, the premises of the bidder or contractor shall be open, at all reasonable hours, for inspection by a representative of the Department or an organization acting on behalf of the Department.</p> <p>8.3 If there are no inspection requirements indicated in the bidding documents and no mention is made in the contract, but during the contract period it is decided that inspections shall be carried out, the purchaser shall itself make the necessary arrangements, including payment arrangements with the testing authority concerned.</p> <p>8.4 If the inspections, tests and analyses referred to in clauses 8.2 and 8.3 show the supplies to be in accordance with the contract requirements, the cost of the inspections, tests and analyses shall be defrayed by the purchaser.</p> <p>8.5 Where the supplies or services referred to in clauses 8.2 and 8.3 do not comply with the contract requirements, irrespective of whether such supplies or services are accepted or not, the cost in connection with these inspections, tests or analyses shall be defrayed by the supplier.</p> <p>8.6 Supplies and services which are referred to in clauses 8.2 and 8.3 and which do not comply with the contract requirements may be rejected.</p> <p>8.7 Any contract supplies may on or after delivery be inspected, tested or analysed and may be rejected if found not to comply with the requirements of the contract. Such rejected supplies shall be held at the cost and risk of the supplier who shall, when called upon, remove them immediately at his own cost and forthwith substitute them with supplies which do comply with the requirements of the contract. Failing such removal the rejected supplies shall be returned at the suppliers cost and risk. Should the supplier fail to provide the substitute supplies forthwith, the purchaser may, without giving the supplier further opportunity to substitute the rejected supplies, purchase such supplies as may be necessary at the expense of the supplier.</p> <p>8.8 The provisions of clauses 8.4 to 8.7 shall not prejudice the right of the purchaser to cancel the contract on account of a breach of the conditions thereof, or to act in terms of Clause 23 of GCC.</p>

<b>9. Packing</b>	<p>9.1 The supplier 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. The packing shall be sufficient to withstand, without limitation, rough handling during transit and exposure to extreme temperatures, salt and precipitation during transit, and open storage. Packing, case size and weights shall take into consideration, where appropriate, the remoteness of the goods' final destination and the absence of heavy handling facilities at all points in transit.</p> <p>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, including additional requirements, if any, specified in SCC, and in any subsequent instructions ordered by the purchaser.</p>
<b>10.Delivery and documents</b>	<p>10.1 Delivery of the goods shall be made by the supplier in accordance with the terms specified in the contract. The details of shipping and/or other documents to be furnished by the supplier are specified in SCC.</p> <p>10.2 Documents to be submitted by the supplier are specified in SCC.</p>
<b>11.Insurance</b>	<p>11.1 The goods supplied under the contract shall be fully insured in a freely convertible currency against loss or damage incidental to manufacture or acquisition, transportation, storage and delivery in the manner specified in the SCC.</p>
<b>12.Transportation</b>	<p>12.1 Should a price other than an all-inclusive delivered price be required, this shall be specified in the SCC.</p>
<b>13.Incidental Services</b>	<p>13.1 The supplier may be required to provide any or all of the following services, including additional services, if any, specified in SCC:</p> <ul style="list-style-type: none"> <li>(a) performance or supervision of on-site assembly and/or commissioning of the supplied goods;</li> <li>(b) furnishing of tools required for assembly and/or maintenance of the supplied goods;</li> <li>(c) furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied goods;</li> <li>(d) performance or supervision or maintenance and/or repair of the supplied goods, for a period of time agreed by the parties, provided that this service shall not relieve the supplier of any warranty obligations under this contract; and</li> <li>(e) training of the purchaser's personnel, at the supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied goods.</li> </ul> <p>13.2 Prices charged by the supplier for incidental services, if not included in the contract price for the goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the supplier for similar services.</p>
<b>14.Spare parts</b>	<p>14.1 As specified in SCC, the supplier may be required to provide any or all of the following materials, notifications, and information pertaining to spare parts manufactured or distributed by the supplier:</p> <ul style="list-style-type: none"> <li>(a) such spare parts as the purchaser may elect to purchase from the supplier, provided that this election shall not relieve the supplier of any warranty obligations under the contract; and</li> <li>(b) in the event of termination of production of the spare parts: <ul style="list-style-type: none"> <li>(i) Advance notification to the purchaser of the pending termination, in sufficient time to permit the purchaser to procure needed requirements; and</li> <li>(ii) Following such termination, furnishing at no cost to the purchaser, the blueprints, drawings, and specifications of the spare parts, if requested.</li> </ul> </li> </ul>
<b>15.Warranty</b>	<p>15.1 The supplier warrants that the goods supplied under the contract are new, unused, of the most recent or current models and that, they incorporate all recent improvements in design and materials unless provided otherwise in the contract. The supplier further warrants that all goods supplied under this contract shall have no defect, arising from design, materials, or workmanship (except when the design and/or material is required by the purchaser's specifications) or from any act or omission of the supplier, that may develop under normal use of the supplied goods in the conditions prevailing in the country of final destination.</p> <p>15.2 This warranty shall remain valid for twenty-four (24) months after the goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the contract, or for eighteen (18) months after the date of shipment from the port</p>

	<p>or place of loading in the source country, whichever period concludes earlier, unless specified otherwise in SCC.</p> <p>15.3 The purchaser shall promptly notify the supplier in writing of any claims arising under this warranty.</p> <p>15.4 Upon receipt of such notice, the supplier shall, within the period specified in SCC and with all reasonable speed, repair or replace the defective goods or parts thereof, without costs to the purchaser.</p> <p>15.5 If the supplier, having been notified, fails to remedy the defect(s) within the period specified in SCC, the purchaser may proceed to take such remedial action as may be necessary, at the supplier's risk and expense and without prejudice to any other rights which the purchaser may have against the supplier under the contract.</p>
<b>16.Payment</b>	<p>16.1 The method and conditions of payment to be made to the supplier under this contract shall be specified in SCC.</p> <p>16.2 The supplier shall furnish the purchaser with an invoice accompanied by a copy of the delivery note and upon fulfilment of other obligations stipulated in the contract.</p> <p>16.3 Payments shall be made promptly by the purchaser, but in no case later than thirty (30) days after submission of an invoice or claim by the supplier.</p> <p>16.4 Payment will be made in Rand unless otherwise stipulated in SCC.</p>
<b>17.Prices</b>	<p>17.1 Prices charged by the supplier for goods delivered and services performed under the contract shall not vary from the prices quoted by the supplier in his bid, with the exception of any price adjustments authorised in SCC or in the purchaser's request for bid validity extension, as the case may be.</p>
<b>18.Contract Amendments</b>	<p>18.1 No variation in or modification of the terms of the contract shall be made except by written amendment signed by the parties concerned.</p>
<b>19.Assignment</b>	<p>19.1 The supplier shall not assign, in whole or in part, its obligations to perform under the contract, except with the purchaser's prior written consent.</p>
<b>20.Subcontracts</b>	<p>20.1 The supplier shall notify the purchaser in writing of all subcontracts awarded under these contracts if not already specified in the bid. Such notification, in the original bid or later, shall not relieve the supplier from any liability or obligation under the contract.</p>
<b>21.Delays in the supplier's performance</b>	<p>21.1 Delivery of the goods and performance of services shall be made by the supplier in accordance with the time schedule prescribed by the purchaser in the contract.</p>
	<p>21.2 If at any time during performance of the contract, the supplier or its subcontractor(s) should encounter conditions impeding timely delivery of the goods and performance of services, the supplier shall promptly notify the purchaser in writing of the fact of the delay, its likely duration and its cause(s). As soon as practicable after receipt of the supplier's notice, the purchaser shall evaluate the situation and may at his discretion extend the supplier's time for performance, with or without the imposition of penalties, in which case the extension shall be ratified by the parties by amendment of contract.</p> <p>21.3 No provision in a contract shall be deemed to prohibit the obtaining of supplies or services from a national department, provincial department, or a local authority.</p>
	<p>21.4 The right is reserved to procure outside of the contract small quantities or to have minor essential services executed if an emergency arises, the supplier's point of supply is not situated at or near the place where the supplies are required, or the supplier's services are not readily available.</p>
	<p>21.5 Except as provided under GCC Clause 25, a delay by the supplier in the performance of its delivery obligations shall render the supplier liable to the imposition of penalties, pursuant to GCC Clause 22, unless an extension of time is agreed upon pursuant to GCC Clause 21.2 without the application of penalties.</p> <p>21.6 Upon any delay beyond the delivery period in the case of a supplies contract, the purchaser shall, without cancelling the contract, be entitled to purchase supplies of a similar quality and up to the same quantity in substitution of the goods not supplied in conformity with the contract and to return any goods delivered later at the supplier's expense and risk, or to</p>

	cancel the contract and buy such goods as may be required to complete the contract and without prejudice to his other rights, be entitled to claim damages from the supplier.
<b>22. Penalties</b>	<p>22.1 Subject to GCC Clause 25, if the supplier fails to deliver any or all of the goods or to perform the services within the period(s) specified in the contract, the purchaser shall, without prejudice to its other remedies under the contract, deduct from the contract price, as a penalty, a sum calculated on the delivered price of the delayed goods or unperformed services using the current prime interest rate calculated for each day of the delay until actual delivery or performance. The purchaser may also consider termination of the contract pursuant to GCC Clause 23.</p>
<b>23. Termination for default</b>	<p>23.1 The purchaser, without prejudice to any other remedy for breach of contract, by written notice of default sent to the supplier, may terminate this contract in whole or in part:</p> <ul style="list-style-type: none"> <li>(a) if the supplier 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 purchaser pursuant to GCC Clause 21.2;</li> <li>(b) if the Supplier fails to perform any other obligation(s) under the contract; or</li> <li>(c) if the supplier, in the judgment of the purchaser, has engaged in corrupt or fraudulent practices in competing for or in executing the contract.</li> </ul> <p>23.2 In the event the purchaser terminates the contract in whole or in part, the purchaser may procure, upon such terms and in such manner as it deems appropriate, goods, works or services similar to those undelivered, and the supplier shall be liable to the purchaser for any excess costs for such similar goods, works or services. However, the supplier shall continue performance of the contract to the extent not terminated.</p> <p>23.3 Where the purchaser terminates the contract in whole or in part, the purchaser may decide to impose a restriction penalty on the supplier by prohibiting such supplier from doing business with the public sector for a period not exceeding 10 years.</p> <p>23.4 If a purchaser intends to impose a restriction on a supplier or any person associated with the supplier, the supplier will be allowed a time period of not more than 14 days to provide reasons why the envisaged restriction should not be imposed. Should the supplier fail to respond within the stipulated 24 days the purchaser may regard the intended penalty as not objected against and impose it on the supplier.</p> <p>23.5 Any restriction imposed on any person by the Accounting Officer/ Authority will, at the discretion of the Accounting Officer/ Authority, should be applicable to any other enterprise or nay partner, manager, director or other person who wholly or party exercises or exercised or may exercise control over the enterprise of the first mentioned person, and with which enterprise or person the first mention person, is or was in the opinion of the AO/AA actively associated.</p> <p>23.6 If a restriction is imposed, the purchaser must, within 5 days of such imposition is imposed, the purchaser must within five (5) working days of such imposition, furnish the National Treasury, with the following information:</p> <ul style="list-style-type: none"> <li>i. The name and address of the supplier and / or person restricted by the purchaser;</li> <li>ii. The date of commencement of the restriction;</li> <li>iii. The period of restriction; and</li> <li>iv. The reasons for the restriction.</li> </ul> <p>These details will be loaded in the National treasury's central database of suppliers or person prohibited from doing business with the public sector.</p> <p>23.7 If a court of law convicts a person on an offence as contemplated in section 12 or 13 of the Prevention and Combating of Corrupt Activities Act, No. 12 of 2004, the court may also rule that such person's name be endorsed on the register for Bid Defaulters. When a person's name has been endorsed on the Register, the person will be prohibited from doing business with the public sector for a period not less than 5 years and not more than 10 years. The National Treasury is empowered to determine the period of restriction and each case will be dealt with on its own merits. According to section 32 of the Act the Register must be open to the public. The Register can be perused on the National Treasury's web-site.</p>
<b>24. Anti-dumping and</b>	<p>24.1 When, after the date of bid, provisional payments are required, or anti-dumping or countervailing duties are imposed, or the amount of a provisional payment or anti-dumping</p>



<b>countervailing duties and rights</b>	or countervailing right is increased in respect of any dumped or subsidized import, the State is not liable for any amount so required or imposed, or for the amount of any such increase. When, after the said date, such a provisional payment is no longer required or any such anti-dumping or countervailing right is abolished, or where the amount of such provisional payment or any such right is reduced, any such favourable difference shall on demand be paid forthwith by the contractor to the State or the State may deduct such amounts from moneys (if any) which may otherwise be due to the contractor in regard to supplies or services which he delivered or rendered, or is to deliver or render in terms of the contract or any other contract or any other amount which may be due to him.
<b>25. Force Majeure</b>	<p>25.1 Notwithstanding the provisions of GCC Clauses 22 and 23, the supplier shall not be liable for forfeiture of its performance security, damages, or termination for default if and to the extent that his delay in performance or other failure to perform his obligations under the contract is the result of an event of force majeure.</p> <p>25.2 If a force majeure situation arises, the supplier shall promptly notify the purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the purchaser in writing, the supplier shall continue to perform its obligations under the contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the force majeure event.</p>
<b>26. Termination for insolvency</b>	26.1 The purchaser may at any time terminate the contract by giving written notice to the supplier if the supplier becomes bankrupt or otherwise insolvent. In this event, termination will be without compensation to the supplier, provided that such termination will not prejudice or affect any right of action or remedy which has accrued or will accrue thereafter to the purchaser.
<b>27. Settlement of Disputes</b>	<p>27.1 If any dispute or difference of any kind whatsoever arises between the purchaser and the supplier in connection with or arising out of the contract, the parties shall make every effort to resolve amicably such dispute or difference by mutual consultation.</p> <p>27.2 If, after thirty (30) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the purchaser or the supplier may give notice to the other party of his intention to commence with mediation. No mediation in respect of this matter may be commenced unless such notice is given to the other party.</p> <p>27.3 Should it not be possible to settle a dispute by means of mediation, it may be settled in a South African court of law.</p> <p>27.4 Mediation proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.</p> <p>27.5 Notwithstanding any reference to mediation and/or court proceedings herein,  (a) the parties shall continue to perform their respective obligations under the contract unless they otherwise agree; and  (b) the purchaser shall pay the supplier any monies due the supplier.</p>
<b>28. Limitation of Liability</b>	<p>28.1 Except in cases of criminal negligence or wilful misconduct, and in the case of infringement pursuant to Clause 6;</p> <p>(a) the supplier shall not be liable to the purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the supplier to pay penalties and/or damages to the purchaser; and</p> <p>(b) the aggregate liability of the supplier to the purchaser, whether under the contract, in tort or otherwise, shall not exceed the total contract price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment</p>
<b>29. Governing Language</b>	29.1 The contract shall be written in English. All correspondence and other documents pertaining to the contract that is exchanged by the parties shall also be written in English.
<b>30. Applicable Law</b>	30.1 The contract shall be interpreted in accordance with South African laws, unless otherwise specified in SCC.
<b>31. Notices</b>	31.1 Every written acceptance of a bid shall be posted to the supplier concerned by registered or certified mail and any other notice to him shall be posted by ordinary mail to the address

	<p>furnished in his bid or to the address notified later by him in writing and such posting shall be deemed to be proper service of such notice.</p> <p>31.2 The time mentioned in the contract documents for performing any act after such aforesaid notice has been given, shall be reckoned from the date of posting of such notice.</p>
<b>32. Taxes and Duties</b>	<p>32.1 A foreign supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the purchaser's country.</p> <p>32.2 A local supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted goods to the purchaser.</p> <p>32.3 No contract shall be concluded with any bidder whose tax matters are not in order. Prior to the award of a bid the Department must be in possession of a tax clearance certificate, submitted by the bidder. This certificate must be an original issued by the South African Revenue Services.</p>
<b>33. National Industrial Participation Programme (NIP)</b>	<p>33.1 The NIP Programme administered by the Department of Trade and Industry shall be applicable to all contracts that are subject to the NIP obligation.</p>
<b>34. Prohibition of Restrictive practices</b>	<p>34.1 In terms of section 4 (1) (b) (iii) of the Competition Act No. 89 of 1998, as amended, an agreement between, or concerted practice by, firms, or a decision by an association of firms, is prohibited if it is between parties in a horizontal relationship and if a bidder (s) is / are or a contractor(s) was / were involved in collusive bidding (or bid rigging).</p> <p>34.2 If a bidder(s) or contractor(s), based on reasonable grounds or evidence obtained by the purchaser, has / have engaged in the restrictive practice referred to above, the purchaser may refer the matter to the Competition Commission for investigation and possible imposition of administrative penalties as contemplated in the Competition Act No. 89 of 1998.</p> <p>34.3 If a bidder(s) or contractor(s), has / have been found guilty by the Competition Commission of the restrictive practice referred to above, the purchaser may, in addition and without prejudice to any other remedy provided for, invalidate the bid(s) for such item(s) offered, and / or terminate the contract in whole or part, and / or restrict the bidder(s) or contractor(s) from conducting business with the public sector for a period not exceeding ten (10) years and / or claim damages from the bidder(s) or contractor(s) concerned.</p>



**LIMPOPO**  
PROVINCIAL GOVERNMENT  
REPUBLIC OF SOUTH AFRICA

## **DEPARTMENT OF HEALTH**

### **TERMS OF REFERENCE**

**HEDP002/22/23: SUPPLY, DELIVERY, INSTALLATION, ACCEPTANCE, COMMISSIONING AND MAINTENANCE OF RADIOLOGY AND IMAGING EQUIPMENT IN THE LIMPOPO DEPARTMENT OF HEALTH FOR A PERIOD OF SIXTY (60) MONTHS**

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## 1. DEFINITIONS

1.1	<b>“Mandatory”</b> -refers to the document or an area in terms of the bid that is required, obligatory and /or compulsory. Non-submission or compliant with means no further evaluation of the bid will be entertained. <b>NB: Demonstrated through a hash sign(#)</b>
1.2	<b>“Acceptable Bid”</b> - means any bid, which, in all respects, complies with the specifications and conditions of the Request for Bid as set out in this document.
1.3	<b>“All-inclusive maintenance plan”</b> - comprehensive package that covers all services, maintenance, all repairs including spare parts required, normal wear and tear requirements, transport, accommodation and labour.
1.4	<b>“Bid”</b> - means a written offer in a prescribed or stipulated form in response to an invitation by an organ of state for the provision of services or goods.
1.5	<b>“Bidder Agent”</b> - means any person mandated by a prime Bidder or consortium/joint venture to do business for and on behalf of, or to represent in a business transaction, the prime Bidder and thereby acquire rights for the prime Bidder or consortium/joint venture against Department of Health or an organ of state and incur obligations binding the prime Bidder or consortium/joint venture in favour of the Department.
1.6	<b>“Bidders”</b> - means any enterprise, consortium or person, partnership, company, close corporation, firm or any other form of enterprise or person, legal or natural, which has been invited by the Department of Health to submit a bid in response to this bid invitation.
1.7	<b>“Client”</b> - means Government departments, provincial and local administrations that participate in Department of Health procurement processes.
1.8	<b>“Comparative Price”</b> - means the price after deduction or addition of non-firm price factors, unconditional discounts, etc.
1.9	<b>“Consortium”</b> - means several entities joining forces as an umbrella entity to gain a strategic collaborative advantage by combining their expertise, capital, efforts, skills and knowledge for the purpose of executing this bid.
1.10	<b>“Department”</b> means the Limpopo Department of Health
1.11	<b>“Disability”</b> - means, in respect of a person, a permanent impairment of a physical, intellectual, or sensory function, which results in restricted, or lack of, ability to perform an activity in the manner, or within the range, considered normal for a human being.
1.12	<b>“Firm Price”</b> - means the price that is only subject to adjustments in accordance with the actual increase or decrease resulting from the change, imposition or abolition of customs or excise duty and any other duty, levy or tax which, in terms of a law or regulation is binding on the contractor and demonstrably has influence on the price of any supplies or the rendering cost of any service, for the execution of a contract.

1.13	<b>“Goods”</b> – means any work, equipment, machinery, tools, materials or anything of whatever nature to be rendered to Department of Health’s delegate by the successful Bidder in terms of this bid.
1.14	<b>“Internal Collaboration”</b> - means collaborative arrangements within a group of companies or within various strategic business units/subsidiaries/operating divisions in order to gain a strategic position whilst sharing resources, profits and losses as well as risks.
1.15	<b>“Joint Ownership”</b> - (also known as equity JVs) means the establishment by two parent companies of a child company for a specific task within which both parent companies invest in order to overcome the limited capabilities vested within them in order that they can both benefit from the combined investment.
1.16	<b>“Joint Venture” - (Project)</b> means two or more businesses joining together under a contractual agreement to conduct a specific business enterprise with both parties sharing profit and losses.
1.17	<b>“Licences”</b> - means conditional use of another party’s intellectual property rights.
1.18	<b>“Management”</b> - in relation to an enterprise or business, means an activity inclusive of control, and performed on a daily basis, by any person who is a principal executive officer of the company, by whatever name that person may be designated, and whether or not that person is a director.
1.19	<b>“Non-firm Price(s)”</b> - means all price(s) other than “firm” price(s).
1.20	<b>“Organ of State”</b> - means a constitutional institution defined in the Public Finance Management Act, Act 1 of 1999.
1.21	<b>“Person(s)”</b> - refers to a natural and/or juristic person(s).
1.22	<b>“Prime Bidder”</b> – means any person (natural or juristic) who forwards an acceptable proposal in response to this Request for Bid (RFB) with the intention of being the main contractor should the proposal be awarded to him/her.
1.23	<b>“Rand Value”</b> - means the total estimated value of a contract in Rand denomination, which is calculated at the time of proposal invitations and includes all applicable taxes and excise duties.
1.24	<b>“SMME”</b> – bears the same meaning assigned to this expression in the National Small Business Act, 1996 (Act No. 102 of 1996).
1.25	<b>“Administrative Requirements”</b> – This are inherent requirements of the bid, therefore failure to comply or satisfy any of the requirements shall result in the invalidation of the Bid during administrative compliance stage.
1.26	<b>“Sub-contracting”</b> - means the primary contractor’s assigning or leasing or making out work to, or employing another person to support such primary contractor in executing part of a project in terms of a contract.
1.27	<b>“Successful Bidder”</b> - means the organization or person with whom the order is placed or who is contracted to execute the work as detailed in the bid.

1.28	<b>“Trust”</b> - means the arrangement through which the property of one person is made over or bequeathed to a trustee to administer such property for the benefit of another person.
1.29	<b>“Trustee”</b> - means any person, including the founder of a trust, to whom property is bequeathed in order for such property to be administered for the benefit of another person.
1.30	<b>“Universal Medical Device Nomenclature System (UMDNS)”</b> - is a standard worldwide nomenclature for medical devices that has been officially adopted by many nations. It is produced by the ECRI Institute.

## 2. PURPOSE

The purpose of this request for bid (RFB) is to invite companies with a solid track record and experience in the supply, delivery, installation, acceptance, commissioning and maintenance of Radiology and Imaging Equipment.

## 3. BACKGROUND

The department needs the Radiology and Imaging Equipment in order to ensure the effective and efficient delivery of radiology services at institutions.

## 4. SCOPE OF WORK

The successful bidder(s) is/are expected supply, deliver, install, accept, commission and maintain the Radiology and Imaging equipment specified under **“PRICING”** herein below for a period of sixty (60) months as and when the need arises. As part of the preparation of the room, the successful bidder will be required to de-install and dispose any equipment in the room and the disposal will be at no cost on the part of the department and should comply with radiation control standards. The equipment will be acquired through an outright purchase and no leasing option is required.

## 5. EVALUATION CRITERIA

This bid shall be evaluated in **FOUR (4) stages** as follows:

- ☐ First Stage : Mandatory Requirements
- ☐ Second Stage : Administrative Compliance
- ☐ Third Stage : Technical Evaluation
- ☐ Fourth Stage : Evaluation on price and BBBEE

## 5.1. FIRST STAGE: MANDATORY REQUIREMENTS

The following mandatory documents must be submitted with the bid and failure which the bidder will be disqualified and not be evaluated any further.

FOL	ADMINISTRATIVE BIDDING REQUIREMENTS	BIDDER'S RESPONSE (Submitted / Not Submitted)
5.1.1.	Attested valid proof of license from South African Health Products Regulatory ( <b>SAHPRA</b> ) as a manufacturer, distributor or wholesaler.	
5.1.2.	Attested valid proof of registration and license with Radiation control to import the model of the device to be supplied under the bidder's name or letter of authorization from the license holder where the license is not in the name of bidder.	
5.1.3	Completed cost breakdown as per <b>PRICE SCHEDULE OF EQUIPMENT OF YOUR CHOICE</b>	

## 5.2. SECOND STAGE: ADMINISTRATIVE COMPLIANCE

5.2.1. The LDoH has prescribed minimum administrative requirements that must be met by the bidders, in order for the former to accept the bid for evaluation. In this regard administrative compliance will be carried out to determine whether the bidder's bid comply in this regard.

5.2.2. Where the bidder fails to comply fully with any of the administrative bidding requirements below/under this bid or the LDoH is for any reason unable to verify whether administrative bidding requirements are fully complied with, the LDoH reserves the right, either to:

- a. Reject the bid in question.
- b. Give the bidder an opportunity to submit and/or supplement the information and/or documentation provided so as to achieve full compliance with the administrative bidding requirements, provided that such information/ documentation can be provided within the period that will be determined by the LDoH and such supplementary information/ documentation is only administrative and not substantive in nature.



- c. Permit the bid to be evaluated, subject to the outstanding information and/or documentation being submitted prior to the award of the bid.

5.2.3. Bidders shall take note of the following guidelines:

**5.2.3.1.** The below administrative bidding requirements shall be complied with and required documents must be attached before consideration for further evaluation.

**5.2.3.2.** The bidder shall respond with “**Comply**”, “**Not Comply**” or “**Not Applicable**” in the apportioned spaces. The “**Not Applicable**” answer shall only be considered where the response field has the wording “**If Applicable**”.

**NB: Bidders *may* be disqualified for failure to comply with the above guidelines when responding to administrative bidding requirements.**

FOL	ADMINISTRATIVE BIDDING REQUIREMENTS	BIDDER'S RESPONSE (Comply/ Not Comply / Not Applicable)
5.2.4.	<b>Submission of the following standard bidding documents (fully completed and signed):</b>	
(i)	<b>SBD 1:</b> Invitation to Bid,	
(ii)	<b>SBD 3.2:</b> Pricing Schedule (Non-Firm Prices),	
(iii)	<b>SBD 4:</b> Bidder's Disclosure ,	
(iv)	<b>SBD 5:</b> National Industrial Participation Programme;	
(v)	<b>SBD 6.1.: Preference points claim form in terms of the Preferential Procurement Regulations 2017;</b>	
5.2.5.	In case of Consortium or Joint Venture ( <b>If applicable</b> ) the following are required:	
(i)	Signed agreement between involved parties indicating the lead member;	
(ii)	Every member of the Consortium or Joint Venture is registered on the Central Supplier Database and Bidders must submit a CSD Report/ Proof of CSD registration for the Consortium or Joint Venture and NOT INDIVIDUAL CSD REPORTS / PROOF OF CSD REGISTRATION;	
(iii)	Letter of appointment by consortium/joint venture parties for a representative to sign the bid documents;	
(iv)	All parties to the consortium/joint venture must submit their individual documents referred to above ( <b>i.e. Company Profile, Annexure A: Portfolio of Current and Completed Contracts</b> ) except that they must submit consolidated certified copy of valid or original valid B-BBEE verification certificate issued by a Verification Agency accredited by SANAS;	

FOL	ADMINISTRATIVE BIDDING REQUIREMENTS	BIDDER'S RESPONSE (Comply/ Not Comply / Not Applicable)
5.2.6.	Proof of Central Supplier Database Registration AND/OR Attachment of Central Supplier Database Registration Report (CSD).	
5.2.7.	Submission of an Own Company profile and <b><u>Completion of Annexure A: Portfolio of Current and Completed Contracts</u></b>	
5.2.8.	Returnable documents must be chronologically indexed with a contents list	
5.2.9.	Original Equipment Manufacturer (OEM) original brochure of the item offered. The brochure must be in original colours and presented in English.	
5.2.10.	Import License of Bidder: Attested photocopy of Import License, if the products are imported. The license must have been renewed and up to date.	
5.2.11.	Attachment of an attested photocopy of a valid CE Compliance certificate on all equipment offered (Applicable Equipment).	
5.2.12.	<p>Provide Proof of Financial Capacity of a minimum of <b>R5 000 000.00</b> to be tested through any of the following documents:</p> <p>a) Proof of support from a (National Credit Regulator) NCR registered Financial Services Provider / Financial Institution on primary funding.</p> <p style="text-align: center;"><b>OR</b></p> <p>b) An undertaking by a registered financial institution (bank) to provide funding/revolving credit, or overdraft facility. (Not a conditional assessment of Credit Rating or Bank Rating)</p> <p style="text-align: center;"><b>OR</b></p> <p>c) An undertaking by the National Credit Regulator (NCR) registered institution to provide funding / revolving credit.</p> <p style="text-align: center;"><b>OR</b></p> <p>d) Current three months' bank statement averaging the minimum value.</p> <p>NB: All the above must be duly signed by designated authorities and stamped not older than three months.</p>	

**NB: Failure to attach or complete and/or sign any of the designated arrears of the documents mentioned above may render the bid a "Not Acceptable Bid"**

### **5.3. THIRD STAGE: TECHNICAL EVALUATION (COMPLIANCE TO SPECIFICATION)**

5.3.1. Bidders will be expected to comply with the specifications of the machines/equipment as outlined by the Department as per paragraph 12.1.9. (Items 1 – 12)

**NB: Bidders are not restricted to bid for all radiology and imaging equipment.**

**Bidders may submit bid for one or all the equipment**

### **5.4. FOURTH STAGE: EVALUATION ON PRICE AND BBEE**

- 5.4.1. This bid shall be evaluated in terms of **90/10** preference points system.
- 5.4.2. Bidders must submit a B-BBEE Verification Certificate from a Verification Agency accredited by the South African National Accreditation System (SANAS).
- 5.4.3. In case of a B-BBEE exempted micro enterprise or B-BBEE qualifying small enterprise bidders may submit a valid Sworn Affidavit (attached to this bid).
- 5.4.4. Should bidder(s) fail to submit the valid BBEE certificate it will be interpreted to mean that preference points for B-BBEE status level of contribution are not claimed.
- 5.4.5. Points shall be awarded to a bidder for attaining the B-BBEE status level of contribution in accordance with the table below:

<b>B-BBEE Status Level of Contributor</b>	<b>Number of Points</b>
<b>1</b>	<b>10</b>
<b>2</b>	<b>9</b>
<b>3</b>	<b>6</b>
<b>4</b>	<b>5</b>
<b>5</b>	<b>4</b>
<b>6</b>	<b>3</b>
<b>7</b>	<b>2</b>
<b>8</b>	<b>1</b>
<b>Non-compliant contributor</b>	<b>0</b>

## **6. KEY ASPECTS OF THE BID PROPOSAL**

Bidders must take note of the following fundamental aspects before submission of their bid proposals:

- 6.1. Bidders should initial every page of the bid proposal.
- 6.2. Bid documents have been properly signed and completed in the original ink and in handwriting. No copies of completed bid documents will be accepted.

- 6.3.** All Standard Bidding Documents should be returned in their original form;
- 6.4.** That their bids are substantially responsive to the bidding document;
- 6.5.** Bidders must submit their bid in line with the bid specification. Failure to comply shall invalidate the bid.
- 6.6.** Delivery period must be within the timeframe specified in the technical specification of each equipment.
- 6.7.** Bidders must submit their bids on the stipulated closing date and time and late bids shall not be considered.
- 6.8.** In order to evaluate and adjudicate bids effectively, it is imperative that bidders submit responsive bids. To ensure a bid will be regarded as responsive it is imperative to comply with all conditions pertaining all the administrative requirements of the bid.
- 6.9.** Each bidder must attach all applicable documents in support of its bid in accordance with the requirements set out in this bid as well as any other relevant materials, photographs and/or attachments.
- 6.10.** Each bid, once submitted, constitutes a binding and irrevocable offer to provide the services on the terms set out in the bid, which offer cannot be amended after its date of submission.

## **7. BID AWARD & CONTRACT CONDITIONS**

- 7.1.** The shortlisted bidders shall be subjected to vetting process. Only successful bidder(s) who are cleared during vetting process shall be considered for appointment.
- 7.2.** Bidders shall be notified about the decision of the Department by means of publication in the Provincial Bid Bulletin.
- 7.3.** The contract shall be concluded between Limpopo Department of Health and the successful service provider(s).
- 7.4.** The contract period of sixty (60) months will be in terms of the acceptance letter.
- 7.5.** The department is not obliged to accept or consider any bid in full or in part or any responses or submissions in relation thereto and may reject any bid.
- 7.6.** The department reserves the right to appoint the bidder whose bid most successfully conforms to the criteria and the requirements in accordance with the terms and conditions described in the specification.
- 7.7.** The appointment of the successful bidder is subject to the conclusion of a Service Level Agreement (SLA) between the department and the successful bidder governing all rights and obligations related to the required services.

- 7.8. The outcome of the successful bidders shall be published through the same media that was used to advertise the bid.
- 7.9. The department reserves the right to award the bid to one or more service providers, wholly or in part or not to award.
- 7.10. The department may, on reasonable and justifiable grounds, award the bid to a company that did not score the highest number of points
- 7.11. Awarding of the proposal will be subject to the Service Provider's expressing acceptance of National Treasury General Conditions of Contract (GCC).
- 7.12. Design of X – Rays rooms must be in line with the guidelines issued by the Department of Health. See annexure "B"

## 8. CONTRACT ADMINISTRATION

- 8.1. Successful bidder(s) must report to contract management unit immediately when unforeseeable circumstances will adversely affect the execution of the contract.
- 8.2. Full particulars of such circumstances as well as the period of delay must be furnished.
- 8.3. The administration of the bid and contract i.e. evaluation, award, distribution of contract circulars, contract price adjustments etc., shall be the sole responsibility of the Supply Chain Management Unit.

## 9. PRICING

- 9.1. Bidders should provide one quote for the Radiology and Imaging equipment of their choice i.e. **OUTRIGHT PURCHASE PRICE QUOTE**
- 9.2. All prices charged must be inclusive of **business overheads and VAT. NB: Successful bidders who are not registered for VAT at the time of bidding must register as required by law immediately after award.**
- 9.3. Extended maintenance cost equaling factory standard maintenance plan and warranties must be provided for the Radiology and Imaging equipment.
- 9.4. It is an express requirement of this request for bid that bidders provide some transparency in respect to their pricing approach. In this regard, bidders must indicate the basis on which they have calculated their pricing by providing a breakdown of the total bid price for all alterations including, air conditioning and electrical power requirements.

- 9.5.** All prices quoted by suppliers will be assessed to ensure that bidders did not underquote/overquote. **(Bidders perceived to have under quoted/over quoted in terms of market prices shall be disqualified).**

## **10. PRICE ADJUSTMENTS**

Bidders must take note that prices shall be firm for the first 12 months of the contract, and thereafter a CPI price adjustment shall be applicable in the first and second anniversary of the contract. The adjustment shall be automatically applied. **(BIDDERS MUST NOT APPLY FOR SUCH PRICE ADJUSTMENT).**

## **11. RATE OF EXCHANGE (ROE) CLAIMS**

Should the price be subjected to Rate of Exchange (ROE), claims for ROE variation will be considered. Claims for the rate of exchange variation will only be considered on receipt of requests from suppliers. All relevant documents must accompany the claims. Claims for ROE shall be applicable to suppliers that have, in their Bid documents, indicated the ROE at the time of bidding.

## **12. TECHNICAL SPECIFICATIONS**

### **12.1. General Requirements of the Specifications:**

The Radiology and Imaging equipment required and price quotations must take the following into account: (failure to demonstrate the consideration of these requirements may result in disqualification of the bid):

#### **12.1.1. Installation and Alterations:**

- a) The bid price to include de-installation of the existing equipment in the identified space
- b) The bid price to include delivery and commissioning of the equipment.
- c) Cost for any additional alterations required to convert and refurbish the available space.
- d) State delivery time.
- e) State installation time.
- f) Bidder to investigate if there is suitable access for the delivery of the Radiology and Imaging equipment.
- g) Site must be visited at the hospitals listed in paragraph 12.1.8, evaluated and all identified pre-installation gaps be quoted accordingly.
- h) Provide separate quotation for renovations per square meter for both ceiling and floor for all equipment that require installation.

- i) **NB: The bidders must, separate from the total bid price, quote the cost of detailed alterations for the following, amongst any other.**

<b>FOL</b>	<b>DESCRIPTION</b>	<b>RATES PER SQUARE METER</b>
<b>1</b>	<b>Roof</b>	<b>UNIT m<sup>2</sup></b>
		<b>See Annexure C</b> schedule H.1.B Building and Civil Engineering works
<b>2</b>	<b>Ceiling</b>	<b>See Annexure C</b> schedule H.1.B Building and Civil Engineering works
<b>3</b>	<b>Painting</b>	<b>See Annexure C</b> schedule H.1.B Building and Civil Engineering works
<b>4</b>	<b>Cupboards or cabinets</b>	<b>See Annexure C</b> schedule H.1.B Building and Civil Engineering works
<b>5</b>	<b>Shelves</b>	<b>See Annexure C</b> schedule H.1.B Building and Civil Engineering works
<b>6</b>	<b>Walls</b>	<b>See Annexure C</b> schedule H.1.B Building and Civil Engineering works
<b>7</b>	<b>Floors</b>	<b>See Annexure C</b> schedule H.1.B Building and Civil Engineering works
<b>8</b>	<b>Air conditioning</b>	<b>See Annexure D</b> schedule G.1.B Air conditioning, ventilation & refrigeration
<b>9</b>	<b>Electrical</b>	<b>See Annexure E</b> schedule B.1.A General electric maintenance

**NB: Should the bidder not quote all the building work and alterations that are necessary and required for installation of applicable Radiology and Imaging equipment, omissions that were not quoted shall be to the cost of the bidder.**

**NB: It is the responsibility of the successful bidder to effect the building works**

**NB: In the event where there are no rates, quotations should be forwarded to be evaluated.**

**12.1.2. Power Supply**

- a) Bidder must investigate the present electrical supply thoroughly and if any alterations are required, the bidder must also separately quote power supply requirements.**
- b) The bidder must certify that they would be responsible, under the terms of the warranty and subsequent service contracts, to meet all costs for damage occurring as a result of any electrical variations.

**12.1.3. Warranty**

- a) Bidders must supply a minimum of twenty-four month warranty against poor workmanship, latent defects, parts and recall. This must be all inclusive and include, amongst others, ALL PARTS, labour, traveling and accommodation. The warranty must include all maintenance, software updates and call outs for the twenty-four-month period.
- b) Supplier should guarantee the availability of spare parts for the defined lifespan of the equipment.
- c) The up-time of the unit must be better than 98%, excluding scheduled preventative maintenance and software upgrades, measured on a quarterly basis. The percentage lower than 98% will be added to the warranty period.

**NB: Should the bidder not quote all the power requirements that are necessary and required for installation of applicable equipment, omissions that were not quoted shall be to the cost of the bidder.**

**12.1.4. Service**

- a) Preference will be given to Companies which have an established service facility, with technicians that are experienced in the servicing of offered equipment within Limpopo Province or at least 350km from Polokwane.
- b) Availability and reliability of service is of extreme importance to this Department.
- c) Bidders to state whether a service Engineer / technician is able to reach the area of equipment within 3 hours of call.

**12.1.5. Technical Compliance**

**NB: The technical specifications must be compliant to requirements of each technical specification.**



#### 12.1.6. **Training**

- a) The successful bidder will be responsible for sufficient training of the relevant clinicians and technical staff in the operation of the units.
- b) Supply curriculum for on-site training. Assessment of staff after training with 100% attendance rate for all the relevant clinicians and technical staff.
- c) The initial training should be on-site,
- d) Follow up training should be continuous and can incorporate on and off-site training
- e) Supply details of training program. Discuss with end user.
- f) Comprehensive application / operation manuals to be supplied in both hard and electronic copies.

#### 12.1.7. **General**

- a) The successful bidder will be expected to maintain the equipment during the warranty period.
- b) The successful bidder will enter into all-inclusive maintenance contract
- c) Bidders are at the time of bidding required to submit an all-inclusive maintenance plans for the 8-year period from the end of the warranty period. Failure to do so will disqualify the bid.
- d) Considerable life span including availability of spare parts of technology offered  
Please include written commitment from manufacturers.

#### 12.1.8. **Mandatory Site Inspection/ Visit**

**Bidders must conduct a site inspection at the listed HOSPITALS in paragraph 13.1 to determine pricing for the Radiology and Imaging equipment.**

Failure to attend site inspection on the date set by the department shall disqualify the bidder/s.

### 12.1.9. DETAILED TECHNICAL SPECIFICATIONS

#### ITEM 1: BID SPECIFICATIONS FOR A 128 SLICE COMPUTER TOMOGRAPHY SYSTEM

The Computer Tomography System on offer must be of modern slip-ring designed technology under current production and should be licensed for sale in the Southern African market by a recognised Supplier who can prove the service, spares and application support is available in Africa to maintain the system at peak operating performance. The system offered must comply or exceed all the minimum performance specifications as indicated below for the various sub-components and supported by factory supplied product specifications/brochures.

ITEM NUMBER	DESCRIPTION	COMPLY/ NOT COMPLY	MANDATORY	DETAILS OF OFFER
<b>1</b>	<b><u>GANTRY:</u></b>			
1.1	Modern slip-ring designed gantry technology.			
1.2	Supports whole body CT Scanning including whole body angiography.			
1.3	Scan time of 0.35 second for sub-second scanning.			
1.4	Aperture size of at least 72cm or larger.			
1.5	Angulation of at least + 30 degrees and – 30 degrees.			
1.6	Support variable fields of view of at least 500mm or larger			
1.7	128-slice acquisitions with a 128 x 0.5mm slices			
1.8	Dual control panels on gantry to adjust gantry movements.			
1.9	3D patient alignment system.			
1.10	Control of gantry movements from operator console.			
1.11	Intercom between gantry and operator console.			
1.12	Electronic patient breathing instructions in multiple languages.			
<b>2</b>	<b><u>PATIENT SUPPORT SYSTEM:</u></b>			
2.1	Support patients weight of 150kg to 350kg.			
2.2	Lowest table height to be less than 340mm.			
2.3	Longitudinal tabletop travel to be at least 2000mm.			
2.4	The scan range of the tabletop must be 2000mm or better to facilitate whole body scanning applications.			
2.5	Motorized patient support movements.			
2.6	Table top width to at least 47cm or wider.			
2.7	Metal-free tabletop allowing patient scanning without re-positioning patient.			
2.8	Control of table movements from operator console and gantry.			
2.9	Programming of motorized removal and re-indexing of table top without compromising patient scanning for emergency access to patient.			

2.10	Patient positioning accessories to include headrest support, table leg extender, security straps, infant immobilizer, arm support, knee support and immobilizing straps			
<b>3</b>	<b><u>DETECTOR ACQUISITION SYSTEM:</u></b>			
3.1	Solid-state detector technology using low-dose and high-resolution acquisitions.			
3.2	Multi-slice detector technology for 128-slice acquisitions per 360-degree gantry rotation.			
3.3	Multi-Slice detector comprising at least 896 channels with 2572 views per second sampling rates or better.			
3.4	The detector should be a true 128-row			
3.5	Coupled detector / tube assembly on slip-ring based gantry design.			
3.6	Calibration and service phantoms to be included.			
3.7	The detector should be able to produce a minimum slice thickness of at least 0.5mm. Bidders to state minimum slice thickness available.			
<b>4.</b>	<b><u>X-RAY GENERATOR:</u></b>			
4.1.	Mounted on slip-ring yoke in gantry.			
4.2.	Modern high frequency 60KW generator allowing 120KV and 500mA for 0.5 second-scan times or better.			
4.3.	Support of at least 200 scans in 100 seconds using a 0.5 second scan time or better during the spiral scan mode			
4.4.	4 Variable KV settings. State settings.			
4.5.	Variable mA settings up to at least 500mA or better			
<b>5.</b>	<b><u>X-RAY TUBE:</u></b>			
5.1.	High-speed rotating anode tube with dual focal spot technology			
5.2.	Anode heat storage capacity not less than 7.0MHU.			
5.3.	Anode heat dissipation rate not less than 1386 KHU/minute.			
5.4.	Cooling performance curves required.			
5.5.	Support of at least 200 scans in 100 seconds using a 0.5 second scan time or better during the spiral scan mode.			
<b>6.</b>	<b><u>OPERATOR CONSOLE:</u></b>			
6.1	Modern user interface with logical and intuitive operation.			
6.2.	At least 200 pre-programmed scan protocols required.			
6.3.	Operator consoles with 19 inch high-resolution LCD colour display with 1024 x 1024 display resolution.			
6.4.	Operator console with independent monitor, keyboard and mouse/touch screen, linked with multi-tasking functionality, are required in operator control room.			
6.5.	DICOM and PACS compatible storage of patient images is required			
6.6.	Intercom to gantry for patient instruction			
6.7.	Emergency stop switch for patient safety.			
6.8.	X-ray tube protection / display on console required.			
6.9.	Electronic patient breathing instructions in multiple languages.			
<b>7</b>	<b><u>COMPUTER SYSTEM / RECONSTRUCTION:</u></b>			

7.1	Operator console with modern 64 bit high-speed computer with 8 GB memory to support multi-tasking operation to allow simultaneous scanning, reconstruction, viewing, archiving, processing and filming operation.			
7.2	At least a 512 x 512 reconstruction matrix is required			
7.3	Real-time reconstruction for scout-view required.			
7.4	A 15 frames / second or faster reconstruction time is required per 512 x 512 reconstructed images			
8	<b>IMAGE STORAGE:</b>			
8.1	Large image archive to store raw scan-data as well as reconstructed data required.			
8.2	DICOM and PACS storage of patient images is required.			
9	<b>IMAGE VIEWING MODES: (BIDDERS TO SPECIFY)</b>			
9.1	Image acquisition, viewing, processing and filming modes required, supported by systems product data.			
9.2	3D surface and volume rendering, Maximum and minimum Intensity projections, Curved and planar MPR reconstructions required, supported by systems product data.			
9.3	Noise reduction techniques to be highlighted.			
9.4	Window width.			
9.5	Window level.			
9.6	Preset window.			
9.7	Linear and non-linear window settings.			
9.8	Double window			
9.9	Non-linear user-programmable window.			
9.10	State CT number measurement range.			
9.11	Inset scout-view display.			
9.12	ROI setting and processing			
9.12.a	ROI shapes including point, rectangular, polygonal, elliptical and irregular shapes.			
9.12.b	Mean, standard deviation, area and minimum 5 mega pixels			
9.12.c	At least 3 ROI's to be displayed			
9.12.d	Size, position and rotation.			
9.13	Distance and angle between two points			
9.14	Standard and oblique profile.			
9.15	CT number display.			
9.16	Volume calculation.			
9.17	Enlargement via video manipulation.			
9.18	Zoom using raw data.			
9.19	Addition and subtraction of images.			
9.20	Arrow insertion			
9.21	Top / bottom image reversal.			
9.22	Left / right image reversal			
9.23	Black / white image reversal.			
9.24	Image filtering.			
9.25	Screen-save			
9.26	High-speed axial image interpolation.			
9.27	Automated MPR reconstruction using multi-slice datasets.			
9.28	Noise reduction filters.			
9.29	Cine image display.			
9.30	Dynamic image display			
9.31	Three-dimensional image processing.			

9.32.a	3D surface rendering			
9.32.a.1	Clipping and texturing.			
9.32.b	3D and MPR volume rendering			
9.32.b.1	Maximum intensity projection.			
9.32.b.2	Minimum intensity projection.			
9.32.b.3	X-ray volume rendering			
9.32.b.4	Intensity volume rendering.			
9.32.b.5	Shaded volume rendering with free setting of the opacity setting.			
9.32.c	Display and processing			
9.32.c.1	Zooming			
9.32.c.2	Panning			
9.32.c.3	Measurement including distance and angle			
9.32.c.4	Annotation			
9.32.c.5	Cutting			
9.32.c.6	Automated Bone Removal			
9.32.c.7	Automated MPR with 3 orthogonal planes, oblique imaging and curved reconstructions.			
9.32.c.8	Volume calculation			
9.33	Customized patient information display.			
9.34	Any other software functionality to be detailed.			
9.35	Optional software modules to be detailed			
<b>10</b>	<b>HELICAL MODE PERFORMANCE:</b>			
10.1	Tilted spiral scan mode with 128-slice acquisitions or better being acquired per gantry rotation			
10.2	Support of at least 200 scans in 100 seconds using a 0.5 second scan time or better during the spiral scan mode			
10.3	10 scan plans required per scout-view required.			
10.4	A variable pitch setting is required for spiral scanning mode. Details required.			
10.5	Single spiral sequences required			
10.6	Multiple spiral sequences required.			
10.7	Multi-directional spiral sequences required.			
10.8	Combined conventional and spiral planned sequences required.			
10.9	Tilted spiral mode			
10.10	Different reconstruction algorithms required.			
10.11	Real-time reconstruction and display of images during the spiral mode are required at a viewing rate of at least 12 images per second or better			
10.12	For accurate contrast examinations to achieve imaging during the phase where maximum contrast concentration appears, a bolus-timing package is to be included. Details to be stated.			
<b>11</b>	<b>IMAGE QUALITY PERFORMANCE:</b>			
11.1	Isotropic volume imaging is a requirement with a 0.5mm x 0.5mm x 0.5mm voxel requirement. State voxel sizes used for isotropic volume imaging.			
11.2	Image noise of less than 0.6%. State parameters used			
11.3	Spatial resolution of 8.0 lp/cm at MTF 50% and 14.5 lp/cm at MTF 2% or better. State parameters used			
11.4	High contrast detectability in the X-Y-Z plane			
11.5	Low contrast detectability of 2mm @ 0.3%. State CTDIvol in mGy			

11.6	International CATPHAN performance phantom to be used for all measurements. Supply details of phantom used for measurements.			
<b>12</b>	<b><u>DOSE REDUCTION TECHNIQUES:</u></b>			
12.1	Applied dose for multi-slice CT applications is required to be kept to the absolute minimum for all applications protocols.			
12.2	Tenderers are to detail all dose reduction techniques used during patient scanning to reduce the total applied patient dose.			
12.3	The applied patient dose must be quantified and displayed on the operators console for the patient examination. Modes to include:			
12.3.a	Weighted CT Dose Index.			
12.3.b	Volume CT Dose Index.			
12.3.c	Dose Length Product.			
12.4.a	Gantry design			
12.4.b	Choice of scan-times available			
12.4.c	Detector design.			
12.4.d	Slice profile used.			
12.4.e	Real-time exposure control during scanning.			
12.4.f	Variable pitch settings			
12.4.g	Beam collimation and X-ray tube filtration			
12.4.h	Adult and pediatric scanning exposure techniques/protocols			
12.4.i	Accurate contrast timing			
12.4.j	Real-time spiral scanning display.			
12.4.k	Calculated dose display on operators console monitor			
12.4.l	Software image quality correction that allows reconstructed images to be improved without having to rescan the patient with additional scans or scans with a higher applied dose.			
<b>13</b>	<b><u>DICOM AND PACS COMPATIBILITY:</u></b>			
13.1	The CT Scanner is to support image linkage to network, linkage to 3D Workstation and linkage to laser camera.			
13.2	The 3D workstation to support linkage to CT Scanner and laser camera.			
13.3	The Laser camera to support DICOM compatible printer.			
13.4	DICOM compatible hardware/software to ensure network linkage.			
13.5	DICOM network interface required			
13.6	Links to 3D Doctors workstation and Laser camera systems is required via DICOM compatibility.			
13.7	High-speed data transfer over the network is required. State speed.			
13.8	Conformance statements for the various services classes per modality to be provided			
13.9	DICOM Storage commitment, query / retrieve / MWM and MPPS DICOM software functionality must be provided to ensure PACS / HIS / RIS network compatibility			
<b>14</b>	<b><u>VASCULAR ANALYSIS:</u></b>			
14.1	To be used with CT contrast examinations on vessels measuring 3mm to 60mm in diameter, for pre-surgical diagnosis, planning and stent planning			

14.1.a	Must be capable of being used for at least the following anatomical areas:			
14.1.b	Abdominal aorta.			
14.1.c	Carotid arteries.			
14.1.d	Renal arteries			
14.1.e	2D and 3D image reference must be possible.			
14.1.f	MIPS, MPR and curved MPR views must be possible			
14.1.g	The following measurements are required:			
14.1.h	Length of the centerline curve			
14.1.i	Minimum and maximum cross-sectional areas and diameters.			
14.1.j	Stenosis percentage calculation			
14.2	ECG Gated Scanning including trigger monitor			
14.3	ECG Gated Reconstruction multi-segment techniques . Full details required.			
14.4	A full Cardiac Analysis package in required including Calcium Scoring, Coronary Artery Analysis and Left Ventricular Function.			
<b>15</b>	<b><u>3D WORKSTATION:</u></b>			
15.1	A WINDOWS Operating system, modern, Dual Core PC system is required with at least 16 GB RAM , RAID hard-drive configuration, network card, suitable graphics card and 19 inch flat panel LCD monitor (supporting 1280 x 1024 resolution) is required.			
15.2	Modern user-interface with high-speed processing required			
15.3	3D, Surface rendering, volume rendering, image sculpting, Maximum Intensity Projections, Minimum Intensity Projections, MPR and curved MPR, e-mail facility and other image processing tools are required.			
15.4	DICOM compatibility required.			
15.5	Product performance and functionality to be supported by factory specification details.			
<b>16</b>	<b><u>CT CONTRAST INJECTOR:</u></b>			
16.1	A modern contrast injector is required and will be used for all contrast-enhanced examinations. Details to be supplied			
<b>17</b>	<b><u>DICOM AND PACS COMPATIBLE LASER CAMERA</u></b>			
17.1	DICOM and PACS Compatible networked laser camera required.			
17.2	Various imaging formats required.			
17.3	Daylight loading film magazines.			
17.4	Fully Automated Image Quality Control technology to be integrated into the laser camera to optimize image contrast and density preferences.			
17.5	Linkage to 3D workstation and CT Console required, linked via network.			
17.6	Laser printing using dry printing technology required. Full details			
17.7	Simultaneous connection and print support from DICOM compatible modalities. State number of modalities supported			
	<b><u>CLINICAL APPLICATION PACKAGES TO BE OFFERED:</u></b>			
<b>18</b>	<b><u>CT FLUOROSCOPY</u></b>			

18.1	CT Fluoroscopy mode for drainages, FNA, biopsies.			
18.2	3-image display mode must be possible			
18.3	Console to control ability to interactively change table height, longitudinal table position and gantry angulation.			
18.4	Bidders are to state what dose reduction techniques are available to limit applied dose to the Radiologists hands.			
19	<b><u>CT COLONOSCOPY:</u></b>			
19.1	Generation of 3D images of the colon for screening purposes.			
19.2	A 3D axial mode must be available to review the data in 3D slabs with adjustable thickness.			
19.3	A 3D survey mode must be available showing the 3D endo-luminal view with conventional MPR views.			
19.4	A 3D transparent wall mode must be available to study the exterior portion of the wall as well as interior wall navigation.			
19.5	A 3D Flythrough mode must be available to interactively navigate the colon.			
19.6	Prone and supine or pre-surgical and post-surgical images must be capable of being compared side-by-side.			
19.7	A reverse viewing mode must be available allowing the user to review the areas recently navigated.			
19.8	The creation of smooth with continuous flythrough or outside view movies of the colon to reveal spatial relationship of anatomic structures.			
19.9	A report facility must be available to create reports for the patient or referring clinicians that can be printed or posted to a secure intranet site			
20	<b><u>SITTING REQUIREMENTS:</u></b>			
20.1	The bidder is to inspect the proposed installation site for complete site evaluation.			
20.2	The bidder will be requested to provide room layout drawings and siting requirements.			
20.3	Air-conditioning requirements to be stated.			
20.4	Power requirements to be stated			
20.5	UPS requirements to be stated			
20.6	Site layout requirements to be stated.			
20.7	A detailed summary of costs of all proposed siting related issues is to be included.			
21	<b><u>SUPPORTING DOCUMENTATION:</u></b>			
21.1	All system brochures, product specifications and application notes to be supplied.			
21.2	DICOM conformance statements to be included.			
22	<b><u>CUSTOMER SUPPORT DETAILS:</u></b>			
22.1	Application training support to be detailed.		#	
22.2	Service support to be detailed.			
23	<b><u>SYSTEM WARRANTY:</u></b>			
23.1	A minimum guarantee period of 24 months is applicable. All parts and all labour costs to be included during the warranty period.		#	
24	<b><u>GENERAL TECHNICAL AND SAFETY SPECIFICATIONS</u></b>			
24.1	The equipment quoted must be protected against electromagnetic interference.		#	



24.2	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
24.3	Must be the latest model - state date of initial manufacture of the model range offered.			
24.4	Bidders must state the lifespan of the equipment offered			
24.5.	Bidders must provide a minimum of 2 qualified technicians. <b>NB Certified copies of qualifications</b> (or equivalent) training must be submitted with this bid.		#	
24.6	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
24.7	No part shall be second hand or refurbished.			

## PRICING SCHEDULE

**OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE**

<b>ITEM 1: 128 SLICE CT SCANNAR</b>  (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	R
<b>Year 4</b>	R
<b>Year 5</b>	R
<b>Year 6</b>	R
<b>Year 7</b>	R

Year 8	R
Year 9	R
Year 10	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b> <b>(Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)</b>	R

**NB: Bidder must attach detailed breakdown of the total bid price.**

**ITEM 2: BID SPECIFICATIONS FOR A 256 SLICE COMPUTER TOMOGRAPHY SYSTEM**

ITEM NUMBER	DESCRIPTION	COMPLY/ NOT COMPLY	MANDATORY	DETAILS OF OFFER
<b>1</b>	<b><u>GANTRY:</u></b>			
1.1	Modern slip-ring designed gantry technology.			
1.2	Supports whole body CT Scanning including whole body angiography.			
1.3	Scan time of 0.35 second for sub-second scanning.			
1.4	Aperture size of at least 72cm or larger.			
1.5	Angulation of at least + 30 degrees and – 30 degrees.			
1.6	Support variable fields of view of at least 500mm or larger			
1.7	256 slice acquisitions with a 256 x 0.5mm slices			
1.8	Dual control panels on gantry to adjust gantry movements.			
1.9	3D patient alignment system.			
1.10	Control of gantry movements from operator console.			
1.11	Intercom between gantry and operator console.			
1.12	Electronic patient breathing instructions in multiple languages.			
<b>2</b>	<b><u>PATIENT SUPPORT SYSTEM:</u></b>			
2.1	Support patients up to 350kgs.			
2.2	Lowest table height to be less than 340mm or lower.			
2.3	Longitudinal tabletop travel to be at least 2000mm.			
2.4	The scan range of the tabletop must be 1750mm or better to facilitate whole body scanning applications.			
2.5	Motorized patient support movements.			
2.6	Table top width to at least 47cm or wider.			

2.7	Metal-free tabletop allowing patient scanning without re-positioning patient.			
2.8	Control of table movements from operator console and gantry.			
2.9	Programming of motorized removal and re-indexing of table top without compromising patient scanning for emergency access to patient.			
2.10	Patient positioning accessories to include headrest support, table leg extender, security straps, infant immobilizer, arm support, knee support and immobilizing straps			
<b>3</b>	<b><u>DETECTOR ACQUISITION SYSTEM:</u></b>			
3.1	Solid-state detector technology using low-dose and high-resolution acquisitions.			
3.2	Multi-slice detector technology for 256-slice acquisitions per 360-degree gantry rotation.			
3.3	Multi-Slice detector comprising at least 896 channels with 2572 views per second sampling rates or better.			
3.4	The detector should be a true 256-row			
3.5	Coupled detector / tube assembly on slip-ring based gantry design.			
3.6	Calibration and service phantoms to be included.			
3.7	The detector should be able to produce a minimum slice thickness of at least 0.5mm. Bidders to state minimum slice thickness available.			
<b>4.</b>	<b><u>X-RAY GENERATOR:</u></b>			
4.1.	Mounted on slip-ring yoke in gantry.			
4.2.	Modern high frequency 60KW generator allowing 120KV and 500mA for 0.5 second-scan times or better.			
4.3.	Support of at least 200 scans in 100 seconds using a 0.5 second scan time or better during the spiral scan mode			
4.4.	4 Variable KV settings. State settings.			
4.5.	Variable mA settings up to at least 500mA or better			
<b>5.</b>	<b><u>X-RAY TUBE:</u></b>			
5.1.	High-speed rotating anode tube with dual focal spot technology			
5.2.	Anode heat storage capacity not less than 7.0MHU.			
5.3.	Anode heat dissipation rate not less than 1386 KHU/minute.			
5.4.	Cooling performance curves required.			
5.5.	Support of at least 200 scans in 100 seconds using a 0.5 second scan time or better during the spiral scan mode.			
<b>6.</b>	<b><u>OPERATOR CONSOLE:</u></b>			
6.1.	Modern user interface with logical and intuitive operation.			
6.2.	At least 200 pre-programmed scan protocols required.			
6.3.	Operator consoles with 19 inch high-resolution LCD colour display with 1024 x 1024 display resolution.			
6.4.	Operator console with independent monitor, keyboard and mouse/touch screen, linked with multi-tasking functionality, are required in operator control room.			

6.5.	DICOM and PACS compatible storage of patient images is required			
6.6.	Intercom to gantry for patient instruction			
6.7.	Emergency stop switch for patient safety.			
6.8.	X-ray tube protection / display on console required.			
6.9.	Electronic patient breathing instructions in multiple languages.			
<b>7</b>	<b><u>COMPUTER SYSTEM / RECONSTRUCTION:</u></b>			
7.1.	Operator console with modern 64 bit high-speed computer with 8 GB memory to support multi-tasking operation to allow simultaneous scanning, reconstruction, viewing, archiving, processing and filming operation.			
7.2.	At least a 512 x 512 reconstruction matrix is required			
7.3.	Real-time reconstruction for scout-view required.			
7.4.	A 15 frames / second or faster reconstruction time is required per 512 x 512 reconstructed images			
<b>8</b>	<b><u>IMAGE STORAGE:</u></b>			
8.1.	Large image archive to store raw scan-data as well as reconstructed data required.			
8.2.	At least a 300GB disk for 260 000 reconstructed images is required for storage. State storage included.			
8.3.	At least a 180GB disk for 3600 rotational -data sets is required for raw data storage. State storage included.			
8.4.	DICOM and PACS storage of patient images is required.			
<b>9</b>	<b><u>IMAGE VIEWING MODES:</u></b>			
9.1.	Image acquisition, viewing, processing and filming modes required, supported by systems product data.			
9.2.	3D surface and volume rendering, Maximum and minimum Intensity projections, Curved and planar MPR reconstructions required, supported by systems product data.			
9.3.	Noise reduction techniques to be highlighted.			
9.4.	Window width.			
9.5.	Window level.			
9.6.	Preset window.			
9.7.	Linear and non-linear window settings.			
9.8.	Double window			
9.9.	Non-linear user-programmable window.			
9.10.	State CT number measurement range.			
9.11.	Inset scout-view display.			
9.12.	ROI setting and processing			
9.12.a	ROI shapes including point, rectangular, polygonal, elliptical and irregular shapes.			
9.12.b	Mean, standard deviation, area and minimum 5 mega pixels			
9.12.c	At least 3 ROI's to be displayed			
9.12.d	Size, position and rotation.			
9.13.	Distance and angle between two points			
9.14.	Standard and oblique profile.			
9.15.	CT number display.			
9.16.	Volume calculation.			
9.17.	Enlargement via video manipulation.			
9.18.	Zoom using raw data.			
9.19.	Addition and subtraction of images.			
9.20.	Comment.			

9.21.	Arrow insertion			
9.22.	Top / bottom image reversal.			
9.23.	Left / right image reversal			
9.24.	Black / white image reversal.			
9.25.	Image filtering.			
9.26.	Screen-save			
9.27.	High-speed axial image interpolation.			
9.28.	Automated MPR reconstruction using multi-slice datasets.			
9.29.	Noise reduction filters.			
9.30.	Cine image display.			
9.31.	Dynamic image display			
9.32.	Three-dimensional image processing.			
9.32.a	3D surface rendering			
9.32.a.1	Clipping and texturing.			
9.32.b	3D and MPR volume rendering			
9.32.b.1	Maximum intensity projection.			
9.32.b.2	Minimum intensity projection.			
9.32.b.3	X-ray volume rendering			
9.32.b.4	Intensity volume rendering.			
9.32.b.5	Shaded volume rendering with free setting of the opacity setting.			
9.32.c	Display and processing			
9.32.c.1	Zooming			
9.32.c.2	Panning			
9.32.c.3	Measurement including distance and angle			
9.32.c.4	Annotation			
9.32.c.5	Cutting			
9.32.c.6	Automated Bone Removal			
9.32.c.7	Automated MPR with 3 orthogonal planes, oblique imaging and curved reconstructions.			
9.32.c.8	Volume calculation			
9.33.	Customized patient information display.			
9.34.	Any other software functionality to be detailed.			
9.35.	Optional software modules to be detailed			
<b>10</b>	<b><u>HELICAL MODE PERFORMANCE:</u></b>			
10.1.	Tilted spiral scan mode with 256-slice acquisitions or better being acquired per gantry rotation			
10.2.	Support of at least 200 scans in 100 seconds using a 0.5 second scan time or better during the spiral scan mode			
10.3.	10 scan plans required per scout-view required.			
10.4.	A variable pitch setting is required for spiral scanning mode. Details required.			
10.5.	Single spiral sequences required			
10.6.	Multiple spiral sequences required.			
10.7.	Multi-directional spiral sequences required.			
10.8.	Combined conventional and spiral planned sequences required.			
10.9.	Tilted spiral mode			
10.10.	Different reconstruction algorithms required.			
10.11.	Real-time reconstruction and display of images during the spiral mode are required at a viewing rate of at least 12 images per second or better			
10.12.	For accurate contrast examinations to achieve imaging during the phase where maximum contrast concentration			

	appears, a bolus-timing package is to be included. Details to be stated.			
<b>11</b>	<b><u>IMAGE QUALITY PERFORMANCE:</u></b>			
11.1.	Isotropic volume imaging is a requirement with a 0.5mm x 0.5mm x 0.5mm voxel requirement. State voxel sizes used for isotropic volume imaging.			
11.2.	Image noise of less than 0.6%. State parameters used			
11.3.	Spatial resolution of 8.0 lp/cm at MTF 50% and 14.5 lp/cm at MTF 2% or better. State parameters used			
11.4.	High contrast detectability in the X-Y-Z plane			
11.5.	Low contrast detectability of 2mm @ 0.3%. State CTDIvol in mGy			
11.6.	International CATPHAN performance phantom to be used for all measurements. Supply details of phantom used for measurements.			
<b>12</b>	<b><u>DOSE REDUCTION TECHNIQUES:</u></b>			
12.1.	Applied dose for multi-slice CT applications is required to be kept to the absolute minimum for all applications protocols.			
12.2.	Tenderers are to detail all dose reduction techniques used during patient scanning to reduce the total applied patient dose.			
12.3.	The applied patient dose must be quantified and displayed on the operators console for the patient examination. Modes to include:			
12.3.a	Weighted CT Dose Index.			
12.3.b	Volume CT Dose Index.			
12.3.c	Dose Length Product.			
12.4.a	Gantry design			
12.4.b	Choice of scan-times available			
12.4.c	Detector design.			
12.4.d	Slice profile used.			
12.4.e	Real-time exposure control during scanning.			
12.4.f	Variable pitch settings			
12.4.g	Beam collimation and X-ray tube filtration			
12.4.h	Adult and pediatric scanning exposure techniques/protocols			
12.4.i	Accurate contrast timing			
12.4.j	Real-time spiral scanning display.			
12.4.k	Calculated dose display on operators console monitor			
12.4.l	Software image quality correction that allows reconstructed images to be improved without having to rescan the patient with additional scans or scans with a higher applied dose.			
<b>13</b>	<b><u>DICOM AND PACS COMPATIBILITY:</u></b>			
13.1.	The CT Scanner is to support image linkage to network, linkage to 3D Workstation and linkage to laser camera.			
13.2.	The 3D workstation to support linkage to CT Scanner and laser camera.			
13.3.	The Laser camera to support DICOM compatible printer.			
13.4.	DICOM compatible hardware/software to ensure network linkage.			
13.5.	DICOM network interface required			
13.6.	Links to 3D Doctors workstation and Laser camera systems is required via DICOM compatibility.			

13.7.	High-speed data transfer over the network is required. State speed.			
13.8.	Conformance statements for the various services classes per modality to be provided			
13.9.	DICOM Storage commitment, query / retrieve / MWM and MPPS DICOM software functionality must be provided to ensure PACS / HIS / RIS network compatibility			
<b>14</b>	<b><u>VASCULAR ANALYSIS:</u></b>			
14.1.	To be used with CT contrast examinations on vessels measuring 3mm to 60mm in diameter, for pre-surgical diagnosis, planning and stent planning			
14.1.a	Must be capable of being used for at least the following anatomical areas:			
14.1.b	Abdominal aorta.			
14.1.c	Carotid arteries.			
14.1.d	Renal arteries			
14.1.e	2D and 3D image reference must be possible.			
14.1.f	MIPS, MPR and curved MPR views must be possible			
14.1.g	The following measurements are required:			
14.1.h	Length of the centreline curve			
14.1.i	Minimum and maximum cross-sectional areas and diameters.			
14.1.j	Stenosis percentage calculation			
14.2.	ECG Gated Scanning including trigger monitor			
14.3.	ECG Gated Reconstruction multi-segment techniques. Full details required.			
14.4.	A full Cardiac Analysis package is required including Calcium Scoring, Coronary Artery Analysis and Left Ventricular Function.			
<b>15</b>	<b><u>3D WORKSTATION:</u></b>			
15.1.	A WINDOWS Operating system, modern, Dual Core PC system is required with at least 16 GB RAM , RAID hard-drive configuration, network card, suitable graphics card and 19 inch flat panel LCD monitor (supporting 1280 x 1024 resolution) is required.			
15.2.	Modern user-interface with high-speed processing required			
15.3.	3D, Surface rendering, volume rendering, image sculpting, Maximum Intensity Projections, Minimum Intensity Projections, MPR and curved MPR, e-mail facility and other image processing tools are required.			
15.4.	DICOM compatibility required.			
15.5.	Product performance and functionality to be supported by factory specification details.			
<b>16</b>	<b><u>CT CONTRAST INJECTOR:</u></b>			
16.1.	A modern contrast injector is required and will be used for all contrast-enhanced examinations. Details to be supplied			
<b>17</b>	<b><u>DICOM AND PACS COMPATIBLE LASER CAMERA</u></b>			
17.1.	DICOM and PACS Compatible networked laser camera required.			
17.2.	650DPI printing is required on 35 x 43cm film size.			
17.3.	Up to 200 films / hour film throughput is required. State DPI rate used to print films at the stated rate.			

17.4.	Film printing to be accomplished is less than 25 seconds.			
17.5.	14-bit pixel depth with at least 16000 levels of gray.			
17.6.	3 on-line film drawers allowing the choice of film sizes.			
17.7.	Various imaging formats required.			
17.8.	Daylight loading film magazines.			
17.9.	Fully Automated Image Quality Control technology to be integrated into the laser camera to optimize image contrast and density preferences.			
17.10.	Linkage to 3D workstation and CT Console required, linked via network.			
17.11.	Laser printing using dry printing technology required. Full details			
17.12.	Simultaneous connection and print support from DICOM compatible modalities. State number of modalities supported			
	<b><u>CLINICAL APPLICATION PACKAGES TO BE OFFERED:</u></b>			
<b>18</b>	<b><u>CT FLUOROSCOPY</u></b>			
18.1.	CT Fluoroscopy mode for drainages, FNA, biopsies.			
18.2.	3-image display mode must be possible			
18.3.	Console to control ability to interactively change table height, longitudinal table position and gantry angulation.			
18.4.	Bidders are to state what dose reduction techniques are available to limit applied dose to the Radiologists hands.			
<b>19</b>	<b><u>CT COLONOSCOPY:</u></b>			
19.1.	Generation of 3D images of the colon for screening purposes.			
19.2.	A 3D axial mode must be available to review the data in 3D slabs with adjustable thickness.			
19.3.	A 3D survey mode must be available showing the 3D endo-luminal view with conventional MPR views.			
19.4.	A 3D transparent wall mode must be available to study the exterior portion of the wall as well as interior wall navigation.			
19.5.	A 3D Flythrough mode must be available to interactively navigate the colon.			
19.6.	Prone and supine or pre-surgical and post-surgical images must be capable of being compared side-by-side.			
19.7.	A reverse viewing mode must be available allowing the user to review the areas recently navigated.			
19.8.	The creation of smooth with continuous flythrough or outside view movies of the colon to reveal spatial relationship of anatomic structures.			
19.9.	A report facility must be available to create reports for the patient or referring clinicians that can be printed or posted to a secure intranet site			
<b>20</b>	<b><u>SITTING REQUIREMENTS:</u></b>			
20.1.	The bidder is to inspect the proposed installation site for complete site evaluation.			
20.2.	The bidder will be requested to provide room layout drawings and siting requirements.			
20.3.	Air-conditioning requirements to be stated.			
20.4.	Power requirements to be stated			
20.5.	UPS requirements to be stated			
20.6.	Site layout requirements to be stated.			



20.7.	A detailed summary of costs of all proposed siting related issues is to be included.			
20.8.	The proposed equipment layout plan / drawings must be accepted and signed by the Head of Department and the Medical Superintendent as a mandatory requirement for tender acceptance. All site preparation costs proposed must be related to the signed installation site plan.			
20.9.	Bidders are to attend a compulsory site inspection meeting as requested by the Hospital. Details will be confirmed.			
<b>21</b>	<b><u>SUPPORTING DOCUMENTATION:</u></b>			
21.1.	All system brochures, product specifications and application notes to be supplied.		#	
21.2.	DICOM conformance statements to be included.			
<b>22</b>	<b><u>CUSTOMER SUPPORT DETAILS:</u></b>			
22.1.	Application training support to be detailed.			
22.2.	Service support to be detailed.		#	
22.3.	Spares availability to be detailed			
<b>23</b>	<b><u>SYSTEM WARRANTY:</u></b>			
23.1.	A minimum guarantee period of 24 months is applicable. All parts and all labour costs to be included during the warranty period.			
<b>24</b>	<b><u>GENERAL TECHNICAL AND SAFETY SPECIFICATIONS</u></b>		#	
24.1.	The equipment quoted must be protected against electromagnetic interference.		#	
24.2.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
24.3.	Must be the latest model - state date of initial manufacture of the model range offered.			
24.4.	Bidders must state the lifespan of the equipment offered			
24.5.	Bidders must provide a minimum of 2 qualified technicians. <b>NB Certified copies of qualifications</b> (or equivalent) training must be submitted with this bid.		#	
24.6.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
24.7.	No part shall be second hand or refurbished.			

## PRICING SCHEDULE

OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE

<b>ITEM 2: 256 SLICE CT SCANNAR</b>  (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	R
<b>Year 4</b>	R
<b>Year 5</b>	R
<b>Year 6</b>	R
<b>Year 7</b>	R
<b>Year 8</b>	R
<b>Year 9</b>	R
<b>Year 10</b>	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b>  (Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)	R

**NB: Bidder must attach detailed breakdown of the total bid price.**

### ITEM 3: BID SPECIFICATION FOR C – ARM FLUOROSCOPY FLAT PANEL DETECTOR:

FOL	DESCRIPTION	COMPLY/ NOT COMPLY	MANDA TORY	DETAILS OF OFFER
<b>1</b>	<b>X-RAY GENERATOR</b>			
1.1.	The unit shall be at least a 15 kW, of the single-phase high frequency microprocessor controlled type.			
1.2.	Full automatic mains control regulating both kV and mA shall be included, but it shall also be possible to select factors manually			
1.3.	High tension shall be continuously variable from $\pm 40$ to 120 kilovolt (kV).			
1.4.	Maximum X Ray tube current required 35mA for Pulsed Fluoroscopy and 100mA for Digital Exposure			
1.5.	Fluoroscopy - from at least 0,2 mA at 40 kilovolt (kV) to at least 8 mA for normal mode, and at least 20 mA for high definition mode at 120 kV			
1.6.	Pulsed fluoroscopy: at least 10 mA at 120 kV			
1.7.	To comply with future digital environment a digital exposure mode is required with: mA range $\pm 1$ to $\pm 70$ and kV between 40 and 110.			
1.8.	Radiography: not less than 50 mA at 110 kV			
1.9.	State what technology is employed the reduce radiation to both user and patient.			
1.10.	Exposure for digital radiography:			
1.11.	Full automatic brightness for varying tissue density is required, both kV and mA controlled.			
1.12.	It is required that the unit shall, after switch-on, immediately be ready for screening, without the need to enter patient information.			
<b>2.</b>	<b>X-RAY TUBE:</b>			
2.1.	The tube shall be able to work with full output of the generator, and shall have an overload protection.			
2.2.	Foci: (Company to specify)			
2.3.	Fine $\pm 0,3$ to 0,4 millimetre (mm); Heat dissipation not less than 70 KHU/min. Please specify			
2.4.	Broad $\pm 0.5$ to 0.7 mm inherent filtration $\geq 3.0$ Al equivalent. State			
2.5.	Only rotating anode tubes shall be considered, bidders to state type of tube offered			
2.6.	The anode thermal capacity shall be not less than 300kHU			
2.7.	State target angle.			
<b>3</b>	<b>COLLIMATOR:</b>			
3.1.	All collimator settings shall be controlled automated or from the control panel and electrically motorized.			
3.2.	Useful beam shall be limited to the input phosphor by means of an iris diaphragm. It shall be possible to select a field smaller than input phosphor. A rotatable parallel and independent of each other, shutter mechanism shall be included.			
<b>4.</b>	<b>DIGITAL FLAT DETECTOR</b>			

4.1.	Flat detector			
4.2.	Size not smaller than 21cm, (Company to specify)			
4.3.	Pixel size smaller than 200 x 200 µm. Please state (Company to specify)			
4.4.	Integrated Laser beam for accurate positioning should be included			
4.5.	Three user selectable zoom formats to be available. Please specify.			
<b>5</b>	<b>VIEWING STATION</b>			
5.1	Two, high resolution, high contrast monitors shall form part of the TV system. These monitors shall be at least 21 Inch			
5.2.	The monitors shall have a minimum resolution of 1280 x 1024 pixels technology.			
5.3.	Monitor shall be flicker-free with a view angle not less than 170°.			
5.4.	The monitors shall be mounted firmly on a separate trolley specifically designed to prevent it from tumbling over when moved around			
<b>6.</b>	<b>C-ARM MOBILE STAND:</b>			
6.1.	The C-Arm height adjustment shall be motorised and manual driven to approximately 470mm ( +10%).			
6.2.	The offered stand shall have large castors completely covered front and back by an alloy / steel guard (Min 100mm Diameter) that facilitate easy movement of the complete unit with cable deflectors per wheel.			
6.3.	The offered C-arm stand shall have a steering handle controlling the castors (at least 2 castors) in order to facilitate easy manoeuvring of the unit. It shall be possible to rotate the castors through 90° so that the unit can be moved parallel to patient bed.			
6.4.	The offered C-arm stand shall have a central floor lock in order to lock the unit into position.			
6.5.	The radius (arc depth) of offered C-Arm shall be at least 680mm			
6.6.	The distance between front o FPD (Flat Panel Detector) to front of X-Ray Collimator shall be at least 770mm. State free space;			
6.7.	The Source to Image Distance (SID) shall be at least 970mm;			
<b>7</b>	<b>NETWORK &amp; LAN INTEGRATION CONNECTIVITY</b>			
7.1.	The unit must have the ability to <b>DICOM Send</b> (Sends images in series to PACS and <b>DICOM</b> standard)			
7.2.	The unit must have the ability to <b>DICOM Print</b> (Prints image material using virtual film sheets via DICOM print laser camera or network printer)			
7.3.	The unit must have the ability to have DICOM Modality Worklist from a DICOM patient management system (Worklist).			
<b>8.</b>	<b>FEATURES / GEOMETRY &amp; OPERATIONAL CHARACTERISTICS</b>			
8.1.	The total motorized vertical movement of the C-arm shall atleast be 430 mm.			
8.2.	Rotation of C-arm (rotating the C-arm and the FPD and the X-ray Tube move from floor to ceiling and ceiling to floor respectively, in an arc) must be no less than +180 ° and -			

	180°. This rotation shall be possible without having to raise the C arm to give clearance to the camera unit			
8.3.	Longitudinal/horizontal travel of the C-arm shall not be less than 200 mm			
8.4.	Rotation of C-arm in PA/lateral tube direction shall not be less than 135° with tube and DFP in a vertical position.			
8.5.	The minimum C-Arm depth shall be no less than 700mm			
8.6.	The minimum C-arm Free space must not be less than 750mm			
8.7.	The Swivel range of the C-arm must be no less than +10° to -10°.			
8.8.	All movements shall be counter balanced and equipped with effective brakes			
8.9.	It shall be possible to securely lock the wheels			
8.10.	The unit must have an Integrated Laser beam from detector side, for accurate positioning should be included in the total price			
<b>9.</b>	<b>USER INTERFACE</b>			
9.1.	The unit must have Integrated Keyboard;			
9.2.	The unit must have a Tracker ball or mouse pad;			
9.3.	The unit must have a USB port allowing storage of images onto a flash drive device.			
9.4.	The unit must have Pre-set anatomically programmed fluoroscopy parameters;			
9.5.	The unit must have Touch screen ability on image monitor allowing post processing of images and patient administration			
9.6.	The unit must have digital output connectors at the mobile viewing station.			
<b>10.</b>	<b>IMAGE PROCESSING AND DISPLAY</b>			
10.1.	The unit must have the ability to do Multiple simultaneous displays of images on monitor.			
10.2.	The unit must have the ability to do Image Invert.			
10.3.	The unit must have the ability to do Image orientation.			
10.4.	The unit must have the ability to do Patient detail.			
10.5.	The unit must have the ability to do Real Time Brightness, Contrast and window level adjustments.			
10.6.	The unit must have the ability to do Vertical image flip.			
10.7.	The unit must have the ability to do Horizontal image flip.			
10.8.	The unit must have Magnification tools to zoom and to roam to any section of an image in real time.			
10.9.	The unit must have the ability to do Annotation			
10.10	The unit shall have measurement tools to quantify lengths and angles in an image in real time.			
10.11	The offered units shall be able to store a minimum of 140000 Images for retrieval at later stage.			
10.12.	The offered units shall have image processing capabilities to allow for real time and post processing of images.			
10.13.	The unit must have the ability to do must have last image hold capability.			
10.14.	The system shall have a means of protecting the patient images that are stored on disk.			
10.15.	The unit must provide warning indicators before any protected or unprotected images are overwritten so that			

	necessary precautions can be taken by the user to save the data if needed.			
10.16.	The Bidder shall supply a disk that will allow a complete examination to be stored at the maximum frames per second of the unit on offer. Bidder to state size of disk on offer.( USB memory stick)			
<b>11.</b>	<b>USER MANUAL</b>			
11.1.	<p>The bidder must include in their offer at no extra cost to the final bid price:</p> <p>(a) Complete user Operation/Maintenance Manuals x2 (two) Book/File and CD/DVC copies in English Language</p> <p>(b) Complete <b>ORIGINAL</b> Service/Repair Manuals x 2 (two) Book/File and CD/DVD copies in English Language which <b>MUST</b> include the following information:</p> <p>(i) Fault Finding Guide</p> <p>(ii) Circuit Diagrams/Schematics</p> <p>(iii) Circuit Descriptions</p> <p>(iv) PCB Layouts</p> <p>(v) Calibration Guide</p> <p>(vi) Part numbers and exploded diagram of mechanical parts/panels</p> <p>The offer submitted must be supported by descriptive literature, colour pamphlets, colour brochures and technical data sheets applicable to the offer</p>			
<b>12.</b>	<b>END USER TRAINING</b>			
12.1.	User training must be provided by the successful bidder in the operation of the unit at no extra cost to the final bid price,			
12.2.	Application specialist should train all users on an on-going basis			
12.3.	It must display error code for troubleshooting.			
12.4.	<b>All QA software and relevant tools need to be included for the whole system in the total bid price.</b>			
<b>13.</b>	<b>SUPPORTING DOCUMENTATION:</b>			
13.1.	All system brochures, product specifications and application notes to be supplied.			
13.2.	DICOM conformance statements to be included.			
<b>14.</b>	<b>CUSTOMER SUPPORT DETAILS:</b>			
14.1.	Application training support to be detailed.			
14.2.	Service support to be detailed.			
14.3.	Spares availability to be detailed			
<b>15.</b>	<b>SYSTEM WARRANTY:</b>			
15.1.	A minimum guarantee period of 24 months is applicable. All parts and all labour costs to be included during the warranty period.		#	
<b>16.</b>	<b>GENERAL TECHNICAL AND SAFETY SPECIFICATIONS</b>			
16.1.	The equipment quoted must be protected against electromagnetic interference.		#	
16.2.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
16.3.	Must be the latest model - state date of initial manufacture of the model range offered.			
16.4.	Bidders must state the lifespan of the equipment offered			
16.5.	<p>Bidders must provide a minimum of 2 qualified technicians.</p> <p><b>NB Certified copies of qualifications</b> (or equivalent) training must be submitted with this bid.</p>		#	

16.6.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
16.7.	No part shall be second hand or refurbished.			

## PRICING SCHEDULE

**OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE**

<b>ITEM 3: C – ARM FLUOROSCOPY FLAT PANEL DETECTOR</b>  <b>(All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)</b>	<b>R</b>
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	<b>R</b>
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	<b>R</b>
<b>Year 4</b>	<b>R</b>
<b>Year 5</b>	<b>R</b>
<b>Year 6</b>	<b>R</b>
<b>Year 7</b>	<b>R</b>
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b>  <b>(Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)</b>	<b>R</b>

**NB: Bidder must attach detailed breakdown of the total bid price.**

**ITEM 4: BID SPECIFICATIONS FOR A DIRECT DIGITAL CEILING SUSPENDED DUAL DETECTOR X-RAY UNIT (DICOM COMPATIBLE)**

<b>FOL</b>	<b>DESCRIPTION</b>	<b>COMPLY/ NOT COMPLY</b>	<b>MANDA TORY</b>	<b>DETAILS OF OFFER</b>
<b>1</b>	<b>X-RAY GENERATOR</b>			
1.1.	State maximum power at 100 kV according - to IEC601 (kW) +-50kw			
1.2.	State generator performance data: kW Ma at kV			
1.3.	Minimum rated output power should be at least 65 kW			
1.4.	Shortest switching time with automatic exposure control (1 ms)			
1.5.	Shortest mAs product			
1.6.	Must use 1 mAs per step			
1.7.	Maximum switching frequency (f/s) bidder to state			
1.8.	Maximum Tube voltage of more or equal to 150kV			
1.9.	Dimensions of the generator cabinet - L x W x H in cm bidder to indicate			
1.10.	Weight in kg bidder to indicate			
1.11.	Automatic exposure techniques/programs must be available with the option of manual programming included.			
1.12.	Bidders to supply details of programming facility and the number of programs.			
1.13.	A monitoring and display of tube heat status should be provided			
1.14.	Tube overload protection mechanism is required			
1.15.	Automatic mains compensation must be provided			
1.16.	Must have a two step hand switch retractable which can initiate the exposure from a safe distance			
<b>2.</b>	<b>DIGITAL SYSTEM</b>			
2.1.	A fully automatic, digital, radiographic examination and evaluation workstation based on detector technology for high image dynamics with excellent signal/noise ratio is required			
2.2.	Must have Two flat panel detectors with one fixed detector and one wireless detector to be provided			
2.3.	Examination table			
2.4.	Erect wall stand			
<b>3.</b>	<b>EXPOSURE SYSTEM</b>			
3.1.	Detector Csi technology type - state type offered			
3.2.	Exposure formats: should no be less than 35cm x 43cm			
3.3.	Full vertical			
3.4.	Full horizontal			
3.5.	Detector exposure matrix: state pixels:			
3.6.	Bidder to indicate Detector element pitch			
3.7.	Bidder to indicate Acquisition depth in bit			
3.8.	Description of the scattered radiation grid: TYPE			
3.9.	Minimum grid ratio of 10:01			
3.10.	Reading speed at maximum format from the exposure to preview on the monitor (± 5 sec)			



3.11.	From the exposure to image transmission to the laser printer should not be more than 40 sec			
3.12.	Can the system operate without additional external cooling? If not, provide details			
<b>4.</b>	<b>IMAGE PROCESSOR</b>			
4.1.	Type			
4.2.	Storage matrix			
4.3.	Depth of memory image not less than 500mb			
4.4.	Storage capacity (full format) including external			
<b>5.</b>	<b>CONTROL CONSOLE</b>			
5.1.	Patient data entering			
5.2.	Enter data Manually			
5.3.	Monitor size must not be less than 19 inches and must be touch screen (diagonal)			
5.4.	Monitor pixels must not be less than 2200x2600			
5.5.	Touch screen must not be glove sensitive or use a pointer			
5.6.	Monitor must be flicker free and distortion free			
5.7.	Complete standing console			
5.8.	Image processing using :			
5.9.	Keyboard			
5.10.	Mouse			
5.11.	Integrated generator operation			
5.12.	Menu control			
5.13.	Organ program selection			
5.14.	Window position/width			
5.15.	Horizontal/vertical image mirroring			
5.16.	Image rotation must be 360°			
5.17.	Left/right, ap/pa marking			
5.18.	Built-in and Configurable text annotation			
5.19.	Filter selection			
5.20.	Edge enhancement and noise suppression - bidder to state mechanism			
5.21.	Not less than 4 x image zoom			
5.22.	UPS to be included for control console and must last for at least 20 minutes while full operational - state support time of UPS			
<b>6.</b>	<b>APPLICATION AND EVALUATION PROGRAMS</b>			
6.1.	Organ-related application program?			
6.2.	Windowing (centre/width)			
6.3.	Paging forward and back			
6.4.	Multi-image display on the monitor (mosaic)			
6.5.	Retro-collimation facilities (shutter)			
6.6.	Image documentation in the background			
6.7.	Multi-tasking technique			
6.8.	Edge enhancement			
6.9.	Noise suppression			
6.10.	Zoom			
<b>7.</b>	<b>SYSTEM INTERFACES</b>			
7.1	Should be a fully comprehensive DICOM compatible and fully digital			
7.2	DICOM and PACS interface compatible			
7.3.	Please submit a copy of the "Conformance Statement" for all DICOM interfaces			
<b>8.</b>	<b>X-RAY TUBE WITH MULTILEAF COLLIMATOR (COMPANY TO SPECIFY)</b>			

8.1.	Nominal voltage (kV) 40- 150kV			
8.2.	Nominal power (IEC 613)			
8.3.	Focal spot parameter (IEC 336)			
8.4.	Small focus 0.6mm			
8.5.	Large focus 1.2mm			
8.6.	Anode angle 12°			
8.7.	State Anode material			
8.8.	State Speed of rotating anode			
8.9.	Heat storage capacity of the anode 300kHU			
8.10.	Multileaf collimator with rotating flange collimator			
8.11.	± 45° swivelling			
8.12.	Y-axis ± 180 °			
8.13.	X-axis ± 180 °			
8.14.	Light localizer on/off switching			
8.15.	There must be a measuring tape as part of the collimator			
9.	<b>CEILING SUSPENDED TUBE SUPPORT</b>			
9.1.	20.1 The tube column must be ceiling mounted #			
9.2.	20.2 The X-ray tube assembly rotation should be #			
9.3.	330° about the vertical and horizontal axis			
9.4.	State movements: movement will be subject to change during installation at different sites.			
9.5.	Longitudinal: bidder to state			
9.6.	Transverse: bidder to state			
9.7.	Vertical: bidder to state			
9.8.	Multi planner movements controlled by electric lock			
9.9.	All movements to be counter balanced			
9.10.	Single button "release" of all electromagnetic stand			
10.	<b>X-RAY EXAMINATION TABLE</b>			
10.1.	Motorized height-adjustable table minimum height not less than 45cm and maximum height of not less than 90cm			
10.2.	Must have a mechanism for controlling table movement			
10.3.	Table top must be radiolucent, scratch resistance and must have fixation of table top rubber bumper			
10.4.	Must come with a radiolucent mattress			
10.5.	Mattress must be fluid and stain resistant			
10.6.	Floating table top			
10.7.	Emergency button must be accessible and not protruding outside the table frame range			
10.8.	Detector carriage with scattered radiation grid. State			
10.9.	Type:			
10.10.	Focus:			
10.11.	Table top dimensions (cm) bidder to specify			
10.12.	Table top longitudinal movement with a minimum of 50cm			
10.13.	Transversal movement +/-12 cm)			
10.14.	Control of the table functions via footswitch			
10.15.	Electromagnetically released permanent brakes to be standard			
10.16.	Load capacity must be at least 220 kg			
10.17.	Automatic exposure device			
11.	<b>SOFTWARE AND HARDWARE UPGRADES</b>			
11.1.	All future upgrades (hardware and software), where applicable, involving patient safety must be offered at no additional cost. All future upgrades removing software viruses from existing software, where applicable, must be supplied at no additional			

	cost. Any software upgrade, where policeable, before or after installation if the equipment must be brought to the attention of the Manager, Health Technology Services.			
12.	<b>USER MANUAL</b>			
12.1.	<p>The bidder must include in their offer at no extra cost to the final bid price:</p> <p>(a) Complete user Operation/Maintenance Manuals x2 (two) Book/File and CD/DVC copies in English Language</p> <p>(b) Complete <b>ORIGINAL</b> Service/Repair Manuals x 2 (two) Book/File and CD/DVD copies in English Language which <b>MUST</b> include the following information:</p> <p>(i) Fault Finding Guide</p> <p>(ii) Circuit Diagrams/Schematics</p> <p>(iii) Circuit Descriptions</p> <p>(iv) PCB Layouts</p> <p>(v) Calibration Guide</p> <p>(vi) Part numbers and exploded diagram of mechanical parts/panels</p> <p>The offer submitted must be supported by descriptive literature, colour pamphlets, colour brochures and technical data sheets applicable to the offer</p>			
13.	<b>END USER TRAINING</b>			
13.1.	User training must be provided by the successful bidder in the operation of the unit at no extra cost to the final bid price,			
13.2.	Application specialist should train all users on an on-going basis			
13.3.	A computerised radiography unit using storage phosphor screens and a reader must be offered			
13.4.	It must be possible to enter patient data manually for emergencies or when the network is down			
13.5.	Cassette throughput must be at least 70 plates per hour of size 35 x 43cm			
13.6.	12 bit image acquisition and display must be possible.			
13.7.	System should have a flat-panel touch screen, full colour monitor doe data input, image control and system control.			
13.8.	System should have automatic and adjustable image quality. Please provide details.			
13.9.	DICOM print class, storage SCU and worklist management to be included.			
13.10.	Uninterrupted power supply to be include for DR system (UPS). UPS must operate for a minimum of 2 hours			
13.11.	Operational power of 220-230VAC			
13.12.	Image storage on system of a minimum of 5000 images on-line for referral.			
13.13.	The system must be capable of receiving patient data from the RIS/HIS and provide output to the PACS, DICOM printer.			
13.14.	It should be possible to send images to more than one viewing stations automatic and manual.			
13.15.	Anatomic and radiographic annotations must be possible.			
13.16.	State time for full image preview in seconds - should be +/- 40sec.			
13.17.	<b>All Radiation Control Board QA test kits need to be included for the whole system in the total bid price.</b>			
13.18.	All future upgrades (hardware and software), where applicable, involving <u>patient safety</u> must be offered at no additional cost.			

13.19.	All future upgrades removing software viruses from existing software, where applicable, must be supplied at no additional cost.			
13.20.	Monitor size must not be less than 21 inches and must be touch screen (diagonal)			
13.21.	Monitor pixels must not be less than 2200 x 2600			
13.22.	Touch screen must not be glove sensitive or use a pointer			
13.23.	Monitor must be flicker free and distortion free			
13.24.	Complete console			
<b>14.</b>	<b>IMAGE PROCESSING USING:</b>			
14.1.	Keyboard			
14.2.	Mouse			
14.3.	Menu control			
14.4.	Organ programme selection			
14.5.	Window width / level			
14.6.	Horizontal/vertical image mirroring			
14.7.	Image rotation must be 360°			
14.8.	Left/right, ap/pa markings			
14.9.	Built-in and configurable text annotations			
14.10.	Filter selection			
14.11.	Edge enhancement and noise suppression to be included - Bidder to state mechanism used.			
14.12.	Not less than 4x image zoom			
<b>15.</b>	<b>SUPPORTING DOCUMENTATION:</b>			
15.1	All system brochures, product specifications and application notes to be supplied.		#	
15.2	DICOM conformance statements to be included.		#	
<b>16.</b>	<b>CUSTOMER SUPPORT DETAILS:</b>			
16.1	Application training support to be detailed.		#	
16.2	Service support to be detailed.		#	
16.3	Spares availability to be detailed		#	
<b>17</b>	<b>SYSTEM WARRANTY:</b>			
17.1.	A minimum guarantee period of 24 months is applicable. All parts and all labour costs to be included during the warranty period.		#	
<b>18.</b>	<b>GENERAL TECHNICAL AND SAFETY SPECTIFICATIONS</b>			
18.1.	The equipment quoted must be protected against electromagnetic interference.		#	
18.2.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
18.3.	Must be the latest model - state date of initial manufacture of the model range offered.			
18.4.	Bidders must state the lifespan of the equipment offered			
18.5.	Bidders must provide a minimum of 2 qualified technicians. <b>NB Certified copies of qualifications</b> (or equivalent) training must be submitted with this bid.		#	
18.6.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
18.7.	No part shall be second hand or refurbished.			

**PRICING SCHEDULE**

**OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE**

<b>ITEM 4: DIRECT DIGITAL CEILING SUSPENDED DUAL DETECTOR X-RAY UNIT (DICOM COMPATIBLE)</b>  (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	R
<b>Year 4</b>	R
<b>Year 5</b>	R
<b>Year 6</b>	R
<b>Year 7</b>	R
<b>Year 8</b>	R
<b>Year 9</b>	R
<b>Year 10</b>	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b>  (Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)	R

**NB: Bidder must attach detailed breakdown of the total bid price.**

## ITEM 5: CLINICAL LINEAR ACCELERATOR

### INTRODUCTION

This specification defines the performance, reliability and features of a clinical linear accelerator system. Bidders answering this specification shall meet the following general and specific requirements to be considered for the award for any contract that results from this bid.

FOL	DESCRIPTION	COMPLY/ NOT COMPLY	MANDAT ORY	DETAILS OF OFFER
<b>1.</b>	<b>Isocenter</b>			
1.1.	<ul style="list-style-type: none"> <li>Target distance: 100cm <math>\pm</math> 2mm</li> <li>Isocenter height above floor: 124cm to 133cm</li> <li>Clearance distance under radiation head and head size: manufacturer's specification</li> <li>Gantry, collimator and couch isocenter accuracy: Manufacturer's specification as per International electrical commission (IEC)</li> </ul>			
<b>2.</b>	<b>Gantry Rotation</b>			
2.1.	<ul style="list-style-type: none"> <li>Range: 360<sup>0</sup></li> <li>Angle indicator accuracy and rotation accuracy: atleast 0.5<sup>0</sup></li> <li>Highest rotation speed available</li> <li>Angle resolution indicator: manufacturer's specification</li> <li>Anti-collision protection</li> </ul>			
<b>3.</b>	<b>Collimator rotation</b>			
3.1.	<ul style="list-style-type: none"> <li>Range: 360<sup>0</sup></li> <li>Angle indicator accuracy: <math>\pm</math> 0.5<sup>0</sup></li> <li>Highest rotation speed available with or without accessories</li> <li>Angle resolution indicator: manufacturer's specification</li> </ul>			
<b>4.</b>	<b>Independent jaws</b>			
4.1.	<ul style="list-style-type: none"> <li>Upper and lower jaws speed, travel range and accuracy: manufacturer's specification and must be latest available</li> </ul>			
<b>5.</b>	<b>Light field indicator</b>			
5.1.	<ul style="list-style-type: none"> <li>Crosswire accuracy at isocenter <math>\pm</math> 0.5 mm to 2mm or less</li> <li>Optical distance indicator range: 70cm to 170cm, and 1mm accuracy at 100cm manufacture to specify</li> <li>Light field and radiation field coincidence at isocenter: 1mm to 2mm or less</li> <li>Field size: smallest to 40cm x 40cm</li> <li>Anti-collision protection</li> <li>Wall mount axial, sagittal, and coronal and horizontal green isocentric lasers</li> </ul>			

<b>6.</b>	<b>Beam Shaping</b>			
6.1.	<ul style="list-style-type: none"> <li>• Must have asymmetric collimation for both jaws. The field size must be variable from smallest up to 40 cm x 40 cm (clipped edges) with at least a 35 cm x 35 cm field size without clipped edges.</li> <li>• Must have virtual or dynamic wedges in at least one axis.</li> <li>• Must support shadow trays</li> <li>• Must have MLCs in both beam axes with at least 120 leaves and at most 1 cm width at isocentre</li> <li>• If better MLC systems than specified are available, specify and give the additional cost to acquire and purchase.</li> <li>• Leaf transmission must not exceed 1%</li> </ul>			
<b>7.</b>	<b>SRS System</b>			
7.1.	<ul style="list-style-type: none"> <li>• Removable mini/micro MLC with maximum of 3mm leaf width at isocentre for the central 5cm x 5cm</li> <li>• All cabling and modifications to the linac must be included in the price</li> <li>• Must include thermos plastic mask frame and immobilisation suitable for SRS</li> </ul>			
<b>8.</b>	<b>Patient support system (treatment couch)</b>			
8.1.	<b>Motion ranges</b> <ul style="list-style-type: none"> <li>• Lateral, longitudinal and vertical movements must be motorized and must be able to drive to a position within 1 mm</li> <li>• Couch speed and accuracy for manual and motorized control: manufacture specification</li> <li>• Must comply with IEC recommendations</li> <li>• Must have a pair of handheld pendants for couch and gantry movement control on the left and right sides of the couch</li> <li>• Must have a pair of panels for couch and gantry motion control on the left and right sides of the couch.</li> </ul>			
8.2.	<b>Couch top</b> <ul style="list-style-type: none"> <li>• Must be Carbon fibre</li> <li>• Suitable for IMRT and SBRT/SRS, arc therapy</li> <li>• Must be able to support up to atleast 200kg patient weight</li> <li>• Must comply with IEC recommendations</li> </ul>			
<b>9.</b>	<b>Functional requirements</b>			
9.1.	The accelerator should deliver the following treatment techniques: <ul style="list-style-type: none"> <li>• Static and arc therapy for both x ray and electrons</li> <li>• IMRT: step and shoot, sliding window,</li> <li>• RapidArc/VMAT delivery</li> <li>• SBRT/SRT</li> </ul>			
<b>10.</b>	<b>X-ray beams</b>			

10.1.	<ul style="list-style-type: none"> <li>Nominal energies <ul style="list-style-type: none"> <li>6MV</li> <li>10MV</li> <li>15MV</li> </ul> </li> </ul> <p>Dose rate: atleast 80 to 1000 MU/min or higher Beam characteristics must comply with SAHPRA and IEC specifications</p>			
<b>11.</b>	<b>Electron beams</b>			
11.1.	<ul style="list-style-type: none"> <li>Four different energies equally space from 5 MeV to 21 Mev</li> <li>Dose rate: atleast 80 to 1000 Gy/min or higher</li> </ul>			
11.2.	<p>Applicators with field sizes</p> <ul style="list-style-type: none"> <li>6 cm x 6 cm</li> <li>10 cm x 10 cm</li> <li>15 cm x 15 cm</li> <li>20 cm x 20 cm</li> <li>25 cm x 25 cm</li> <li>Coded and interlocked removable end frames and applicator holder</li> <li>X-ray contamination in the electron beam must be specified by the supplier and must comply with the licensing condition</li> <li>Optional applicators to be quoted separately</li> </ul>			
<b>12.</b>	<b>Portal Imaging</b>			
12.1.	<ul style="list-style-type: none"> <li>Must be retractable and the detector must be based on amorphous silicon transistor technology</li> <li>Must be possible to capture DRR generated on the treatment planning system for comparison with portal image</li> <li>Specify the various software options with their features and cost differences if there are various versions</li> <li>Mechanical collision interlocks compatible to gantry and couch movement</li> <li>Field of view (specify maximum)</li> <li>Must include licence for portal dosimetry</li> </ul>			
<b>13.</b>	<b>Image guidance</b>			
13.1.	<ul style="list-style-type: none"> <li>Kv X-Ray based system with 1 or 2 XR sources</li> <li>Retractable X Ray tube and flat panel detector mounted on the gantry</li> <li>Cone beam CT reconstruction after full or partial rotation</li> <li>Must be able to match DRR to actual image and suggest corrections</li> <li>Must have green lasers to indicate isocentre</li> <li>Must have a back pointer</li> </ul>			
<b>14.</b>	<b>Control console</b>			



14.1.	<ul style="list-style-type: none"> <li>• Treatment prescription must be both manually entered or sent via network and IMPAC compliant record and verify system</li> <li>• Parameters must be displayed at the console and inside the room</li> </ul>			
<b>15.</b>	<b>Cost of ownership/risk</b>			
15.1.	<ul style="list-style-type: none"> <li>• The linac must be established with a documented history of reliability and must be approved and licensed by the Department of Health</li> <li>• No parts shall be second-hand or refurbished</li> <li>• The unit must carry a two-year warranty</li> <li>• Specify the cost of the next five year all-inclusive service contract</li> <li>• The company must have at least two trained linac technicians in their employment. The response time for a call out must not exceed 24 hours.</li> <li>• The uptime of the unit must be better than 98%. If it is less, time time will be added to the warranty period. A sliding scale penalty clause will be built into any service contract.</li> </ul>	SCC		
<b>16.</b>	<b>Training</b>			
16.1.	<ul style="list-style-type: none"> <li>• Off – site and On-site training must be given to:</li> <li>• Radiotherapists – complete training in the use of ALL features</li> <li>• Physicists – training in IMRT, SRS treatment planning, R&amp;V system, first line maintenance, physics and applicable service functions</li> <li>• A full set of manuals covering clinical, safety and dosimetric aspects as well as mechanical and electronic circuitry must be supplied.</li> </ul>			
<b>17.</b>	<b>Additional requirements</b>			
17.1.	<ul style="list-style-type: none"> <li>• The prospective suppliers must inspect the bunker and ensure that any structural changes required to meet shielding requirements are either part of the building upgrade or included in the cost. Specific attention must be given to the sliding door.</li> <li>• Specify the climate control and lighting requirements. Water chillers, compressed air and any other specialised auxiliary equipment, including voltage stabiliser, must be included in the purchase price. Prospective suppliers must ensure that the available space for such units is sufficient</li> <li>• The successful supplier will be required to remove and package the existing VARIAN LINAC for storage at a site to be designated by the hospital.</li> </ul>	GCC		

	<ul style="list-style-type: none"> <li>• The bidder should provide a chiller and air conditioners and maintain them for the duration of the contract.</li> <li>• The successful bidder must provide electrical support during load – shedding.</li> </ul>			
<b>18.</b>	<b>Accessories</b>			
18.1.	<ul style="list-style-type: none"> <li>• The successful bidder may be required to supply a phantom and associated software for acquisition of beam data in SSD and TPR modes. (Quote separately)</li> <li>• The successful bidder may be required to supply addition suitable phantom for patient specific QA verification of IMRT plans, RapidArc, and SRS plans. (Quote separately)</li> <li>• The successful bidder must install temperature and pressure gauges on the wall.</li> <li>• The successful bidder must supply plain parallel chamber</li> </ul>			
<b>19.</b>	<b>Software</b>			
19.1.	The successful bidder must supply and <b>SPECIFY</b> the latest version of software available and free updates for Treatment Planning, Record and Verify, Oncology Information System, and associated functions necessary for a paperless oncology department.			
<b>18.</b>	<b>Acceptance testing and commissioning</b>			
18.1.	An acceptance testing shall be conducted by the successful bidder upon installation of the accelerator. The terms of reference shall be supplied to the hospital in writing. The bidder should supply full support to the resident physicist on commissioning of the accelerator and they must provide an independent physicist check as per SAHPRA recommendations.			

## PRICING SCHEDULE

OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE

<b>ITEM 5: CLINICAL LINEAR ACCELERATOR</b> (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	R
<b>Year 4</b>	R
<b>Year 5</b>	R
<b>Year 6</b>	R
<b>Year 7</b>	R
<b>Year 8</b>	R
<b>Year 9</b>	R
<b>Year 10</b>	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b> (Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)	R

**NB: Bidder must attach detailed breakdown of the total bid price.**

## ITEM 6: DIGITAL PANORAMIC X-RAY (FLOOR MOUNTED)

FOL	DESCRIPTION	COMPLY/ NOT COMPLY	MANDA TORY	DETAILS OF OFFER
<b>1.</b>	<b>X-RAY GENERATOR</b>			
1.1.	Unit be capable of digital panoramic imaging of the mouth to include:			
1.1.1.	Sinus			
1.1.2.	Temporo Mandibular Joint			
1.1.3.	Whole Jaw			
1.2.	Unit be capable of digital cephalometric images			
1.3.	Tube output voltage be between 60kV and 90kV			
1.4.	Focal dimension of 0.5mm (Bidder to specify)			
1.5.	Voltage 220 – 240V, 50 – 60Hz			
1.6.	Patient positioning by Bite Block, Chin Rest, Chin Support for PAN			
1.7.	Unit must be floor mounted with height adjustment			
1.8.	Unit to be accessible to wheelchair patients			
1.9.	Have three laser positioning lights: Mid Sagital, Frankfurt and canine			
1.10.	Should have patient positioning system			
1.11.	Must be motorised up and down function			
1.12.	Have adjustable form of focal trough depending on jaw shape and size of patient			
1.13.	Have a software that is upgradable to other modalities			
1.14.	Must have the following programmes: standard panoramic, paediatric, automatic double TMJ, Sinus, lateral and PA cephalogram.			
<b>2</b>	<b>IMAGE PROCESSING</b>			
2.1.	Exposure time must be 10 - 18 seconds (Bidder to specify)			
2.2.	Software for processing all captured images			
2.3.	Compatible computer system (desktop) with 21 inch LED Monitor			
2.4.	Keyboard and mouse with a cord			
2.5.	DICOM System compatible: both for storage and printing			
2.6.	Should have automatic compensation for the cervical vertebra shadow			
2.7.	Should have a test mode that disables x – ray radiation during operation			
2.8.	Imaging geometry should eliminate artifacts			
2.9.	Export to PACS			
2.10.	Trouble shooting and error codes be displayed and included in the manual			
2.11.	Must allow image manipulation			
2.12.	Must have printer			
<b>3.</b>	<b>GENERAL REQUIREMENTS &amp; SAFETY PRECAUTIONS</b>			

3.1.	Licencing and all acceptance certificates			
3.2.	Provide phantoms for Quality Assurances and Quality Controls			
3.3.	Softwares for quality assurance and quality control tests			
3.4.	Indicate radiation reduction methods			
3.5.	Supply 1Xadult lead apron and 1X paediatric lead apron and thyroid collar			
3.6.	Supply UPS or have voltage stabilizer			
3.7.	3 Pixel matrix and 21 inch			
3.8.	Bidders must provide a minimum of 2 qualified technicians. <b>NB</b> Certified copies of qualifications (or equivalent) training must be submitted with this bid.		#	
3.9.	The equipment quoted must be protected against electromagnetic interference.		#	
3.10.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
3.11.	Must be the latest model - state date of initial manufacture of the model range offered.			
3.12.	Bidders must state the lifespan of the equipment offered			
3.13.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
3.14.	No part shall be second hand or refurbished.			

## PRICING SCHEDULE

**OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE**

<b>ITEM 6: DIGITAL PANORAMIC X-RAY (FLOOR MOUNTED)</b>  (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	

Year 1	Warranty
Year 2	Warranty
Year 3	R
Year 4	R
Year 5	R
Year 6	R
Year 7	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT(Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)</b>	R

**NB: Bidder must attach detailed breakdown of the total bid price.**

**ITEM 7: DIGITAL PANORAMIC X-RAY (WALL MOUNTED)**

<b>FOL</b>	<b>DESCRIPTION</b>	<b>COMPLY/ NOT COMPLY</b>	<b>MANDAT ORY</b>	<b>DETAILS OF OFFER</b>
<b>1.</b>	<b>X-RAY GENERATOR</b>			
1.1.	Unit be capable of digital panoramic imaging of the mouth to include:			
1.1.1.	Sinus			
1.1.2.	Temporo Mandibular Joint			
1.1.3.	Whole Jaw			
1.2.	Unit be capable of digital cephalometric images			
1.3.	Tube output voltage be between 60kV and 90kV			
1.4.	Focal dimension of 0.5mm (Bidder to specify)			
1.5.	Voltage 220 – 240V, 50 – 60Hz			
1.6.	Patient positioning by Bite Block, Chin Rest, Chin Support for PAN			
1.7.	Unit must be wall mounted with height adjustment			
1.8.	Unit to be accessible to wheelchair patients			
1.9.	Have three laser positioning lights: Mid Sagital, Frankfurt and canine			
1.10.	Should have patient positioning system			
1.11.	Must be motorised up and down function			
1.12.	Have adjustable form of focal trough depending on jaw shape and size of patient			
1.13.	Have a software that is upgradable to other modalities			
1.14.	Must have the following programmes: standard panoramic, paediatric, automatic double TMJ, Sinus, lateral and PA cephalogram.			

<b>2</b>	<b>IMAGE PROCESSING</b>			
2.1.	Exposure time must be 10 - 18 seconds (Bidder to specify)			
2.2.	Software for processing all captured images			
2.3.	Compatible computer system (desktop) with 21 inch LED Monitor			
2.4.	Keyboard and mouse with a cord			
2.5.	DICOM System compatible: both for storage and printing			
2.6.	Should have automatic compensation for the cervical vertebra shadow			
2.7.	Should have a test mode that disables x – ray radiation during operation			
2.8.	Imaging geometry should eliminate artifacts			
2.9.	Export to PACS			
2.10.	Trouble shooting and error codes be displayed and included in the manual			
2.11.	Must allow image manipulation			
2.12.	Must have printer			
<b>3.</b>	<b>GENERAL REQUIREMENTS &amp; SAFETY PRECAUTIONS</b>			
3.1.	Licensing and all acceptance certificates			
3.2.	Provide phantoms for Quality Assurances and Quality Controls			
3.3.	Softwares for quality assurance and quality control tests			
3.4.	Indicate radiation reduction methods			
3.5.	Supply 1X adult lead apron and 1X paediatric lead apron and thyroid collar			
3.6.	Supply UPS or have voltage stabilizer			
3.7.	3 Pixel matrix and 21 inch			
3.8.	Bidders must provide a minimum of 2 qualified technicians. <b>NB</b> Certified copies of qualifications (or equivalent) training must be submitted with this bid.		#	
3.9.	The equipment quoted must be protected against electromagnetic interference.		#	
3.10.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
3.11.	Must be the latest model - state date of initial manufacture of the model range offered.			
3.12.	Bidders must state the lifespan of the equipment offered			
3.13.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
3.14.	No part shall be second hand or refurbished.			

## PRICING SCHEDULE

OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE

<b>ITEM 7: DIGITAL PANORAMIC X-RAY (WALL MOUNTED)</b>  (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	R
<b>Year 4</b>	R
<b>Year 5</b>	R
<b>Year 6</b>	R
<b>Year 7</b>	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b>  (Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)	R

**NB: Bidder must attach detailed breakdown of the total bid price.**



# **ITEM 8: DIGITAL INTRA ORAL X – RAY WITH RVG**

<b>FOL</b>	<b>DESCRIPTION</b>	<b>COMPLY/ NOT COMPLY</b>	<b>MANDAT ORY</b>	<b>DETAILS OF OFFER</b>
<b>1.</b>	<b>X-RAY GENERATOR</b>			
1.1.	Wall mounted Xray unit			
1.2.	Scissor arm			
1.3.	Operation automated and conventional			
1.4.	Microcontroller based digital timer			
1.5.	Low radiation, leakage be <1% of stated guidelines			
1.6.	Rotating arm be durable and easy to use			
1.7.	X-ray Tube head must be between 50kV to 70kV			
1.8.	X-Ray Tube filtration of 1.5mm			
1.9.	Focal Point of 0.2 to 0.8mm and focal skin distance of 20cm			
1.10.	Collimator with cone, built in filter			
1.11.	Voltage of 220 to 240 VAC			
1.12.	Control Timer Unit:			
1.12.1.	With exposure time indicator			
1.12.2.	With emission control light			
<b>2</b>	<b>IMAGE PROCESSING</b>			
2.1.	Sensor size be compatible to both adults and paediatrics			
2.2.	Software upgradable and Compatible			
2.3.	Compatible computer system (desktop) with 21 inch LED Monitor			
2.4.	Capable of image storage			
2.5.	Printer-DICOM compatibility			
2.6.	Exposure time: 0.2 seconds			
2.7.	Export to PACS			
<b>3.</b>	<b>GENERAL REQUIREMENTS &amp; SAFETY PRECAUTIONS</b>			
3.1.	Licencing and all acceptance certificates			
3.2.	Provide phantoms for Quality Assurances and Quality Controls			
3.3.	Indicate radiation reduction methods			
3.4.	Supply 1Xadult lead apron and 1X paediatric lead apron and thyroid collar			
3.5.	Supply UPS or have voltage stabilizer			
3.6.	Bidders must provide a minimum of 2 qualified technicians. <b>NB</b> Certified copies of qualifications (or equivalent) training must be submitted with this bid.		#	
3.7.	The equipment quoted must be protected against electromagnetic interference.		#	
3.8.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			

3.9.	Must be the latest model - state date of initial manufacture of the model range offered.			
3.10.	Bidders must state the lifespan of the equipment offered			
3.11.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
3.12.	No part shall be second hand or refurbished.			

## **PRICING SCHEDULE**

**OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE**

<b>ITEM 8: DIGITAL INTRA ORAL X – RAY WITH RVG</b> <b>(All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)</b>	<b>R</b>
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	<b>R</b>
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	<b>R</b>
<b>Year 4</b>	<b>R</b>
<b>Year 5</b>	<b>R</b>
<b>Year 6</b>	<b>R</b>
<b>Year 7</b>	<b>R</b>
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b> <b>(Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)</b>	<b>R</b>

**NB: Bidder must attach detailed breakdown of the total bid price.**

# **ITEM 9: DIGITAL PAN/CEPH X-RAY UNIT (FLOOR MOUNTED)**

<b>FOL</b>	<b>DESCRIPTION</b>	<b>COMPLY/ NOT COMPLY</b>	<b>MANDAT ORY</b>	<b>DETAILS OF OFFER</b>
<b>1.</b>	<b>X-RAY GENERATOR</b>			
1.1.	Unit be capable of digital panoramic imaging of the mouth to include:			
1.1.1.	Sinus			
1.1.2.	Temporo Mandibular Joint			
1.1.3.	Whole Jaw			
1.2.	Unit be capable of digital cephalometric images			
1.3.	2 Sensors to allow for both PAN and CEPH modes			
1.4.	Should have computerized automatic cephalometric system			
1.5.	Large LED touchscreen			
1.6.	Cater for adult and paediatric patients			
1.7.	Tube output voltage be between 60kV and 90kV (Bidder to specify)			
1.8.	Focal dimension of 0.5mm (Bidder to specify)			
1.9.	Current rating of 15mA (Bidder to specify)			
1.10.	Easy positioning for Ceph: ear rods, nasal			
1.11.	Patient positioning by Bite Block, Chin Rest, Chin Support for PAN			
1.12.	Range of movement (Bidder to specify)			
1.13.	Unit must be floor mounted with height adjustment			
1.14.	Unit to be accessible to wheelchair patients			
1.15.	Have three laser positioning lights: Mid Sagital, Frankfurt and canine			
1.16.	Should have functionally designed easy-to-use head positioner, including nasal positioner for CEPH			
1.17.	Have adjustable form of focal trough depending on jaw shape and size of patient			
1.18.	Light beams be used for positioning			
1.19.	Use a line voltage of 220VAC TO 240VAC			
<b>2</b>	<b>IMAGE PROCESSING</b>			
2.1.	Exposure time be maximum 15 seconds (Bidder to specify)			
2.2.	Software for processing all captured images: PAN & CEPH			
2.3.	Compatible computer system (desktop) with 21 inch LED Monitor			
2.4.	Should have exposure counters for both PAN and CEPH and total number of images			
2.5.	Keyboard and mouse with a cord			
2.6.	DICOM System compatible: both for storage and printing			
2.7.	Should have automatic compensation for the cervical vertebra shadow			
2.8.	Should have a test mode that disables x – ray radiation during operation			

2.9.	Imaging geometry should eliminate artifacts			
2.10.	Export to PACS			
<b>3.</b>	<b>GENERAL REQUIREMENTS &amp; SAFETY PRECAUTIONS</b>			
3.1.	Licencing and all acceptance certificates			
3.2.	Provide phantoms for Quality Assurances and Quality Controls			
3.3.	Indicate radiation reduction methods			
3.4.	Supply 1Xadult lead apron and 1X paediatric lead apron and thyroid collar			
3.5.	Supply UPS or have voltage stabilizer			
3.6.	3 Pixel matrix and 21 inch			
3.7.	Bidders must provide a minimum of 2 qualified technicians. <b>NB</b> Certified copies of qualifications (or equivalent) training must be submitted with this bid.		#	
3.8.	The equipment quoted must be protected against electromagnetic interference.		#	
3.9.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
3.10.	Must be the latest model - state date of initial manufacture of the model range offered.			
3.11.	Bidders must state the lifespan of the equipment offered			
3.12.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
3.13.	No part shall be second hand or refurbished.			

## PRICING SCHEDULE

**OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE**

<b>ITEM 9: DIGITAL PAN/CEPH X-RAY UNIT (FLOOR MOUNTED)</b> <b>(All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)</b>	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R

<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	<b>R</b>
<b>Year 4</b>	<b>R</b>
<b>Year 5</b>	<b>R</b>
<b>Year 6</b>	<b>R</b>
<b>Year 7</b>	<b>R</b>
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b> <b>(Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)</b>	<b>R</b>

**NB: Bidder must attach detailed breakdown of the total bid price.**

**ITEM 10: DIGITAL PAN/CEPH X-RAY UNIT (WALL MOUNTED)**

<b>FOL</b>	<b>DESCRIPTION</b>	<b>COMPLY/ NOT COMPLY</b>	<b>MANDATORY</b>	<b>DETAILS OF OFFER</b>
<b>1.</b>	<b>X-RAY GENERATOR</b>			
1.1.	Unit be capable of digital panoramic imaging of the mouth to include:			
1.1.1.	Sinus			
1.1.2.	Temporo Mandibular Joint			
1.1.3.	Whole Jaw			
1.2.	Unit be capable of digital cephalometric images			
1.3.	2 Sensors to allow for both PAN and CEPH modes			
1.4.	Should have computerized automatic cephalometric system			
1.5.	Large LED touchscreen			
1.6.	Cater for adult and paediatric patients			
1.7.	Tube output voltage be between 60kV and 90kV (Bidder to specify)			
1.8.	Focal dimension of 0.5mm (Bidder to specify)			
1.9.	Current rating of 15mA (Bidder to specify)			
1.10.	Easy positioning for Ceph: ear rods, nasal			
1.11.	Patient positioning by Bite Block, Chin Rest, Chin Support for PAN			
1.12.	Range of movement (Bidder to specify)			
1.13.	Unit must be wall mounted with height adjustment			
1.14.	Unit to be accessible to wheelchair patients			

1.15.	Have three laser positioning lights: Mid Sagital, Frankfurt and canine			
1.16.	Should have functionally designed easy-to-use head positioner, including nasal positioner for CEPH			
1.17.	Have adjustable form of focal trough depending on jaw shape and size of patient			
1.18.	Light beams be used for positioning			
1.19.	Use a line voltage of 220VAC TO 240VAC			
<b>2</b>	<b>IMAGE PROCESSING</b>			
2.1.	Exposure time be maximum 15 seconds (Bidder to specify)			
2.2.	Software for processing all captured images: PAN & CEPH			
2.3.	Compatible computer system (desktop) with 21 inch LED Monitor			
2.4.	Should have exposure counters for both PAN and CEPh and total number of images			
2.5.	Keyboard and mouse with a cord			
2.6.	DICOM System compatible: both for storage and printing			
2.7.	Should have automatic compensation for the cervical vertebra shadow			
2.8.	Should have a test mode that disables x – ray radiation during operation			
2.9.	Imaging geometry should eliminate artifacts			
2.10.	Export to PACS			
<b>3.</b>	<b>GENERAL REQUIREMENTS &amp; SAFETY PRECAUTIONS</b>			
3.1.	Licencing and all acceptance certificates			
3.2.	Provide phantoms for Quality Assurances and Quality Controls			
3.3.	Indicate radiation reduction methods			
3.4.	Supply 1Xadult lead apron and 1X paediatric lead apron and thyroid collar			
3.5.	Supply UPS or have voltage stabilizer			
3.6.	3 Pixel matrix and 21 inch			
3.7.	Bidders must provide a minimum of 2 qualified technicians. <b>NB</b> Certified copies of qualifications (or equivalent) training must be submitted with this bid.		#	
3.8.	The equipment quoted must be protected against electromagnetic interference.		#	
3.9.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
3.10.	Must be the latest model - state date of initial manufacture of the model range offered.			
3.11.	Bidders must state the lifespan of the equipment offered			
3.12.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate		#	

	operation. The cost of the starter pack must be included in the bid price.			
3.13.	No part shall be second hand or refurbished.			

## **PRICING SCHEDULE**

**OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE**

<b>ITEM 10: DIGITAL PAN/CEPH X-RAY UNIT (WALL MOUNTED)</b> (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	R
<b>Year 4</b>	R
<b>Year 5</b>	R
<b>Year 6</b>	R
<b>Year 7</b>	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b> (Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)	R

**NB: Bidder must attach detailed breakdown of the total bid price.**

## ITEM 11: MOBILE DIGITAL X – RAY UNITS 1 FLAT DETECTOR

FOL	DESCRIPTION	COMPLY/ NOT COMPLY	MANDA TORY	DETAILS OF OFFER
<b>1.</b>	<b>MOBILE UNIT</b>			
1.1.	The unit must be a light weight compact system and easy to manoeuvre.			
1.1.1.	The unit must have a built- in battery, that is fully operational for minimum 2 hours after being charged.		#	
1.1.2.	The unit must have a wheel lock function.		#	
1.1.3.	The unit must have electro-magnetic locks for tube and collimators		#	
1.2.	Tube rotation must be minimum 180 degrees around the vertical axis.			
1.3.	A manual collimator with +90 degrees and –90 degrees swivel must be included.			
1.4.	“All free” lock control buttons on the collimator handle must be available for fast positioning, including the Film Focus Distance (FFD) setting, tube rotation, extension and contraction of the cross-arm.			
1.5.	The unit's focus to floor distance should at least be 1500 mm.			
1.6.	The unit must easily pass through a standard doorway (at least 640 mm).			
1.7.	The unit must have a lead apron hanger.			
1.8.	The unit offered must be able to make sharp spot turning.			
1.9.	Large sturdy wheels should be incorporated.			
1.10.	The unit should have a tube storage compartment in front of the control panel for safe transport.		#	
<b>2.</b>	<b>DIGITAL MOBILE FLAT PANEL DETECTOR WITH IMAGE PROCESSING</b>			
2.1.	The detectors must be of the flat panel type and wireless.			
2.2.	Flat panel detectors must be provided (sizes at least 35x43cm for adults)			
2.3.	Bidder to indicate Detectors material.			
2.4.	The pixel size (matrix size) must be not > 150µm			
2.5.	The acquisition depth must at least be 12 bit.			
2.6.	Weight of the detector panel must not be more than 5kg including the battery.			
2.7.	The detectors must be supplied with two batteries.			
2.8.	The unit must have detector storage compartments for various sizes			
2.9.	The charging station for the batteries must be supplied, with an electrical surge protection.			



2.10	Detector should be able to withstand a supine patient weight of atleast 150kg			
2.11	Detector should be fluid resistant			
<b>3.</b>	<b>DESCRIPTION OF THE SCATTERED RADIATION GRID:</b>			
3.1.	State Type			
3.2.	State Material			
3.3.	State Focus			
3.4.	Reference image to be displayed on the mobile monitor within at least 3 seconds.			
3.5.	Storage of not less than 2,000 images must be possible.			
3.6.	DICOM format transfer to an image server and/or laser printer must be possible.			
3.7.	After exposure, various types of processing must be possible to obtain the required image information selectively.			
3.8.	A grid for the wireless detectors must be provided			
<b>4.</b>	<b>X-RAY GENERATOR (MICRO-PROCESSOR CONTROLLED HIGH FREQUENCY)</b>			
4.1.	The nominal kilowatt output rating may not be less than 30 kW.			
4.2.	The system must be single phase (230 V) system, with an electrical surge protector.			
4.3.	The unit should have general anatomical programming facilities.			
4.4.	Automatic overload protection must be standard on the generator with error code readout.			
4.5.	Automatic mains compensation must be standard on the system (State the tolerance of mains power fluctuation permissible on the system).			
4.6.	Minimum exposure time to be specified.			
4.7.	The kV range must be from 40 kV (minimum) to at least 150 kV			
4.8.	At 60 kV the unit must be able to give at least 320 mA.			
4.9.	The generator must have a high speed starter unit to drive the x-ray tube to at least 3000 rpm.			
<b>5.</b>	<b>X-RAY TUBE AND CABLES</b>			
5.1.	The unit must have high speed anode rotation with dual focus x-ray tube.			
5.2.	The anode rotation speed must be at least 3000 rpm.			
5.3.	The unit must have focus sizes of at least 0,6 mm (small) and 1,2 mm (large).			
5.4.	A full size multileaf collimator unit with integrated centering lamp must be offered. <b>Double-slot collimator units are not acceptable.</b>			
5.5.	A rotation flange must be provided with the unit for full rotation of the collimator on the x-ray tube.			

5.7.	Minimum anode heat storage capacity must be at least 100 kHU.			
<b>6.</b>	<b>CONTROL CONSOLE</b>			
6.1.	The control console must have the following patient data entering functions:			
6.2.	Automatically retrieve patient data via LAN and Wireless network			
6.3.	Manual patient registration must be possible			
6.4.	Touch panel LCD monitor or latest technology.			
6.5.	Monitor size must be at least 15 inch			
6.6.	Image processing must be possible			
6.7.	The Menu Control should be able to do the following:			
6.7.1.	Organ program selection			
6.7.2.	Window position/width			
6.7.3.	Horizontal and vertical image mirroring			
6.7.4.	Image rotation			
6.7.5.	Antero-Posterior/ Postero-Anterior views with L & R markers			
6.7.6.	Configurable text annotation			
6.7.7.	Filter selection			
6.7.8.	Image zoom			
6.8.	Must be able to print different layouts of selected images.			
6.9.	Edge enhancement and noise suppression			
6.10.	Quality management program including reject analysis			
<b>7.</b>	<b>GENERAL REQUIREMENTS &amp; SAFETY PRECAUTIONS</b>			
7.1.	Licencing and all acceptance certificates			
7.2.	Provide phantoms for Quality Assurances and Quality Controls			
7.3.	Indicate radiation reduction methods			
7.4.	Supply 1Xadult lead apron and 1X paediatric lead apron and thyroid collar			
7.5.	Supply UPS or have voltage stabilizer			
7.6.	3 Pixel matrix and 21 inch			
7.7.	Bidders must provide a minimum of 2 qualified technicians. <b>NB</b> Certified copies of qualifications (or equivalent) training must be submitted with this bid.		#	
7.8.	The equipment quoted must be protected against electromagnetic interference.		#	
7.9.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
7.10.	Must be the latest model - state date of initial manufacture of the model range offered.			

7.12.	Bidders must state the lifespan of the equipment offered			
7.13.	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
7.14.	No part shall be second hand or refurbished.			

## PRICING SCHEDULE

**OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE**

<b>ITEM 11: ITEM 11: MOBILE DIGITAL X – RAY UNITS 1 FLAT DETECTOR</b> (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	R
<b>Year 4</b>	R
<b>Year 5</b>	R
<b>Year 6</b>	R
<b>Year 7</b>	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b> (Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)	R

**NB: Bidder must attach detailed breakdown of the total bid price.**

## ITEM 12: MOBILE DIGITAL X – RAY UNITS 2 FLAT PANEL DETECTORS

FOL	DESCRIPTION	COMPLY/ NOT COMPLY	MANDA TORY	DETAILS OF OFFER
<b>1.</b>	<b>MOBILE UNIT</b>			
1.1.	The unit must be a light weight compact system and easy to manoeuvre.			
1.1.1.	The unit must have a built- in battery, that is fully operational for minimum 2 hours after being charged.		#	
1.1.2.	The unit must have a wheel lock function.		#	
1.1.3.	The unit must have electro-magnetic locks for tube and collimators		#	
1.2.	Tube rotation must be minimum 180 degrees around the vertical axis.			
1.3.	A manual collimator with +90 degrees and –90 degrees swivel must be included.			
1.4.	“All free” lock control buttons on the collimator handle must be available for fast positioning, including the Film Focus Distance (FFD) setting, tube rotation, extension and contraction of the cross-arm.			
1.5.	The unit's focus to floor distance should at least be 1500 mm.			
1.6.	The unit must easily pass through a standard doorway (at least 640 mm).			
1.7.	The unit must have a lead apron hanger.			
1.8.	The unit offered must be able to make sharp spot turning.			
1.9.	Large sturdy wheels should be incorporated.			
1.10.	The unit should have a tube storage compartment in front of the control panel for safe transport.		#	
<b>2.</b>	<b>DIGITAL MOBILE FLAT PANEL DETECTOR WITH IMAGE PROCESSING</b>			
2.1.	The detectors must be of the flat panel type and wireless.			
2.2.	Two Flat panel detectors must be provided (sizes at least 35x43cm for adults) & 24x30cm for children)			
2.3.	Bidder to indicate Detectors material.			
2.4.	The pixel size (matrix size) must be not > 150µm			
2.5.	The acquisition depth must at least be 12 bit.			
2.6.	Weight of the detector panel must not be more than 5kg including the battery.			
2.7.	The detectors must be supplied with two batteries.			
2.8.	The unit must have detector storage compartments for various sizes			
2.9.	The charging station for the batteries must be supplied, with an electrical surge protection.			
2.10	Detector should be able to withstand a supine patient weight of atleast 150kg			

2.11	Detector should be fluid resistant			
<b>3.</b>	<b>DESCRIPTION OF THE SCATTERED RADIATION GRID:</b>			
3.1.	State Type			
3.2.	State Material			
3.3.	State Focus			
3.4.	Reference image to be displayed on the mobile monitor within at least 3 seconds.			
3.5.	Storage of not less than 2,000 images must be possible.			
3.6.	DICOM format transfer to an image server and/or laser printer must be possible.			
3.7.	After exposure, various types of processing must be possible to obtain the required image information selectively.			
3.8.	A grid for the wireless detectors must be provided			
<b>4.</b>	<b>X-RAY GENERATOR (MICRO-PROCESSOR CONTROLLED HIGH FREQUENCY)</b>			
4.1.	The nominal kilowatt output rating may not be less than 30 kW.			
4.2.	The system must be single phase (230 V) system, with an electrical surge protector.			
4.3.	The unit should have general anatomical programming facilities.			
4.4.	Automatic overload protection must be standard on the generator with error code readout.			
4.5.	Automatic mains compensation must be standard on the system (State the tolerance of mains power fluctuation permissible on the system).			
4.6.	Minimum exposure time to be specified.			
4.7.	The kV range must be from 40 kV (minimum) to at least 150 kV			
4.8.	At 60 kV the unit must be able to give at least 320 mA.			
4.9.	The generator must have a high speed starter unit to drive the x-ray tube to at least 3000 rpm.			
<b>5.</b>	<b>X-RAY TUBE AND CABLES</b>			
5.1.	The unit must have high speed anode rotation with dual focus x-ray tube.			
5.2.	The anode rotation speed must be at least 3000 rpm.			
5.3.	The unit must have focus sizes of at least 0,6 mm (small) and 1,2 mm (large).			
5.4.	A full size multileaf collimator unit with integrated centering lamp must be offered. <b>Double-slot collimator units are not acceptable.</b>			
5.5.	A rotation flange must be provided with the unit for full rotation of the collimator on the x-ray tube.			
5.7.	Minimum anode heat storage capacity must be at least 100 kHU.			

<b>6.</b>	<b>CONTROL CONSOLE</b>			
6.1.	The control console must have the following patient data entering functions:			
6.2.	Automatically retrieve patient data via LAN and Wireless network			
6.3.	Manual patient registration must be possible			
6.4.	Touch panel LCD monitor or latest technology.			
6.5.	Monitor size must be at least 15 inch			
6.6.	Image processing must be possible			
6.7.	The Menu Control should be able to do the following:			
6.7.1.	Organ program selection			
6.7.2.	Window position/width			
6.7.3.	Horizontal and vertical image mirroring			
6.7.4.	Image rotation			
6.7.5.	Antero-Posterior/ Postero-Anterior views with L & R markers			
6.7.6.	Configurable text annotation			
6.7.7.	Filter selection			
6.7.8.	Image zoom			
6.8.	Must be able to print different layouts of selected images.			
6.9.	Edge enhancement and noise suppression			
6.10.	Quality management program including reject analysis			
<b>7.</b>	<b>GENERAL REQUIREMENTS &amp; SAFETY PRECAUTIONS</b>			
7.1.	Licencing and all acceptance certificates			
7.2.	Provide phantoms for Quality Assurances and Quality Controls			
7.3.	Indicate radiation reduction methods			
7.4.	Supply 1Xadult lead apron and 1X paediatric lead apron and thyroid collar			
7.5.	Supply UPS or have voltage stabilizer			
7.6.	3 Pixel matrix and 21 inch			
7.7.	Bidders must provide a minimum of 2 qualified technicians. <b>NB</b> Certified copies of qualifications (or equivalent) training must be submitted with this bid.		#	
7.8.	The equipment quoted must be protected against electromagnetic interference.		#	
7.9.	The bidder must be prepared to provide a unit for technical evaluation and clinical assessment on request.			
7.10.	Must be the latest model - state date of initial manufacture of the model range offered.			
7.11.	Bidders must state the lifespan of the equipment offered			

7.12	A starter pack of all essential accessories must be supplied so that the unit can be put into immediate operation. The cost of the starter pack must be included in the bid price.		#	
7.13.	No part shall be second hand or refurbished.			

## PRICING SCHEDULE

OVERHEADS INCLUDING ESSENTIAL ACCESSORIES MUST BE INCLUSIVE IN THE QUOTED PRICE

<b>ITEM 12: MOBILE DIGITAL X – RAY UNITS 2 FLAT PANEL DETECTORS</b> (All Inclusive price including de-installation, installation, alterations, air-conditioning, monitoring equipment, power supply, laser camera, training and all other standard items and essential accessories listed in specifications. (Attach a breakdown)	R
<b>OPTIONAL ACCESSORIES:(ATTACH ADDENDUM)</b>	R
<b>ALL-INCLUSIVE FULL COMPREHENSIVE PREVENTATIVE MAINTENANCE AGREEMENT</b>	
<b>Year 1</b>	<b>Warranty</b>
<b>Year 2</b>	<b>Warranty</b>
<b>Year 3</b>	R
<b>Year 4</b>	R
<b>Year 5</b>	R
<b>Year 6</b>	R
<b>Year 7</b>	R
<b>TOTAL BID PRICE INCLUSIVE OF VAT</b> (Equipment, Essential Accessories, Optional accessories and All Inclusive Full Comprehensive Maintenance Plan)	R

NB: Bidder must attach detailed breakdown of the total bid price.

### 13. BRIEFING SESSION / SITE VISIT

13.1. There will be no briefing session for this bid but **mandatory site visit**.

#### COMPULSORY SITE VISIT WILL BE HELD AS FOLLOWS:

NO	VENUE	DATE	TIME
1.	ST RITAS HOSPITAL	14 Nov 2022	09h30
2.	MANKWENG HOSPITAL	15 Nov 2022	09h00
3.	PIETERSBURG HOSPITAL		11h00
4.	MOKOPANE HOSPITAL	16 Nov 2022	9h30
5.	PHILADELPHIA HOSPITAL	22 Nov 2022	10h00
6.	TSHILIDZINI HOSPITAL	23 Nov 2022	10h00
7.	LETABA HOSPITAL	24 Nov 2022	10h00

### 14. ENQUIRIES

All enquiries regarding the bid may be directed to the following:

Physical Address	Technical Enquiries	Bidding Process
Department of Health Fidel Castro Ruz House 18 College Street Polokwane 0699	Dr F Sithole 082 407 8317  Ms S Stander 015 293 6650 / 082 772 2442	Ms T.O Simango (015) 293 6352  Ms Motene N.M (015) 293 6350



### **ANNEXURE A: PORTFOLIO OF CURRENT AND COMPLETED CONTRACTS**

The bidder must furnish a list of the following particulars of past and current experience of similar services in the provision of project management and implementation unit. The bidder must in addition attach ***proof of references e.g. previous contract***).

FOL	CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL	CONTRACT NUMBER AND DESCRIPTION OF SERVICE	PLACE (TOWN)	CONTRACT START DATE Day, Month & Year	CONTRACT END DATE Day, Month & Year	CONTRACT AMOUNT/ VALUE OF CONTRACT (R )
1	Name of Client					
	Contact Person					
	Tel					
	eMail					
2	Name of Client					
	Contact Person					
	Tel					
	eMail					

<b>FOL</b>	<b>CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL</b>	<b>CONTRACT NUMBER AND DESCRIPTION OF SERVICE</b>	<b>PLACE (TOWN)</b>	<b>CONTRACT START DATE Day, Month &amp; Year</b>	<b>CONTRACT END DATE Day, Month &amp; Year</b>	<b>CONTRACT AMOUNT/ VALUE OF CONTRACT (R )</b>
<b>3</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>4</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>5</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					

<b>FOL</b>	<b>CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL</b>	<b>CONTRACT NUMBER AND DESCRIPTION OF SERVICE</b>	<b>PLACE (TOWN)</b>	<b>CONTRACT START DATE Day, Month &amp; Year</b>	<b>CONTRACT END DATE Day, Month &amp; Year</b>	<b>CONTRACT AMOUNT/ VALUE OF CONTRACT (R )</b>
	<b>Email</b>					
<b>6</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>Email</b>					
<b>7</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>8</b>	<b>Name of Client</b>					

<b>FOL</b>	<b>CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL</b>	<b>CONTRACT NUMBER AND DESCRIPTION OF SERVICE</b>	<b>PLACE (TOWN)</b>	<b>CONTRACT START DATE Day, Month &amp; Year</b>	<b>CONTRACT END DATE Day, Month &amp; Year</b>	<b>CONTRACT AMOUNT/ VALUE OF CONTRACT (R )</b>
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>9</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>10</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					

<b>FOL</b>	<b>CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL</b>	<b>CONTRACT NUMBER AND DESCRIPTION OF SERVICE</b>	<b>PLACE (TOWN)</b>	<b>CONTRACT START DATE Day, Month &amp; Year</b>	<b>CONTRACT END DATE Day, Month &amp; Year</b>	<b>CONTRACT AMOUNT/ VALUE OF CONTRACT (R )</b>
<b>11</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>12</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>13</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					

<b>FOL</b>	<b>CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL</b>	<b>CONTRACT NUMBER AND DESCRIPTION OF SERVICE</b>	<b>PLACE (TOWN)</b>	<b>CONTRACT START DATE Day, Month &amp; Year</b>	<b>CONTRACT END DATE Day, Month &amp; Year</b>	<b>CONTRACT AMOUNT/ VALUE OF CONTRACT (R )</b>
	eMail					
<b>14</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>15</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>16</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					

<b>FOL</b>	<b>CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL</b>	<b>CONTRACT NUMBER AND DESCRIPTION OF SERVICE</b>	<b>PLACE (TOWN)</b>	<b>CONTRACT START DATE Day, Month &amp; Year</b>	<b>CONTRACT END DATE Day, Month &amp; Year</b>	<b>CONTRACT AMOUNT/ VALUE OF CONTRACT (R )</b>
	<b>Tel</b>					
	<b>eMail</b>					
<b>17</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>18</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>19</b>	<b>Name of Client</b>					

<b>FOL</b>	<b>CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL</b>	<b>CONTRACT NUMBER AND DESCRIPTION OF SERVICE</b>	<b>PLACE (TOWN)</b>	<b>CONTRACT START DATE Day, Month &amp; Year</b>	<b>CONTRACT END DATE Day, Month &amp; Year</b>	<b>CONTRACT AMOUNT/ VALUE OF CONTRACT (R )</b>
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>20</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					
<b>21</b>	<b>Name of Client</b>					
	<b>Contact Person</b>					
	<b>Tel</b>					
	<b>eMail</b>					



<b>FOL</b>	<b>CLIENT NAME, CONTACT PERSON, CONTACT NUMBER AND EMAIL</b>	<b>CONTRACT NUMBER AND DESCRIPTION OF SERVICE</b>	<b>PLACE (TOWN)</b>	<b>CONTRACT START DATE Day, Month &amp; Year</b>	<b>CONTRACT END DATE Day, Month &amp; Year</b>	<b>CONTRACT AMOUNT/ VALUE OF CONTRACT (R )</b>

