

OPEN TENDER

Tender Document

For

Supply, Installation, Testing and Commissioning of Generator at KEMSA Embakasi Warehouse

Invitation for Tender (IFT) Number:

KEMSA-ONT13-2021/2022

Tender Closing date: Tuesday 1st March, 2022

Time: 10.00 AM

Table of Contents

<u>Header</u>	Description	<u>Page</u>
Section A	: Invitation to Tender	3
Section B	: Instructions To Tenderers	4
Section C	: General Information	17
Section D	: General Conditions of Contract	29
Section E	: Special Conditions of Contract	33
Section F	: Tender form and Price Schedules	38
Section G	: Sample Tender Security form	41
Section H	: Contract form	45
Section I	: Performance Security form	47
Section J	: Declaration of Undertaking	49
Section K	: Confidential Business Questionnaire	50
Section L	: Evaluation Criteria	63

Date: 16th February, 2022

Invitation for Tenders (IFT)

Tender Reg. No. KEMSA-ONT13-2021/2022

For <u>Supply, Installation, Testing and Commissioning of Generator at KEMSA Embakasi</u> Warehouse

The Kenya Medical Supplies Authority (KEMSA) is a State Corporation established with the mandate to procure, warehouse and distribute medical commodities to all public health facilities in Kenya. KEMSA now invites sealed bids from eligible bidders for Supply, Installation, Testing and Commissioning of Generator at KEMSA Embakasi Warehouse.

- 1. Bidding will be conducted through the procedures specified in the Public Procurement and Asset Disposal Act (PPADA) 2015 and restricted to invited bidders.
- 2. You are hereby invited to submit a bid for Supply, Installation, Testing and Commissioning of Generator at KEMSA Embakasi Warehouse.
- 3. Completed serialized/paginated bidding documents one original and a copy in plain sealed envelopes clearly marked on top with the Tender Number and Description and must be addressed to below:

Ag. Chief Executive Officer Kenya Medical Supplies Authority 13 Commercial Street, Industrial Area P. O. Box 47715 Nairobi, Kenya

Tel: 254 20 3922000/537670/1/2/3

Email: procure@kemsa.co.ke

- 4. The bid document should be deposited in the Tender Box No. 1 marked GOK/World Bank at the Reception area on the Ground Floor KEMSA's Commercial Street Office in Nairobi on or before 10.00 am on 1st March, 2022.
 - 5. Bids will be opened promptly in public and in the presence of Bidders and their representatives who choose to attend in the opening at **KEMSA bids' opening conference Hall at 10:00am**
 - 6. Late bids, Electronic Bids, Bids not opened in and not read out in public at the bid opening ceremony shall not be accepted for evaluation.

REGISTRATION FORM

Tender No. KEMSA/ONT13/2021-2022- <u>Supply, Installation, Testing and Commissioning</u> of Generator at KEMSA Embakasi Warehouse

NOTE: Please provide your details below for purposes of communication in case you download this tender document from PPIP or KEMSA website.
Name of the firm:
Postal Address:
Telephone Contacts:
Company email address:
Contact Person:
Once completed please submit this form to the email below; procure@kemsa.co.ke

SECTION B: INSTRUCTIONS TO TENDERERS

1.1. Eligible Tenderers

- 1.1.1 This Invitation for Tenders is open to all tenderers eligible as described in the Appendix to Instructions to Tenderers. Successful tenderers shall provide the services for the stipulated duration from the date of commencement (hereinafter referred to as the term) specified in the tender documents.
- 1.1.2 The procuring entity's employees, committee members, board members and their relatives (spouse and children) are not eligible to participate in the tender unless where specially allowed under section 131 of the Act.
- 1.1.3 Tenderers shall provide the qualification information statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring entity to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the services under this Invitation for tenders.
- 1.1.4 Tenderers involved in corrupt or fraudulent practices or debarred from participating in public procurement shall not be eligible.

1.2 Cost of Tendering

- 1.2.1 The Tenderer shall bear all costs associated with the preparation and submission of its tender, and the procuring entity, will in no case be responsible or liable for those costs. Regardless of the conduct or outcome of the tendering process
- 1.2.2 The tender document is issued free of charge
- 1.2.3 The procuring entity shall allow the prospective tenderer to review the tender document free of charge before purchase.

1.3 Contents of Tender Document

- 1.3.1 The tender documents comprise the documents listed below and addenda issued in accordance with clause 2.5 of these instructions to tenderers.
- i) Instructions to Tenderers
- ii) General Conditions of Contract
- iii) Special Conditions of Contract
- iv) Schedule of Requirements
- v) Evaluation criteria
- vi) Form of Tender

- vii) Price Schedules
- viii) Contract Form
- ix) Confidential Business Questionnaire Form
- x) Performance security Form
- 1.3.2 The Tenderer is expected to examine all instructions, forms, terms and specification in the tender documents. Failure to furnish all information required by the tender documents or to submit a tender not substantially responsive to the tender documents in every respect will be at the tenderers risk and may result in the rejection of its tender.

1.4 Clarification of Tender Documents

- 2.4.1 A Candidate making inquiries of the tender documents may notify the Procuring entity by post, fax or by email at the procuring entity's address indicated in the Invitation for tenders. The Procuring entity will respond in writing to any request for clarification of the tender documents, which it receives not later than five (5) days prior to the deadline for the submission of the tenders, prescribed by the procuring entity. Written copies of the Procuring entities response (including an explanation of the query but without identifying the source of inquiry) will be sent to all candidates who have received the tender documents.
- 1.4.2 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

1.5 Amendment of Tender Documents

- 1.5.1 At any time prior to the deadline for submission of tenders, the Procuring entity, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer, may modify the tender documents by issuing and addendum.
- 1.5.2 All prospective tenderers who have obtained the tender documents will be notified of the amendment by post, fax or email and such amendment will be binding on them.
- 1.5.3 In order to allow prospective tenderers reasonable time in which to take the amendment into account in preparing their tenders, the Procuring entity, at its discretion, may extend the deadline for the submission of tenders.

1.6 Language of Tenders

1.6.1 The tender prepared by the tenderer, as well as all correspondence and documents relating to the tender exchanged by the tenderer and the

Procuring entity shall be written in English language. Any printed literature furnished by the tenderer may be written in another language provided they are accompanied by an accurate English translation of the relevant passages in which case, for purposes of interpretation of the tender, the English translation shall govern.

1.7. Documents Comprising the Tender

- 1.7.1 The tender prepared by the tenderer shall comprise the following components:
- (a) A Tender Form and a Price Schedule completed in accordance with paragraph 2.8, 2.9 and 2.10 below
- (b) Documentary evidence established in accordance with paragraph 2.1.2 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;
- (c) Tender security furnished in accordance with paragraph 2.12 (if applicable)

1.8. Form of Tender

1.8.1 The tenderer shall complete the Tender Form and the Price Schedule furnished in the tender documents, indicating the services to be provided.

1.9. Tender Prices

- 1.9.1 The tenderer shall indicate on the form of tender and the appropriate Price Schedule the unit prices and total tender price of the services it proposes to provide under the contract.
- 1.9.2 Prices indicated on the Price Schedule shall be the cost of the services quoted including all customs duties and VAT and other taxes payable.
- 1.9.3 Prices quoted by the tenderer shall remain fixed during the Term of the contract unless otherwise agreed by the parties. A tender submitted with an adjustable price quotation will be treated as nonresponsive and will be rejected, pursuant to paragraph 2.20.5

1.10. Tender Currencies

2.10.1Prices shall be quoted in Kenya Shillings

1.11. Tenderers Eligibility and Qualifications

- 1.11.1 Pursuant to paragraph 2.1 the tenderer shall furnish, as part of its tender, documents establishing the tenderers eligibility to tender and its qualifications to perform the contract if it's tender is accepted.
- 1.11.2 The documentary evidence of the tenderer's qualifications to perform the contract if its tender is accepted shall establish to the Procuring entity's satisfaction that the tenderer has the financial and technical capability necessary to perform the contract.

1.12. Validity of Tenders

1.12.1Tenders shall remain valid for 90 days after date of tender opening pursuant to paragraph 2.18. A tender valid for a shorter period shall be rejected by the Procuring entity as non-responsive.

1.12.2 In exceptional circumstances, the Procuring entity may solicit the Tenderer's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The tender security provided under paragraph 2.12 shall also be suitably extended. A tenderer granting the request will not be required nor permitted to modify its tender.

1.13. Format and Signing of Tenders

- 1.13.1 The tenderer shall prepare an original and a copy of the tender, clearly marking each "ORIGINAL TENDER" and "COPY OF TENDER," as appropriate. In the event of any discrepancy between them, the original shall govern.
- 1.13.2 The original and all copies of the tender shall be typed or written in indelible ink and shall be signed by the tenderer or a person or persons duly authorized to bind the tenderer to the contract. All pages of the tender, except for un-amended printed literature, shall be initialed by the person or persons signing the tender.
- 1.13.3 The tender shall have no interlineations, erasures, or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

1.14 Sealing and Marking of Tenders

- 1.14.1 The tenderer shall seal the original and the copy of the tender in separate envelopes, duly marking the envelopes as "ORIGINAL TENDER" and "COPY OF TENDER". The envelopes shall then be sealed in an outer envelope.
- 1.14.2 The inner and outer envelopes shall:
- (a) be addressed to the Procuring entity at the address given in the Invitation to Tender.
- (b) bear tender number and name in the invitation to tender and the words, "DO NOT OPEN BEFORE **Tuesday 1**st **March**, **2022** at 10.00 am)
- 1.14.3 The inner envelopes shall also indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared "late".
- 1.14.4 If the outer envelope is not sealed and marked as required by paragraph 2.14.2, the Procuring entity will assume no responsibility for the tender's misplacement or premature opening.

1.15. Deadline for Submission of Tenders

- 1.15.1Tenders must be received by the Procuring entity at the address specified under paragraph 2.15.2 not later than (**Tuesday 1**st **March**, **2022** *at* **10.00** *am*)
- 1.15.2The Procuring entity may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 2.5.3 in which case all rights and obligations of the Procuring entity and candidates previously subject to the deadline will thereafter be subject to the deadline as extended.

1.15.3Bulky tenders which will not fit the tender box shall be received by the procuring entity as provided for in the appendix.

1.16. Modification and Withdrawal of Tenders

- 1.16.1 The tenderer may modify or withdraw its tender after the tender's submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by the Procuring entity prior to the deadline prescribed for submission of tenders.
- 1.16.2 The tenderer's modification or withdrawal notice shall be prepared, sealed, marked and dispatched in accordance with the provisions of paragraph 2.16. a withdrawal notice may also be sent by fax or email but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.
- 1.16.3 No tender may be modified after the deadline for submission of tenders.
- 1.16.4 No tender may be withdrawn in the interval between the deadlines for submission of tenders and the expiration of the period of tender validity. Withdrawal of a tender during this interval may result in the

Tenderer's forfeiture of its tender security, pursuant to paragraph 2.12.7.

1.17. Opening of Tenders

- 1.17.1 The Procuring entity will open all tenders in the presence of tenderers' representatives who choose to attend, on **Tuesday 1**st **March**, **2022** *at* **10.00** *am*) and in the location specified in the invitation for tenders. The tenderers' representatives who are present shall sign a register evidencing their attendance
- 1.17.2 The tenderers' names, tender modifications or withdrawals, tender prices, discounts, and the presence or absence of requisite tender security and such other details as the Procuring entity, at it discretion, may consider appropriate, will be announced at the opening.
- 1.17.3 The Procuring entity will prepare minutes of the tender opening, which will be submitted to tenderers that signed the tender opening register and will have made the request.

1.18 Clarification of Tenders

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

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

1.19 Preliminary Examination and Responsiveness

- 1.19.1 The Procuring entity will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.
- 1.19.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected. If the candidate does not accept the correction of the errors, its tender will be rejected, and its tender security forfeited. If there is a discrepancy between words and figures, the amount in words will prevail
- 1.19.3 The Procuring entity may waive any minor informality or nonconformity or irregularity in a tender which does not constitute a material deviation provided such waiver does not prejudice or affect the relative ranking of any tenderer.
- 1.19.4 Prior to the detailed evaluation, pursuant to paragraph 2.20, the Procuring entity will determine the substantial responsiveness of each tender to the tender documents. For purposes of these paragraphs, a substantially responsive tender is one which conforms to all the terms and conditions of the tender documents without material deviations the Procuring entity's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.
- 1.19.5 If a tender is not substantially responsive, it will be rejected by the procuring entity and may not subsequently be made responsive by the tenderer by correction of the nonconformity.

1.20. Conversion to single currency

1.21.1 Where other currencies are used, the Procuring entity will convert those currencies to Kenya Shillings using the selling exchange rate on the date of tender closing provided by the Central Bank of Kenya.

1.21. Evaluation and Comparison of Tenders

- 2.21.1 The Procuring entity will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 1.20
- 1.21.2 The Procuring entity's evaluation of a tender will take into account, in addition to the tender price, the following factors, in the manner and to the extent indicated in paragraph 2.21.3.
- (a) operational plan proposed in the tender;

- (b) deviations in payment schedule from that specified in the Special Conditions of Contract
- 1.21.3 Pursuant to paragraph 2.21.2. the following evaluation methods will be applied.
- (a) Operational Plan
- (i) The Procuring entity requires that the services under the

Invitation for Tenders shall be performed at the time specified in the Schedule of Requirements. Tenders offering to perform longer than the procuring entity have required delivery time will be treated as non-responsive and rejected.

- (b) Deviation in payment schedule
- (i) Tenderers shall state their tender price for the payment on schedule outlined in the special conditions of contract.

Tenders will be evaluated on the basis of this base price.

Tenderers are, however, permitted to state an alternative payment schedule and indicate the reduction in tender price they wish to offer for such alternative payment schedule. The Procuring entity may consider the alternative payment schedule offered by the selected tenderer.

1.22.4The tender evaluation committee shall evaluate the tender within 30 days from the date of opening the tender.

1.23. Contacting the Procuring entity

- 1.23.1 Subject to paragraph 2.19 no tenderer shall contact the Procuring entity on any matter relating to its tender, from the time of the tender opening to the time the contract is awarded.
- 1.23.2 Any effort by a tenderer to influence the Procuring entity in its decisions on tender evaluation, tender comparison, or contract award may result in the rejection of the Tenderers' tender.

1.24 post-qualification

- 1.24.1 The Procuring entity will verify and determine to its satisfaction whether the tenderer that is selected as having submitted the lowest evaluated responsive tender is qualified to perform the contract satisfactorily.
- 1.24.2 The determination will take into account the tenderer financial and technical capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 1.11.2, as well as such other information as the Procuring entity deems necessary and appropriate
- 1.24.3 An affirmative determination will be a prerequisite for award of the contract to the tenderer. A negative determination will result in rejection of the Tenderer's tender, in which event the Procuring entity will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

1.25 Award Criteria

1.25.1 Subject to paragraph 2.29 the Procuring entity will award the contract to the successful tenderer whose tender has been determined to be substantially responsive and has been determined to be the lowest evaluated tender, provided further that the tenderer is determined to be qualified to perform the contract satisfactorily.

- 1.25.2 To qualify for contract awards, the tenderer shall have the following: -
- (a) Necessary qualifications, capability experience, services, equipment and facilities to provide what is being procured.
- (b) Legal capacity to enter into a contract for procurement
- (c) Shall not be insolvent, in receivership, bankrupt or in the process of being wound up and is not the subject of legal proceedings relating to the foregoing.
- (d) Shall not be debarred from participating in public procurement.

1.26. Procuring entity's Right to accept or Reject any or all Tenders

1.26.1 The Procuring entity reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers.

If the Procuring entity determines that none of the tenders is responsive, the Procuring entity shall notify each tenderer who submitted a tender.

- 1.26.2The procuring entity shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.
- 1.26.3 A tenderer who gives false information in the tender document about is qualification or who refuses to enter into a contract after notification of contract award shall be considered for debarment from participating in future public procurement.

1.27 Notification of Award

- 1.27.1 Prior to the expiration of the period of tender validity, the Procuring entity will notify the successful tenderer in writing that its tender has been accepted.
- 1.27.2 The notification of award will signify the formation of the contract subject to the signing of the contract between the tenderer and the procuring entity pursuant to clause 2.9. Simultaneously the other tenderers shall be notified that their tenders were not successful.
- 1.27.3 Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 2.29 the Procuring entity will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 1.12

1.28 Signing of Contract

- 1.28.1At the same time as the Procuring entity notifies the successful tenderer that its tender has been accepted, the Procuring entity will simultaneously inform the other tenderers that their tenders have not been successful.
- 1.28.2Within fourteen (14) days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Procuring entity.
- 1.28.3 The contract will be definitive upon its signature by the two parties.
- 1.28.4The parties to the contract shall have it signed within twenty-one (21) days from the date of notification of contract award unless there is an administrative review request.

1.29 Performance Security

- 1.29.1 The successful tenderer shall furnish the performance security in accordance with the Conditions of Contract, in a form acceptable to the Procuring entity.
- 1.29.2 Failure by the successful tenderer to comply with the requirement of paragraph 1.29 or paragraph 1.30.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Procuring entity may make the award to the next lowest evaluated tender or call for new tenders.

1.30 Corrupt or Fraudulent Practices

- 1.30.1 The Procuring entity requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts. A tenderer shall sign a declaration that he has not and will not be involved in corrupt or fraudulent practices.
- 1.30.2 The Procuring entity will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question
- 1.30.3 Further a tenderer who is found to have indulged in corrupt or fraudulent practices risks being debarred from participating in public Procurement in Kenya.

Appendix to Instructions to Tenderers

Notes on the Appendix to the Instruction to Tenderers

1. The Appendix to instructions to tenderers is intended to assist the procuring entity in providing specific information in relation to corresponding clause in the instructions to Tenderers included in Section II and has to be prepared for each specific procurement.

- 2. The procuring entity should specify in the appendix information and requirements specific to the circumstances of the procuring entity, the procuring of the procurement, and the tender evaluation criteria that will apply to the tenders.
- 3. In preparing the Appendix the following aspects should be taken into consideration;
- (a) The information that specifies and complements provisions of Section II to be incorporated.
- (b) Amendments and/or supplements if any, to provisions of Section II as necessitated by the circumstances of the specific procurement to be also incorporated.
- 4. Section II should remain unchanged and can only be amended through the Appendix to instructions to tenders.
- 5. Any clause to be included in the appendix to instructions to tenderers must be consistent with the applicable public procurement law and regulations.

Section C: General Information

Introduction

1. Eligible Tenderers

- 1.1 This Invitation for Tenders is open to all tenderers eligible as described in the tender documents. Successful tenderers shall provide the services for the stipulated duration from the date of commencement (hereinafter referred to as the term) specified in the tender documents.
- 1.2 Tenderers shall provide the qualification information statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Procuring entity, in this KEMSA, to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the services under this Invitation for tenders.
- 1.3 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

2. Cost of Tendering

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

The Tender Document

3. Contents

- 3.1 The tender document comprises the documents listed below and addenda issued in accordance with clause 4 of these instructions to tenders.
 - (a) Invitation for Tenders
 - (b) General information
 - (c) General Conditions of Contract
 - (d) Special Conditions of Contract
 - (e) Tender Form and Price Schedules
 - (f) Tender Security Form
 - (g) Contract Form
 - (h) Underwriter's authorisation form
- 3.2 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tender documents. Failure to furnish all information required by the tender documents or to submit a tender not substantially responsive to the tender documents in every respect will be at the tenderer's risk and may result in the rejection of its tender.

4. Clarification of Documents

A prospective tenderer requiring any clarification of the tender document may notify the Procuring entity in writing or by cable (hereinafter, the term *cable* is deemed to include telex and facsimile) at the entity's address indicated in the Invitation for tenders. The Procuring entity will respond in writing to any request for clarification of the tender documents, which it receives no later than seven (7) days prior to the deadline for the submission of tenders, prescribed by the procuring entity. Written copies of the Procuring entities response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective tenderers who have received the tender document.

5. Amendment of Documents

- 5.1 At any time prior to the deadline for submission of tenders, the Procuring entity, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer, may modify the tender documents by amendment.
- 5.2 All prospective candidates who have received the tender documents will be notified of the amendment in writing or by cable, and such amendment will be binding on them.

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

Preparation of Tenders

6. Language of Tender

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

Documents Comprising the Tender

The tender prepared by the tenderer shall comprise the following components:

- (a) Tender Form and a Price Schedule completed in accordance with paragraph 8, 9 and 10 below
- (b) documentary evidence established in accordance with paragraph 11 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;
- (d) tender security furnished is in accordance with paragraph 12

7. Tender Form

The tenderer shall complete the Tender Form and the appropriate Price Schedule furnished in the tender documents, indicating the services to be performed.

8. Tender Prices

- The tenderer shall indicate on the appropriate Price Schedule the unit prices and total tender price of the services it proposes to provide under the contract.
- Prices indicated on the Price Schedule shall be the cost of the services quoted including all taxes payable:
- Prices quoted by the tenderer shall be fixed during the Term of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to paragraph 22.

9. Tender Currencies

Prices shall be quoted in Kenya Shillings.

10. Tenderers Eligibility and Qualifications.

- Pursuant to paragraph 1 of section C, the tenderer shall furnish, as part of its tender, documents establishing the tenderers eligibility to tender and its qualifications to perform the contract if its tender is accepted.
- The documentary evidence of the tenderers qualifications to perform the contract if its tender is accepted shall establish to the Procuring entity's satisfaction that the tenderer has the financial and technical capability necessary to perform the contract as outlined in the evaluation criterion below;

11. Tender Security

- 12.1 The tenderer shall furnish, as part of its tender, a tender security for the amount specified in the Invitation to tender.
- 12.2 The tender security is required to protect the Procuring entity against the risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to paragraph 12.7
- 12.3 The tender security shall be denominated in Kenya Shillings or in another freely convertible currency, and shall be in the form of a bank guarantee or a bank draft issued by a reputable bank located in Kenya or abroad, in the form provided in the tender documents or another form acceptable to the Procuring entity and valid for thirty (30) days beyond the validity of the tender.
- 12.4 Any tender not secured in accordance with paragraph 12.1 and 12.3 will be rejected by the Procuring entity as non-responsive, pursuant to paragraph 22.
- 12.5 Unsuccessful Tenderers' tender security will be discharged or returned as promptly as possible, but not later than thirty (30) days after the expiration of the period of tender validity prescribed by the Procuring entity.
- 12.6 The successful Tenderers' tender security will be discharged upon the tenderer signing the contract, pursuant to paragraph 30, and furnishing the performance security, pursuant to paragraph 31.
- 12.7 The tender security may be forfeited:
 - 13. if a tenderer withdraws its tender during the period of tender validity specified by the procuring entity on the Tender Form; or
 - 14. in the case of a successful tenderer, if the tenderer fails:
 - (i) to sign the contract in accordance with paragraph 30, or
 - (ii) to furnish performance security in accordance with paragraph 31

13. Validity of Tenders

13.1 Tenders shall remain valid for 90 days or as specified in the tender documents after date of tender opening prescribed by the Procuring entity, pursuant to paragraph 18. A tender valid for a shorter period shall be rejected by the Procuring entity as non-responsive.

13.2 In exceptional circumstances, the Procuring entity may solicit the Tenderer's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The tender security provided under paragraph 14 shall also be suitably extended. A tenderer may refuse the request without forfeiting its tender security. A tenderer granting the request will not be required nor permitted to modify its tender.

14. Format and Signing of Tender

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

Submission of Tenders

15. Sealing and Marking of Tenders

- 15.1 The tenderer shall seal the original and each copy of the tender in separate envelopes, duly marking the envelopes as "ORIGINAL" and "COPY." The envelopes shall then be sealed in an outer envelope.
- 15.2 The inner and outer envelopes shall:
 - (a) Be addressed to the Procuring entity at the following address:

The Chief Executive Officer Kenya Medical Supplies Authority Commercial Street P.O Box 47715 00100 Nairobi. 15.3 Bear, **KEMSA-ONT13-2021/2022**, the Invitation for Tenders (IFT) and the words: "DO NOT OPEN BEFORE **10.00 a.m. on Tuesday 1**st **March, 2022**

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

15.4 If the outer envelope is not sealed and marked as required by paragraph 15.2, the Procuring entity will assume no responsibility for the tender's misplacement or premature opening.

16. Deadline for Submission of Tenders

- 16.1 Tenders must be received by the Procuring entity at the address specified under paragraph 15.2 no later than **10.00 a.m. on Tuesday 1**st **March, 2022.**
- 16.2 The Procuring entity may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 6, in which case all rights and obligations of the Procuring entity and candidates previously subject to the deadline will thereafter be subject to the deadline as extended.

17. Modification and Withdrawal of Tenders

- 17.1 The tenderer may modify or withdraw its tender after the tender's submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by the Procuring prior to the deadline prescribed for submission of tenders.
- 17.2 The Tenderer's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of paragraph 15. A withdrawal notice may also be sent by cable, but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.
- 17.3 No tender may be modified after the deadline for submission of tenders.
- 17.4 No tender may be withdrawn in the interval between the deadline for submission of tenders and the expiration of the period of tender validity specified by the tenderer on the Tender Form. Withdrawal of a tender during this interval may result in the Tenderer's forfeiture of its tender security, pursuant to paragraph 12.7.

Opening and Evaluation of Tenders

18. Opening of Tenders

- (b) The Procuring entity will open all tenders in the presence of tenderers' representatives who choose to attend, at 10.00 a.m. Local Time on Tuesday 1st March, 2022 at the KEMSA Tender Opening Hall, Commercial Street, Nairobi.
- 18.1 The tenderers' representatives who are present shall sign a register evidencing their attendance.
- 18.2 The tenderers' names, tender modifications or withdrawals, tender prices, discounts, and the presence or absence of requisite tender security and such other details as the Procuring entity, at its discretion, may consider appropriate, will be announced at the opening.
- 18.3 The Procuring entity will prepare minutes of the tender opening.

19. Clarification of Tenders

- 19.1 To assist in the examination, evaluation and comparison of tenders the Procuring entity may, at its discretion, ask the tenderer for a clarification of its tender. The request for clarification and the response shall be in writing, and no change in the prices or substance of the tender shall be sought, offered, or permitted.
- 19.2 Any effort by the tenderer to influence the Procuring entity in the Procuring entity's tender evaluation, tender comparison or contract award decisions may result in the rejection of the tenderers' tender.

20. Preliminary Examination

- 20.1 The Procuring entity will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.
- 20.2 Arithmetical errors will be rectified on the following basis:
 - If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantity, the unit price shall prevail, and the total price shall be corrected.
 - If the candidate does not accept the correction of the errors, its tender will be rejected, and its tender security may be forfeited.
 - If there is a discrepancy between words and figures, the amount in words will prevail.

- 20.3 The Procuring entity may waive any minor informality or nonconformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any tenderer.
- 20.4 Prior to the detailed evaluation, pursuant to paragraph 21, the Procuring entity will determine the substantial responsiveness of each tender to the tender documents. For purposes of these paragraphs, a substantially responsive tender is one which conforms to all the terms and conditions of the tender documents without material deviations. The Procuring entity's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.
- 20.5 If a tender is not substantially responsive, it will be rejected by the Procuring entity and may not subsequently be made responsive by the tenderer by correction of the nonconformity.

21. Evaluation and Comparison of Tenders

- 21.1 The Procuring entity will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 20.
- 21.2 The comparison shall be of the price to including all costs, as well as duties and taxes payable on all the materials to be used in the provision of the services.
- 21.3 The Procuring entity's evaluation of a tender will take into account, in addition to the tender price, the following factors, in the manner and to the extent indicated in paragraph 21.4 and in the technical specifications:
 - (a) operational plan proposed in the tender;
 - (b) deviations in payment schedule from that specified in the Special Conditions of Contract;
- 21.4 Pursuant to paragraph 23.3 the following evaluation methods will be applied:
 - (a) Operational Plan:

The Procuring entity requires that the services under the Invitation for Tenders shall be performed as required. Tenders that do not comply with this requirement will be treated as non-responsive and rejected.

(b) Deviation in payment schedule:

Tenderers shall state their tender price for the payment on a schedule outlined in the special conditions of contract. Tenders will be evaluated on the basis of this base price.

Tenderers are, however, permitted to state an alternative payment schedule and indicate the reduction in tender price they wish to offer for such alternative payment schedule. The Procuring entity may consider the alternative payment schedule offered by the selected tenderer.

22. Contacting the Procuring entity

- 22.1 Subject to paragraph 19, no tenderer shall contact the Procuring entity on any matter relating to its tender, from the time of the tender opening to the time the contract is awarded.
- 22.2 Any effort by a tenderer to influence the Procuring entity in its decisions on tender evaluation, tender comparison, or contract award may result in the rejection of the Tenderer's tender.

Award of Contract

23. Post-qualification

- 23.1 In the absence of pre-qualification, the Procuring entity will determine to its satisfaction whether the tenderer that is selected as having submitted the lowest evaluated responsive tender is qualified to perform the contract satisfactorily.
- 23.2 The determination will take into account the tenderer financial and technical capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 11, as well as such other information as the Procuring entity deems necessary and appropriate.
- 23.3 An affirmative determination will be a prerequisite for award of the contract to the tenderer. A negative determination will result in rejection of the Tenderer's tender, in which event the Procuring entity will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

24. Award Criteria

Subject to paragraph 9, 21 and 26 the Procuring entity will award the contract to the successful tenderer whose tender has been determined to be substantially responsive and has been determined to be the lowest evaluated tender, provided further that the tenderer is determined to be qualified to perform the contract satisfactorily.

25. Procuring entity's Right to Vary scope of services

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

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

The Procuring entity reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Procuring entity's action.

27. Notification of Award

- 27.1 Prior to the expiration of the period of tender validity, the Procuring entity will notify the successful tenderer in writing that its tender has been accepted.
- 27.2 The notification of award will constitute the formation of the Contract.
- 27.3 Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 29, the Procuring entity will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 12.

28. Signing of Contract

- 28.1 At the same time as the Procuring entity notifies the successful tenderer that its tender has been accepted, the Procuring entity will send the tenderer the Contract Form provided in the tender documents, incorporating all agreements between the parties.
- 28.2 Within twenty-one (21) days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Procuring entity.

29. Performance Security

- 29.1 Within twenty-one (21) days of the receipt of notification of award from the Procuring entity, the successful tenderer shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the tender documents, or in another form acceptable to the Procuring entity.
- 29.2 Failure of the successful tenderer to comply with the requirement of paragraph 28 or paragraph 29 shall constitute sufficient grounds for the annulment of the award and

forfeiture of the tender security, in which event the Procuring entity may make the award to the next lowest evaluated Candidate or call for new tenders.

30. Corrupt Fraudulent Practices

- 30.1 The Procuring entity requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts. In pursuance of this policy, the Procuring entity: -
 - (a) defines, for the purposes of this provision, the terms set forth below as follows:
 - (i). "corrupt practice" means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii). "fraudulent practice" means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring entity, and includes collusive practice among tenderer (prior to or after tender submission) designed to establish tender prices at artificial noncompetitive levels and to deprive the Procuring entity of the benefits of free and open competition;
 - (b) will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question;
 - (c) will declare a firm ineligible, either indefinitely or for a stated period of time, to be awarded any contract if it at any time determines that the firm has engaged in corrupt or fraudulent practices in competing for, or in executing, a contract
- 30.2 Furthermore, tenderers shall be aware of the provision stated in the General Conditions of Contract.

Section D: General Conditions of Contract

1. Definitions

- 1.1 In this Contract, the following terms shall be interpreted as indicated:
 - (a) "The Contract" means the agreement entered into between the Procuring entity and the tenderer, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
 - (b) "The Contract Price" means the price payable to the tenderer under the Contract for the full and proper performance of its contractual obligations.
 - (c) "The services" means services to be provided by the tenderer to the Procuring entity under the Contract.
 - (d) "The Procuring entity" means the organization sourcing for the services under this Contract, in this case Kenya Medical Supplies Authority (KEMSA).
 - (e) "The tenderer" means the individual or firm providing the services under this Contract.

2. Application

2.1 These General Conditions shall apply in all Contracts made by the Procuring entity for the procurement of services.

4. Standards

4.1 The services provided under this Contract shall conform to the standards mentioned in the Technical Specifications.

5. Use of Contract Documents and Information

- 5.1 The Candidate shall not, without the Procuring entity'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 Procuring entity in connection therewith, to any person other than a person employed by the tenderer in the performance of the Contract.
- 5.2 The tenderer shall not, without the Procuring entity's prior written consent, make use of any document or information enumerated in paragraph 5.1 above.

5.3 Any document, other than the Contract itself, enumerated in paragraph 5.1 shall remain the property of the Procuring entity and shall be returned (all copies) to the Procuring entity on completion of the Tenderer's performance under the Contract if so required by the Procuring entity.

6. Patent Rights

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

Performance Security

- 7.1 Within twenty-one (21) days of receipt of the notification of Contract award, the successful tenderer shall furnish to the Procuring entity the performance security in the amount specified in Special Conditions of Contract.
- 7.2 The proceeds of the performance security shall be payable to the Procuring entity as compensation for any loss resulting from the Tenderer's failure to complete its obligations under the Contract.
- 7.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Procuring entity and shall be in the form of a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in Kenya or abroad, acceptable to the Procuring entity, in the form provided in the tender documents.
- 7.4 The performance security will be discharged by the Procuring entity and returned to the Candidate not later than twenty-one (21) days following the date of completion of the Tenderer's performance obligations under the Contract, including any warranty obligations, under the Contract.

7. Payment

- The method and conditions of payment to be made to the tenderer under this Contract shall be specified in Special Conditions of Contract.
- Payments shall be made promptly by the Procuring entity as specified in the contract.

8. Prices

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

9. Assignment

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

10. Subcontracts

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

11. Termination for Default

- 13.1 The Procuring entity may, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the tenderer, terminate this Contract in whole or in part:
 - (a) if the tenderer fails to provide any or all of the services within the period(s) specified in the Contract, or within any extension thereof granted by the Procuring entity
 - (b) if the tenderer fails to perform any other obligation(s) under the Contract
 - (c) if the tenderer, in the judgment of the Procuring entity has engaged in corrupt or fraudulent practices in competing for or in executing the Contract
- 13.2 In the event the Procuring entity terminates the Contract in whole or in part, it may procure, upon such terms and in such manner as it deems appropriate, services similar to those undelivered, and the tenderer shall be liable to the Procuring entity for any excess costs for such similar services.

12. Liquidated Damages

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

13. Resolution of Disputes

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

15.2 If, after thirty (30) days from the commencement of such informal negotiations both parties have been unable to resolve amicably a contract dispute the provisions of the Arbitration Act of the Laws of Kenya shall apply.

14. Language and Law

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

15. Force Majeure

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

Section E: Special Conditions of Contract

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

1. Clarification of Documents

The Procuring entity will respond in writing to any request for clarification of the tender documents, which it receives no later than five (5) days prior to the deadline for the submission of tenders.

2. Bidders Eligibility

The documentary evidence of the Bidders eligibility to tender shall include **proof of tax compliance** from the relevant tax authorities.

3. Validity of Tenders

Tenders shall remain valid for 90 days.

- 4. Prices to be quoted in Kenya Shillings.
- 5. Each tenderer must attach to the tender document a copy of official receipt issued from the cash office for the purchase of tender document.
- 6. The documentary evidence of the tenderers eligibility to tender shall include proof of tax compliance from the relevant tax authorities.
- 7. Provision of the company profile including names of directors and senior managers.
- 8. Complete set of audited financial statements for the last three years.
- 9. Provide references of other organisations to which you render similar services.
- 10. Indicate the number of years the company has been in business.

Section G: Tender Form and Price Schedules

(1)	. Sample Form of Tender		
Da	ate:		
Τe	ender No:		
To	o:		
 [and address of Duranning autitul		
[n	ame and address of Procuring entity]		
G	entlemen and/or Ladies:		
1.	Having examined the tender documents including Addenda Nos		
	in conformity with the said tender documents and or such other sums as may be ascertained in accordance with the Schedule of rates and prices attached herewith and made part of this Tender.		
2.	We undertake, if our Tender is accepted, to deliver the services in accordance with our specifications.		
3.	We agree to abide by this Tender for a period of[number] days from the date fixed for tender opening of the Instructions to tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.		
4.	Until a formal Contract is prepared and executed, this Tender, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us.		
5.	We understand that you are not bound to accept the lowest or any tender you may receive.		
Da	ated this day of 20		
	ignature] [in the capacity of]		
Dı	uly authorized to sign tender for and on behalf of		

(ii). Sample of Schedule of Requirements

General Specifications of Diesel Engine Generator

Description

- 1. Extent of the Contract works
- 2. Regulation and Standards
- 3. Conformity with the Specification
- 4. Information required with Tenders
- 5. Site Conditions
- 6. Tropicalization of Components
- 7. Surface Finish
- 8. Record of Drawings
- 9. Maintenance Manual
- 10. Factory Tests
- 11. Installation
- 12. Spare Parts
- 13. Tools
- 14. Maintenance Period
- 15. Maintenance Contract
- 16. Transport and Storage

1. Extent of Contract Works

The work covered by this specification includes the supply, delivery, installation, setting to work, commissioning to the satisfaction of the engineer and maintenance for a period of twelve months, of a Diesel Engine Generator set complete with all necessary ancillary equipment and as indicated.

2. Regulations and Standards

The equipment shall comply with all relevant statutory instruments and regulations current at the date of tender and in particular the following:

- 1. I.E. E Wiring Regulations
- 2. Regulation under the Electric Power Act
- 3. Factories Act
- 4. Any special regulations issued by the local Electricity or Water Undertakings
- 5. Kenya Bureau of Standards (K.E.B.S)

The equipment and all components shall comply with all relevant KEBS standards and codes of practice or other equal and approved standards specifications and codes. Where the equipment or part of it complies with other internationally recognized standards which are less stringent than British standards or Codes of practice, then the difference is to be stated in writing and must accompany the tender submission.

3. Conformity with the specification.

The equipment to be supplied shall conform in all respects to the specifications. Unless another standard is specifically mentioned in the specification, all materials and practices employed in the works must, where such standards exist be in accordance with the current KEBS standards or code of practices or in accordance with such other authorized standard appropriate to the country of manufacture as in the opinion of the Engineer ensures equivalent or higher quality.

Alternative which deviate in any respect from the specifications may only be submitted in addition to the main offer required by the Specification. Such alternative must be fully detailed and the price indicated may be considered for adoption after the comparison of quotation submitted in accordance with the Specifications.

4. <u>Information required with Tenders</u>

Each tender shall be accompanied by 2 sets of technical manual showing general arrangement and typical details of the equipment offered.

All tender documents and any communications thereof shall be in English language.

5. Site Conditions

The contractor is deemed to have visited the site and if unable to locate it to apply to the Engineer for directions to enable him to do so. The contractor is deemed to have acquainted himself therewith as to its nature, position, means of access, etc. and no claim in the connection will be allowed. No claim will be allowed for travelling or other expenses which

may be incurred by the contractor in visiting the site or preparing a tender for the contract works.

6. Tropicalization of Components

All components shall fully be tropicalized and protected against mold growth.

7. Surface finish

All ferrous metal work shall be either painted or processed to give a rust proof coating. Ferrous metal work to be painted shall first to be either shot blasted or thoroughly wire brushed to remove all scale and oxide and immediately given one brushed coat or two sprayed coats of primer.

After not less than four hours, one brushed or two sprayed undercoats followed by one brushed or two sprayed finishing coats of heat and oil resisting quality paint shall be applied.

Successive coats of paint shall be slightly differing shades. Interior surfaces of electrical equipment enclosures shall be finished white and all external surfaces shall be finished grey (Bs 2660, colour 9-097)

Engine crank cases shall not be painted internally unless the paint is resistant to the lubricating oil.

8. Recording Drawings

The Contractor shall provide to the engineer four sets of the following drawings:

- a) Where indicated a building drawing showing details of cable entries, pipe entries and ducts required, and the exhaust system.
- b) A general arrangement drawing showing the principal dimensions and weight of the set.
- c) A general arrangement of the diesel engine.
- d) A general arrangement of the alternator and exciter showing terminal markings, polarity and phase rotation.
- e) A general arrangement of the electrical control panel(s).
- f) A schematic and wiring diagram of the electrical control panel(s).

9. Maintenance Manual

Upon practical completion of the Contract works the Contractor shall furnish to the Engineer four copies of Manuals. The manuals shall be printed on good quality paper International A4 size and shall have stiff covers of durable materials.

The Manual shall contain full operating and maintenance instructions for each item of equipment, plant and apparatus set out in a form dealing systematically with each system. It shall include, as may be applicable to the contract works, the following and any other items listed in the text of the specification hereinafter:

- a) System Description
- b) Plant
- c) Valve Operation
- d) Switch Operation
- e) Procedure of Fault Finding
- f) Emergency Procedures
- g) Lubrication Requirement
- h) Maintenance and Servicing periods and Procedures
- i) Colour coding legend for all services
- j) Schematic and wiring Diagrams of plant, Apparatus and Switchgear
- k) Record Drawings, true too scale, reduced to international A4 size
- l) Lists of primary and secondary spares

The Manual is to be specially prepared for the contract works and Manufacture's standard descriptive literature and plant operating instruction cards will not be accepted for inclusion unless exceptionally approved by the engineer. The contractor shall, however, affix such cards, if suitable, adjacent to plant and apparatus. One spare set of all such cards shall be furnished to the electrical Engineer.

The maker's name, the rating of the set, the contract number, the location of the site and the year of installation shall appear on the front covers.

10. Factory Tests

The set shall be tested as a unit at the manufacturer's workshop (or elsewhere by agreement) for output and performance generally in accordance with the requirements of BS 649 and as 2613.

The Engineer shall be given adequate notice in writing of the date and time of the work tests and he, or his representative shall if he so desires, be present at such tests and given all reasonable facilities for his own inspections during the course of the tests.

Whether or not the Engineer or his representative attends the tests, he shall be furnished, by the Contractor, with copies of all relevant tests certificates.

11. Installation

Installation of all plant and equipment shall be carried out by the contractor under adequate supervision from skilled staff provided by the plant and equipments manufacturer or his appointed agent.

Plant or equipment which are shipped before the relevant test certificate has been approved by the Engineer shall be shipped at the contractor's own risk and should the test certificate not be approved; new tests may be ordered by the Engineer at the contractor's expense.

12. Spare parts

The contractor shall submit with his tender a separate priced list of recommended spare parts including any optional extras which he recommends should be purchased for the set and its control equipment and are not supplied as standard with the unit. The initial spares required at handover shall be deemed to have been included in the tender pricing.

13. Tools

A complete set of tools and general and special testing equipment shall be provided, including grease and oil guns, necessary for the normal maintenance of the set and it controls.

The tools shall be of the best quality, the spanners being of chrome vanadium steel, and shall be contained in a suitable robust steel tool box with lid fitted with a lock and two keys. All tools and testing equipment may be used by the Contractor in the execution of the contract works but will not be accepted as part of the Contract works by the Engineer unless they are handed over in clean and undamaged condition, in perfect working order and effectively in new condition.

14. Maintenance period

The Contractor shall maintain the complete set and associated control equipment forming the unit for a period of twelve calendar months from the date that the unit is put into commission and regular use. During this maintenance period, the contractor shall at his own expense.

- a) Make good any defects in the unit and replace any parts that fail or show signs of weakness or undue wear in consequences of faulty design, workmanship or materials.
- b) Visit the site with all diligence and attend to any such defect that arises within 48 hours of receiving notification of the defect.
- c) Carry out regular examination and services of the unit at the intervals laid down by the manufacturer, or every three months, whichever is the sooner, the service examination to include all necessary adjustments, greasing, oiling, cleaning, changing of lubricating oils (where necessary) to keep the unit in sound and efficient working order.
- d) Instruct the maintenance personnel in the proper operation, care and maintenance of the set and its equipment.

If during the maintenance period the unit is or is likely to be out of use for a period greater than 48 hours, due to the unit or part thereof developing a defect attributable to faulty design, workmanship or materials, or due to neglect of maintenance by the Contractor, the Contractor shall at his own expense immediately provide and install on free loan a suitable temporary unit for use until the required repair or replacement has been satisfactorily undertaken and the original set (or its replacement) put to proper working order.

At the end of the twelve months' period of maintenance the Contractor shall (in addition to normal servicing work) carry out a compressive examination and test of the set and its auxiliaries, to ensure that the unit is in proper working order and in satisfactory condition for handing over to the Engineer whose representative shall be present at such examination and test.

15. Maintenance Contract

The Contractor may be called upon to enter into maintenance contract with the Employer for the servicing the Generating sets after the expiry of the initial maintenance period. The Contractor shall indicate his willingness to carry out this service at the time of tendering and shall ensure that component personnel are available locally to be called at short notice to attend to Generator faults.

16. Transport and Storage

All plant equipment shall, during transportation, be suitably packed, crated and protected to minimize the possibility of damage, and prevent corrosion or other deterioration.

On arrival at site all plant and equipment shall be examined and any damage to parts and protective priming coats made good before storage or installation.

Particular Specifications for The Standby Generating System

Description

- 1. Location of Site
- 2. Climatic Condition
- 3. Operating Conditions
- 4. Functional objects
- 5. Scope of the Contract
- 6. Performance objectives
- 7. Generating Set Arrangements
- 8. Diesel Engine
 - 8.1 General
 - 8.2 Fuel Oil System
 - 8.3 Lubricating Oil System
 - 8.4 Starting of Engine
 - 8.5 Cooling System
 - 8.6 Governing System
 - 8.7 Exhaust System
 - 8.8 Engine Instruments
 - 8.9 Pipe work, Valves and Fittings
- 9. The Generator (Alternator and Exciter)
 - 9.1 General
 - 9.2 Excitation
 - 9.3 Electrical Control Panel
 - 9.4 Lock-out
 - 9.5 Fault Indication
 - 9.6 Starting Battery and Charger
 - 9.7 Wiring and Earthing
 - 9.8 Contactors
 - 9.9 Relays
 - 9.10 Fuses
 - 9.11 Rectifiers, capacitors and solid-state components
 - 9.12 Enclosures for Equipment
- 10.0 Lifting Gear and Handling
- 11.0 Commissioning

1. Location of site

The site for the proposed Contract Works is at Embakasi Supply Chain Centre.

2. Climatic Condition

The following climatic conditions apply at the site of the Contract Works and the equipment, materials and installations shall be suitable for these conditions:

Maximum Temperature: 32.2.°C

Minimum Temperature: 4.2°C

Relative humidity range: 39% - 97%

Atmospheric salt content: Less than 0.002%

Dust in Atmosphere: Relatively dusty conditions prevail

Longitude (approximately): 36⁰ 55'E

Latitude (approximately): 01⁰ 19'S

Altitude: 1624m above sea level

3. Operating Conditions

The equipment and all components shall be suitable for the operation in ambient conditions of 5° C to 40° C and up to 100% relative humidity;

- i) in an unheated ventilated building.
- ii) in the open air as specified.

Unless otherwise stated all ratings of equipment and components shall be interpreted as site rating and NOT sea level or other ratings.

4. Functional Objectives

The set shall be capable of operating continuously and satisfactorily in a medium dust laden atmosphere as defined in BS 1701 and in accordance with BS 649.

The generating set is required for standby duty and will be connected to the switchboard through a circuit. It shall have an automatic mains failure control, appropriately interlocked with the other incoming supply. Provisions shall be made in the control circuit of the generator for automatic and remote push button control, including the terminals and cable glands for all external cables, which will be supplied by others, where specified. It

shall also be possible to start, operate and stop the set manually, independent of any automatic features.

Within the operating conditions specified in part 3 above the set shall be capable of starting and accepting full load within the shortest possible time, and in any case, in not more than 10 seconds.

Any special features included to achieve this shall be stated in information to be supplied by or complied with by the tenderer section in this document.

5. Scope of the Contract Works

The work covered by this Specification includes the supply, delivery, installation, testing and commissioning to the satisfaction of the Engineer and maintenance for a period of twelve months of new generating sets complete with all necessary ancillary equipment.

The works comprise 1No. 200KVA, 415 volts/3 phase /50Hz continuously rated diesel generator sets with all integral accessories, and all necessary equipment for the safe and efficient working of the sets. The diesel generator sets will be site rated at level of 1624 metres, Kenya Datum.

Diesel generator sets to include:

- a) Push button starting, starting battery and mains power supply trickle charger to be included.
- b) 72-hour operational running capacity auxiliary fuel oil storage tank, loose transfer pump and duplex oil strainer.
- c) An integral belly/ base fuel tank for daily service with an operational running capacity of 8 hours.
- d) All interconnecting pipe work, valves and fittings between the storage tank, base tank and the diesel engine.
- e) An automatic generator control unit.
- f) A diesel generator control cubicle.
- g) Acoustic enclosure/ sound attenuated canopy.
- h) All local wiring.
- i) Maintenance tools and spare parts as specified.
- j) A synchronizing panel for the generator.

6. Performance Objective

The output rating of the set in KVA, the voltage, the number of phases and the frequency shall be as specified in Bill No.2 Schedule 1 of the Bills of Quantities.

Within the operating conditions specified the set, equipped with its standard air intake filters, shall be capable of delivering its rated output continuously at rated voltage and 0.8 lagging power factor and of delivering 10% in excess of the continuous maximum rating for a period of one hour in any 12-hour period.

The steady state voltage shall be maintained within 2 $\frac{1}{2}$ % of the rated voltage under control of the voltage regulator between the cold start ambient conditions and the maximum working temperature, from no load to 10% overload and from unity to 0.8 lagging power factor. After any change of load, the voltage shall not vary by more than + 15% of the rated voltage and shall return to within +/-3% within 3 seconds and to within 2 $\frac{1}{2}$ % of rated voltage within 1 seconds. On starting the voltage overshoot shall not exceed 15% and shall return to within 3% in not more than 3 seconds.

The governing of the set shall be such that the steady load speed band shall not exceed 1% of rated speed. Sudden removal of the full load at rated frequency shall not cause the frequency to rise above 110% of the rated frequency and it shall return to within 105% of the rated frequency within 3 seconds.

The resultant steady state frequency shall return to 104% within 15 seconds. If full load is then reimposed the frequency shall not fall below 94% of rated frequency and shall return to 99% within 3 seconds and to the rated frequency within 15 seconds. The cyclic irregularity of the set at full load shall not be worse than 1/150.

The deviated interference shall be suppressed to the limit specified in BS 800 and BS 833.

7. Generating Set Arrangement

Unless otherwise indicated the set and its auxiliaries shall be mounted on sufficiently substantial underbase. All items which must be held in correct relative alignment shall be located by means of dowels.

The set shall be designed and supplied for operation bolted to the floor on robust antivibration and shock absorbing devices. They shall have adjusting screws for optimum setting and levelling and be so designed and installed that no appreciable engine vibration shall be transmitted to the floor or to any surrounding.

Bearings shall be suitable for operation over long periods without the need for replacement of the lubricant. Oil lubricated bearings shall be fitted with a visible oil level gauge.

8. <u>Diesel Engine</u>

8.1. General

The engine shall comply in design and performance with BS.649 "Diesel Engines for General purposes" or its approved equivalent. The engine shall be designed for satisfactory operation on fuel oil and lubricating oils complying with BS. 2869.

The engine shall be totally enclosed, with forced lubrication from an integral pump having on the suction side a course strainer and on the delivery side a dual' full flow' fine filter with a changeover cock incorporating pressure by-pass, so that the oil flow to the engine is maintained if the filter should choke. Alternatively, a single filter of the self-cleaning type fitted with a by-pass relief valve and having the same filtration performance may be provided. Manual lubrication of any part of the engine will not be accepted. The capacity of the lubricating oil system shall be sufficient to enable the engine to run continuously for 12 hours at any load without replacement.

A filter with a by-pass relief valve shall be inserted in the fuel line immediately before the pump(s). The fuel filter element shall be incapable of passing particles larger than micrometers. The fuel system shall be so arranged that fuel resulting from filter, pump or pipe spillage shall be incapable of entering the engine sump.

Air filters complying with KS 06-294: 1986, Grade 'A' and Grade 'B' suitable for use in a dusty atmosphere shall be fitted on the engine air intake(s)

No significant critical speed of the complete shaft system, including the generator, shall be within 15% of the rated speed.

A manually reset over speed trip shall be fitted to stop the engine if its speed exceeds the rated speed by 15%. A mechanical trip is preferred but an electrical over speed trip may be offered. Both types shall be equipped with a pair of contacts which close on operation of the trip. If the device is belt driven, at least two belts shall be provided and the drive shall be capable of carrying full load with one belt removed.

The set shall be arranged such that on shut-down the cooling water temperature shall not rise with residual heat so that the high water temperature lock-out operates. The engine may be naturally aspirated as pressure charged, or as indicated.

The starting shall be by means of electricity supplied from a starter battery. The starter motor shall be of axial type, de-energizing by a device operated from the engine. A means of manual starting shall also be provided.

Suitable means shall be provided for running by hand the engine main shaft and the associated generator to facilitate inspection and overhaul.

If weekly test runs are insufficient to prevent the drying out of the bearings, means shall be provided to ensure that the bearing surfaces are adequately and automatically wetted with lubricating oil either periodically or immediately prior to every start.

The engine shall be capable of being started from any crank position.

A thermostatically controlled 240-volt immersion heater may be fitted in the engine lubricating oil sump to facilitate starting. The heating surface loading of any lubricating oil heater(s) shall not exceed 0.015 watt per square millimeter to avoid carbonization of oil. An efficient exhaust silencer with adequate draining facilities shall be supplied, and shall either be mounted on the set or installed in a generator room constructed as shown on the drawing indicated. The exhaust silencer system shall be so arranged that it may be readily relocated if required. Where any additional piping bends and fittings are specified, the manufacturer shall advise on any problems involved.

8.2. <u>Fuel Oil System</u>

An auxiliary fuel storage tank whose minimum capacity shall be sufficient to run the engine continuously on full load for 72 hours shall be installed in the position indicated in the contract drawing. It shall be supplied complete with supports.

The tank shall be fitted with a hand operated fuel with a flexible suction hose to permit filling from a drum on the floor.

A three-way cock shall be fitted in the line from tank to the engine to enable the fuel to be supplied from a source other than the storage tank.

The position of the cock shall be clearly marked 'MANUAL, AUTOMATIC, OFF' as applicable.

A duplex oil filter shall be supplied between the storage tank and the diesel engine. The duplex filter shall be capable of being cleaned without dismantling, or in interruption of the fuel flow, and shall be easily maintainable. The tank shall be equipped with a graduated dipstick, a clearly visible contents' gauge (not of the site glass type) and with drain, vent, overflow and inlet and outlet connection.

The set shall also have an integral belly/base fuel tank for daily services with an operational running capacity of 8 hours.

8.3. <u>Lubricating Oil System</u>

An engine driven integral gear type lubricating oil pump shall be provided. The lubricating oil system shall include an oil cooler and fine mesh filters, together with devices to indicate

lubricating oil pressure and to initiate a 240-volt A.C. Lubricating oil Low pressure Alarm, Lubricating Oil High Temperature Alarm and Cooling Water High Temperature Alarm.

As separate 240-volt A.C. Motor driven automatic lubricating oil priming pump shall be provided for intermittent operation when the diesel is lying idle

8.4. **Starting of Engine**

The diesel generator set shall have facilities for local and remote push button starting, with a Local/Remote/ Automatic selector switch at the local panel.

On mains failure the engine shall be capable of being automatically started from battery located near the generator set.

The battery shall be complete with drip tray and trickle charger.

All necessary relays, contacts, switches and miscellaneous items for the starting sequence shall be supplied and installed in the local control panel.

The system shall be designed to give maximum reliability in starting.

The Contractor shall state in detail his proposals to ensure reliable starting and prevention of deterioration of the diesel engine, generator and exciter during idle periods.

All manually operated valves and controls on who's setting the correct operation of the automatic starting equipment depends shall be provided with locking devices.

8.5. <u>Cooling System</u>

The engine may be air or water cooled unless a preference is indicated.

8.5.1. Air Cooling of Engine

Cooling air for the engine and lubricating oil shall be provided by fan(s) mechanically driven from the engine. The cooling system shall be adequate for the total requirements of the engine when running on continuous full load and on 10% overload for one hour in accordance with BS 649 and under the conditions of Section 3.

The engine shall be so designed that the cooling air discharges into or is drawn through a reasonably airtight ducted assembly enclosing the lubricating oil cooler, the cylinder barrels and the cylinder heads of the engine.

This assembly shall terminate in a flanged outlet to which trunking may be readily attached when necessary, to enable hot air from the cooling system to be discharged outside the building.

Belt driven fans shall have at least two belts and the drive shall be capable of transmitting the full load with one belt removed. The cooling air temperature shall be controlled so as to maintain a safe working temperature of the cylinder hand(s) and the engine shall shut down if the maximum is exceeded.

8.5.2. Water Cooling of Engine

A radiator of the air blast type shall be provided. It shall either have separate sections for water and for lubricating oil or be arranged for jacket water cooling only.

The radiator shall be mounted on the set and the fan(s) shall be mechanically driven from the engine. Where indicated the radiators shall be suitable for remote wall or floor mounting, in which case the fan shall be electric motor driven from a supply similar in voltage, phase and frequency to the alternator output and shall be started on line.

Where remotely mounted, the fan shall only operate when generating set is running and shall be controlled by a thermostat mounted in the radiator such that the fan motor will start on rising temperature 50°C and stop on falling temperature.

Belt driven fans shall be provided with at least two belts and the drive shall be capable of transmitting the full load with one belt removed. Circulation of the jacket water and lubricating oil through the respective radiator sections and /or heat exchanger shall be by means of pumps mechanically driven by the engine. Belt driven pumps shall be provided with at least two belts and drive shall be capable of transmitting the full load with one belt removed.

Circulation by thermo-syphon will be accepted provided the engine will operate under the conditions of section 6 and in accordance with BS 649.

An easily visible flow indicator provided with contacts shall be fitted in the water outlet from the engine; the contacts shall close in the 'no flow' condition and shut down the set.

Alternatively, in thermosyphon systems and sealed or pressurized radiator systems the flow indicator may be dispensed with providing the engine shuts down by the operation of the high temperature or low oil pressure safety devices in accordance with section 8.3.

A thermostatically controlled diverter valve shall be inserted in the engine water discharge pipe with a return to the circulating pipe section, to maintain the circulating water at the optimum temperature irrespective of the load. Alternatively, a thermostatic bypass will be accepted.

A radiator make-up/expansion tank, fitted with float control inlet, shall be provided. If a sealed or pressurized unit is offered the tank may be dispensed with.

Where indicated provision shall be made on the radiator framework to permit the attachment of ducting for the discharge air.

A thermometer shall be mounted near the cylinder head(s) to indicate water temperature. Where a lubricating oil cooler is fitted, thermometers shall be mounted at the oil inlet too and outlet from the engine. Alternatively, thermocouple may be provided at all thermometer positions and taken to an instrument panel.

Adequate drains shall be provided at low points in the water and lubricating oil systems of the radiator and, where applicable, of the heat exchanger.

8.6. Governing System

Governing shall conform to B.S. 640 Class A. The governor shall control the frequency within the limits stated in Section 6 Part. Manual speed adjustment shall be provided over a range of +/-15% of the rated speed at any load. The governor system shall be of the mechanical or hydraulic type. In addition, the engine shall be fitted with an approved overspeed trip device which shall operate independently of the normal speed governor and shall act directly upon the fuel supply to the engine.

The overspeed shall act at a speed of 12% to 15% in excess of normal operating speed.

8.7. Exhaust System

The diesel engine shall be provided with a suitable exhaust system for horizontal discharge outside the diesel generator room. The silencer shall be of spark arresting type and shall be equipped with cleaning and draining arrangements.

If an exhaust driven turbo-charger is supplied it shall include air intake filters, manifolds and outlet manifolds. All necessary ducting, piping, supports and lagging required for the system shall be included.

Weatherproof wall boxes permitting expansion shall be fitted where the exhaust piping passes through the building wall or roof. Pipe work shall be connected at site by butt weld connections or use of flanged joints. The use of screwed connectors shall be avoided.

Flanges shall conform to the appropriate Table of B.S.10: 1962. Welding of flanges at site shall be carried out in accordance with B.S.806. The faces of flanges shall be machined and the backs shall be machined or spot faced to receive the bolt heads.

Valves and fittings shall be of approved design and manufacture and shall be subject to the same tests as the highest pressure piping or vessel to which they are connected.

8.8. <u>Engine Instruments</u>

Unless otherwise indicated the following instruments shall be provided:

- (a) a lubricating oil pressure gauge.
- (b) a running hour meter.
- (c) a tachometer.
- (d) a water thermometer.
- (e) an exhaust gas pyrometer or thermometer mounted near the mani-fold.
- (f) lubricating oil thermometers on the inlet to and outlet from the engine, when a lubricating oil cooler if fitted.
- (g) Exhaust turbo-blower pressure gauge(s) as applicable.

8.9. Pipe work, Valves and Fittings

All piping shall comply with requirements of KS-259:11989 for mild steel pipes. Provision shall be made for ready handing of all parts of the plant during assembly or disassembly of the unit.

Adequate provision shall be made for attaching lifting devices, slings and eyebolts.

9. The Generator (Alternator and Exciter)

9.1 General

The generator shall comply with B.S.2613:197, for service in tropical conditions, and shall withstand being idle for considerable periods without any harmful drop in the insulation resistance.

The generator set shall have a prime rated net output of 200KVA as specified in the schedules of the Bills of Quantities, at 0.8 lagging power factor, 415 volts, 3 phase, 4 wire, 50 Hertz with brushless rotating rectifier excitation system and voltage regulator. It shall be directly coupled to the engine and be sized such that it will accept the maximum output of the engine including overload.

The output voltage shall be maintained within plus or minus $2 \frac{1}{2}$ % from no load to full load conditions. The alternator shall be capable of operating within the range of plus or minus 15% of the nominal voltage according to the automatic voltage regulator.

Three phase machines shall be star connected, and a diagram showing the terminal marking and phase rotation shall be provided in the terminal box. Cables connecting the machine winding and machine terminals shall not have a higher de-rating factor for temperature than the windings.

The insulation shall comply with BS 2757 excluding Classes Y and A. The insulation shall have an oil, moisture and fungus proof finish, with a surface which will not retain dust or condensation. It shall be possible to put the set in service after long periods in unheated storage without necessarily drying out the insulation.

The alternator shall be capable of withstanding a short circuit for three seconds when under the control of the automatic voltage regulator.

9.2 Excitation

Excitation shall be by means of brushless direct coupled exciter armature.

The alternators shall be designed for an excitation voltage at full load of not less than 50-Volts unless prior approval is given.

9.3 <u>Electrical control panel</u>

The Automatic Mains Failure control panel shall be provided and fitted with the following:

- a) Two four pole contactors and two TP & N incoming MCCB's each of suitable rating for controlling the supply from the mains transformer and standby generator.
- b) An automatic voltage regulator for the set.
- c) Control equipment as necessary including phase failure protection relay for both the mains supply and the generator supply (with both under and over voltage protection) and phase sequence protection relay for the mains supply all to fulfill the functional requirements and automatic changeover as detailed in Part 9.3.2
- d) One ammeter and a selector switch to measure each phase current and neutral current
- e) One voltmeter and a selector switch to read line to line and line to neutral voltage
- f) A frequency meter. The meters shall comply with BS 89, table 7.

9.3.1 General

The set is to be used for mains failure duty and an automatic starting panel shall be provided which shall contain all necessary equipment for controlling the automatic starting and stopping of the set, lubricating oil priming (if necessary), all auxiliaries, fault warnings and shut downs. All faults, warning and shut-downs shall be separately indicated. There shall be test facilities for indication lamps, etc. preferably by means of a single test button.

Means shall be provided for isolating all supplies to the starting panel either by an isolating switch or by withdrawable fuses. When the set is stopped other than under lock-out conditions, it shall be self-resetting ready for the next start.

The set shall be suitable for starting by manual means. E.g. by cranking or direct operation of the starter solenoid.

All switches and push buttons shall be clearly marked to indicate their function.

It shall be possible to operate the 'Start' and 'Stop' buttons and to see the 'Set Failure' indications without opening the panel doors.

9.3.2 <u>Automatic Changeover Controls and Selector Panels</u>

The controls shall be installed and wired in the machine control panel. The control shall be provided such that on failure of the normal electricity supply, it will automatically initiate the starting off and effect the transfer of load to the generator. The selector panel will then monitor the loading of the generator. The schematic for the controls shall be approved by the Electrical Engineer before manufacture commences.

Where failure of the normal supply is referred to, it shall be defined as follows:

- a. Complete loss of voltage in one line or in all the three lines
- b. Falling of voltage below 85% of the normal voltage between two lines or line and neutral
- c. Voltage overshoot to 110% of the normal voltage between two lines or line and neutral
- d. Incorrect phase sequence.

On failure of the normal supply, the unit shall operate in the following manner:

- a. After a delay, adjustable from 0 to 15 seconds (to avoid operation by a transient dip in voltage) a signal shall be given to start the standby generating set.
- b. On receipt of a signal from the standby generating set that it is ready to take load, and providing that the failure of the normal supply still persists, the normal supply contactor in the control panel shall open and the standby contactor shall close. If the normal supply has been restored before the changeover has taken place, the contactor shall not operate and the starting relay contacts shall open to initiate the shutting down of the standby generating set.

When the standby supply is in operation and the normal supply is restored and remains within 10% of rated voltage on all phases for a pre-set time (adjustable up to 120 second) the standby contactor shall open and the normal supply contactor shall close; the starting relay contacts shall then open to shut down the generating set.

Provision shall be made so that automatic return to normal supply can be prevented if required. Once a start signal has been sent to standby generating set, the engine starting

sequence shall be allowed to continue until the set is ready to take the load before a stopping signal is sent.

A push button labelled 'Test' shall be provided to enable a failure of normal supply to be simulated. If the button is pressed and released the equipment shall complete the starting sequence, and when the set is ready to take load it shall be shut down. If the button is held depressed the equipment shall change over to the standby supply when the set is ready to take load.

Indicating lamps or illuminated panels shall be provided on the front of the panel. They shall be appropriately labelled, easily visible and shall give the following information:

'Main Supply Available'

'Generator Supply Available'

'Mains Supply on load'

'Generator Supply on load'

9.4 Lock out

9.4.1 General

The set shall stop and lock out to prevent further starting when:

- a) It fails to start when the electric starter motor has been in operation for 20 seconds under automatic start condition.
- b) The lubricating oil pressure falls to a value at which it would be unsafe to continue running the engine.
- c) The cooling water does not flow, when the engine is fitted with a visible flow indicator on the cooling water system.
- d) (i) In water cooled engines the cooling water temperature exceeds a predetermined limit.
 - (ii) In air cooled engines the cylinder head temperature exceeds a safe maximum.
- e) The overspeed trip has operated.

9.4.2 Failure of the circuits

Failure of the circuits concerned in sub-section 9.4.1 (b) to 9.4.1(e) shall cause a set to shut down. Reset of lock out shall be by hand.

9.5 Fault indication

Each lock-out detailed in section 9.4.1 shall be indicated by a lamp on the panel together with an indication of the fault causing the shut-down. The fault warning lights shall be set to operate before the lock-out.

9.6 **Starting Battery and Charger**

The battery shall be 12-volts and capable of with-standing the loads imposed upon it by its specified duties. It may be of lead-acid or alkaline type and shall be of sufficient capacity for four starts in succession once in an eight-hour period. Auxiliary circuits connected to the battery shall be protected by fuses.

The battery shall be used to supply an automatic starting and control equipment, and relay operation shall not be impaired when the battery is supplying current to the starter motor.

A single phase supply for battery charging shall be available from the main M.V SWITCHBOARD.

A charger shall be provided which will recharge the battery after engine starting and maintain it in a charged condition when the set is standing or is in service. It may also supply the load of any automatic starting and control equipments, and an additional load up to 24 watts when the set is running and in service.

An alternative quick charge rate shall be provided. The charger shall be fitted with an ammeter to measure the charger and discharge current excluding the starter motor current.

9.7 Wiring and Earthing

Power cables and small wiring cables interconnecting major components shall be of the heat and oil resistant type and shall be metal sheathed or run in metal ducts or metal conduit, which shall be coded and terminated with lugs or eyes or to be soldered, the terminations shall be clearly marked with the numbers and letters of the terminals to which they are connected.

Terminals shall be numbered or lettered, easily accessible and fitted with individual insulating barriers or adequately spaced. Barriers shall be fitted to separate control terminals from power wiring terminals.

All metal work housing electrical equipment shall be bonded to a brass earthing terminal and connected to station Earth and as detailed in the schedule.

9.8 Contactors

Contactors shall have magnetic circuits designed for a.c or d.c operation and shall be rated in accordance with KS 04-182: 1982. Four pole- contactors shall be fitted for three phase-equipment and two-pole contactors for single phase equipment. Main and auxiliary contacts shall be silver faced or better.

9.9 Relays

Relays shall preferably be of sealed type mounted in approved plug-in bias with spring loaded retainers but if this is not practicable they shall be mounted on individual sub-bases and wired so that easy access is obtained to soldered connections. Unsealed relays shall be enclosed in individual or common dust protecting cases.

Time delays, if of the pneumatic type, shall operate on filtered air. The thermal type of time delay relay will not be accepted.

9.10 Fuses

Fuses shall comply with KS-183:1978. A spare fuse cartridge for each pole shall be mounted inside each equipment.

9.11 Rectifiers, Capacitors and solid State components

Rectifiers, capacitors and solid state components shall be suitable for any transient voltage and high currents likely to be uncounted during the operation of the equipment and for the internal operating temperature of the enclosures at the specified maximum external ambient temperature.

9.12 Enclosures for Equipment

Enclosures for electrical and control equipment shall be drip proof and dust protecting, with adequate front and rear access as necessary for maintenance and repair. Special attention shall be given to the method of construction and to the mounting of the components to minimize the effect of vibration. Diagrams of connections in durable form shall be mounted inside the enclosures.

10 <u>Lifting Gear and Handling.</u>

Provision shall be made for ready handling of all parts of the plant during assembly or disassembly of the unit. Adequate provision shall be made for attaching lifting devices, slings and eyebolts.

11 Commissioning

The Contractor shall include for fully commissioning the set and its control equipment and for the purpose of the required tests, shall provide all necessary instrument s, tools, fuel and lubricating oil.

The following tests and checks as applicable shall be carried out by the contractor in the presence of the electrical engineer or his representative.

- a) Check that the main frame is level in all directions, engine and generator shafts are in proper alignment and the vibration absorbing devices are properly installed and located.
- b) Check water and sump oil levels and that the water jacket and radiation heaters (if fitted) are in working order.
- c) Check the battery electrolyte levels and the specific gravity.
- d) Examine the containers in which the fuel and lubricating oils were delivered and check that the type and grade of oils are as recommended for the unit.
- e) Ensure that sufficient fuel oil is in the fuel tank for a two hours' test run.
- f) Check that all radiator and engine block water drain points are free from sludge and other blockages.
- g) Check engine bolts, main drive coupling, valve clearance, fuel pumps settings, governor settings, pipeline connections, water hose, exhaust couplings, flexible pipe work etc, and where a separate cooling water tank is fitted, that the water levels is satisfactory and the ball valve and overflow work.
- h) Check all outgoing connections on the generator and the control panel. All lugs for principal connections shall have clean and bright contact surfaces. A suitable abrasive shall be used where necessary.
- i) Check access panels and doors for proper opening and closing and for functioning of any interlocks fitted.
- j) With the set isolated from the main supply and the selector switch in the 'manual' position, start the engine by means of the 'start' push button and allow it to run up to normal speed. Check that the main battery charger is automatically switched off to avoid its being overloaded by the reduction in voltage across the battery. Where a battery charging dynamo is fitted, check that the main battery charger is disconnected by the operation of the auxiliary contact during the time the engine is running.

- k) Check instruments and gauges for normal operation and response and that the generator voltage is being maintained within the prescribed limits, making due allowance for no-load conditions. Compare the reading of the frequency meter with that of engine tachometer, where both are fitted
- l) Stop engine by turning selector switch to off position and verify that the generator contactor opens at between 95% and 85% of normal voltage. Re-check water and oil levels.
- m) Turn selector switch to 'Auto' position. Disconnect the sensing circuit supply and check that the set starts, the mains contactor opens, and the generator contactor closes in correct order. Reconnect the sensing circuit to verify that the engine stops on restoration of the mains supply and the contactors operate correctly. Check voltage sensing and time delays on each phase in turn and also the push buttons for mains failure simulation and engine stopping operate correctly.
- **NOTE:** Running of the engine for any length of time under no load condition is undesirable and tests calling for such operation should be carried out in as short time as possible consistent with thoroughness.
- n) Operate the necessary isolators and switches to put the set on standby for essential services network with the mains failure simulation push, verify that the set operates correctly with the appropriate time delay for taking up load and that the carrying of the load and its distribution over three phases are satisfactory.
- o) Run the set at various loads for periods totaling at least 30 minutes. Check that the voltage and frequency are being maintained within the required limits with large alterations of load. Note the rate of charge on the dynamo ammeter with the engine running (if a dynamo is fitted), and the rate of charge on the battery charging ammeter with the engine stopped. Check against manufacturers recommendations and adjust charging rates if necessary.
- p) Check that the various engine safeguards operate satisfactorily.
- q) Check the vibration absorbing devices for proper operation and that performance of all flexible connections, both mechanical and electrical, is satisfactory.
- r) When all tests are satisfactory and agreed with the Engineer or his representative, the lubricating oil and water levels shall be finally checked, the fuel oil tank replenished and set left in normal operating order.
- s) An initial supply of all lubricating oils and greases shall be provided by the Contractor.

t) Additional lubricating oil shall be provided for recharging the engine sump once together with a supply of lubricating oils and greases to cover the normal use and serving of the set during the 12 months maintenance period referred to in Part 14 of general specifications of diesel engine generator.

Information to Be Supplied By Or Complied With By The Tenderer

Description

- 1. General
- 2. Information on the set to be supplied
- 3. Deviations from the specifications
- 4. Appendix

1. General

- a) The tenderer shall complete Part 2 of information to be supplied by tenderer Section in full with details of the set he is offering.
- b) Any equipment which he wishes to offer but which does not comply with the specification shall be fully detailed in Part 3 of information to be supplied by tenderer section, together with details of any other deviation or omissions which he may wish to make.
 - Any tender which is submitted without filling these sections will be deemed non-responsive.
- c) The tenderers shall be required to submit, together with their tenders, brochures detailing technical specifications of the generator set they intend to supply. Any tender which is submitted without the brochures will be deemed non- responsive

2. Information of the sets to be supplied

ITEM	EQUIPMENT	DETAILS
1.	<u>Diesel Engine</u> Make	
	Type Net continuous rating (B.S.649)	
	(a) at sea level (b) at site	KVA

	rage 30 Ol 92
	KVA
Speed	
	Rev/min
Supercharger	
Make	
Type	
Air cooling	
Quantity of air required	Not Applicable
Details of ducting	
Water cooling	
Details of water cooling circuits	To be Applicable
Radiator:	
Make	
Type	
Length	
Breadth	mm
Height	mm
	mm

ITEM	EQUIPMENT	DETAILS
	Aspiration Method	
	Quantity of air required	
2.	Auxiliaries	
_,	Filters	
	Coolers	
	Primary pumps	
	Tachometer and drive	
	Governor	
	Special cold start devices	
	Running hours meter	
	Safety devices	
	High temperature	
	Low pressure (lubricating oil)	

		Page 37 OI 92
	Cooling water flow trip over speed trip	
	Speed sensing devices	
	Lubricating oil thermometers:	
	Number	
	Position (s)	
	Water thermometer	
	Position Exhaust thermometer	
	Position	
	Starting Battery	
	Battery charger	
	Immersion Heater	
	Lubrication	
3.	Recommended oil (s)	
	Sump	
	Elsewhere (state where)	Grade quantity (litres)
	Alternator and Exciter	
4.	Make and type	
	Bearings	
	Insulation class (BS.2757)	

ITEM	EQUIPMENT	DETAILS
5.	Electrical Control Panel Main circuit breaker Bypass switches Automatic changeover contactor Automatic voltage regulator Ammeter selector switch Voltmeter selector switch Frequency meter Ammeters No. VoltmetersNo.	Amps Amps Volts Hertz Amps Volts
6.	Power factor meter Other equipment – give details Performance data Fuel consumption	Rated output Consumption % Litres/hour

Page 58 of 92

	110	
	100	
	75	
	50	
Maximum output	Ambient temp.	Out-put
_	<u>KVA</u>	
	0C	
	40	
	30	
	20	
	10	

ITEM	EQUIPMENT	DETAILS
6.	Performance Data (cont'd) Voltage regulation Frequency regulation Time to accept 75% full load from 5°C Time to accept 100% full load from 5°C	% % Seconds Seconds Seconds
7.	Time to accept 100% full load from 40°C Physical Details	Litres
	Auxiliary fuel storage tank for 72 hour operational running capacity	mm long mm wide mm high
	Size of set	Kg.
		mm long mm wide mm

Page 59 of 92

			Page 39 OI 92
	Total weight of set	high	Kg.
	Overall dimensions of set		
8.	Weight of heaviest component		Litres
	Weather proofing		
	Integral belly/base fuel tank for daily service for 8-hour operation capacity		
	Operational Details		
	Description of Operation Sequence of the automatic control		
	Details of drawings, literature, etc., included with tender.		

3. <u>Deviations from the specification</u>

The tenderer shall give details of any equipment which does not meet the specification, or any other deviations, omissions, additions or alternatives in respect of the set which he is offering.

If none, write none.

4. Appendix engine

4.1. Diesel engine

The engine of the generator being offered should be a reputable brand from a reputable country of origin and widely in use locally.

4.2. Alternator

The alternator should be of a reputable and reliable make and type with proven performance under the local conditions.

Schedule of Contract Drawings

There are no drawings in this contract.

Locations of the Generator set and the Mains switch room including cable routes shall be identified on site.

The contractor shall however be required, on commissioning of the generator, to provide circuit diagrams for the AMF panel, generator user guide and maintenance manuals for safe custody by the employer.

Bills of Quantities

Pricing of preliminaries items

Prices will be inserted against item of preliminaries in the Contractor's Bills of Quantities and specification. These Bills are designated as Bill No.1 in this Section. Where the Contractor fails to insert his price in any item he shall be deemed to have made adequate provision for this on various items in the Bills of Quantities. The preliminaries form part of this contract and together with other Bills of Quantities covers for the costs involved in complying with all the requirements for the proper execution of the whole of the works in the contract.

The Bills of Quantities are divided generally into three sections:

a) Preliminaries – Bill No.1

Contractor's preliminaries are as per those described in section C - Contract Preliminaries and General Conditions of Contract. The Contractor shall study the conditions and make provision to cover their cost in this Bill. The number of preliminary items to be priced by the Tenderer has been limited to tangible items such

as site office, temporary works and others. However, the Tenderer is free to include and price any other items he deems necessary taking into consideration conditions he is likely to encounter on site.

b) Installation Items - Other Bills

- a. The brief description of the items in these Bills of Quantities should in no way modify or supersede the detailed descriptions in the contract Drawings, conditions of contract and specifications.
- b. The unit of measurements and observations are as per those described in clause 5 of the section C.

c) <u>Summary</u>

The summary contains tabulation of the separate parts of the Bills of Quantities carried forward with provisional sum, contingencies and any prime cost sums included. The Contract shall insert his totals and enter his grand total tender sum in the space provided below the summary.

This grand total tender sum shall be entered in the Form of Tender_provided elsewhere in this document.

Special Notes to Bills Of Quantities

- 1. The Bills of Quantities form part of the contract documents and are to be read in conjunction with the contract drawings and general specifications of materials and works.
- 2. The prices quoted shall be deemed to include for all obligations under the Contract including but not limited to supply of materials, labour, delivery to site, storage on site, installation, testing, commissioning and all taxes (including 16% VAT and 3% withholding tax).
- 3. In accordance with Government policy, 3% Withholding Tax shall be deducted from all payments made to the Tenderer, and the same shall be forwarded to the Kenya Revenue Authority (KRA).
- **4.** All prices omitted from any item, section or part of the Bills of Quantities shall be deemed to have been included to another item, section or part thereof.

- **5.** The brief description of the items given in the Bills of Quantities are for the purpose of establishing a standard to which the Contractor shall adhere. Otherwise, alternative brands of **equal** and **approved** quality will be accepted.
- **6.** Should the Contractor install any material not specified here in before receiving **written approval** from the Project Manager, the Contractor shall remove the material in question and, **at his own cost**, install the proper material.
- 7. The grand total of prices in the price summary page must be carried forward to the Form of Tender for the tender to be deemed valid.
- **8.** Tenderers must enclose, together with their submitted tenders, manufacturer's brochures detailing technical literature and specifications of the generator set that they intend to offer. Where the brochure contains different models and sizes of generators, the bidders MUST clearly mark out the model and size of generator they intend to offer by using a 'mark pen'.

BILL NO. 1 - CONTRACT PRELIMINARIES

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
1	Discrepancies clause 1.02				
2	Conditions of contract Agreement clause 1.03				
3	Payments clause1.04				
4	Site location clause 1.06				
5	Scope of Contract Works clause 1.08				
6	Extent of the Contractor's Duties clause 1.09				
7	Firm price contract clause 1.12				
8	Variation clause 1.13				
9	Prime cost and provisional sum clause 3.14 (insert profit and attendance which				

Page 63 of 92

		rage	00	OI	72
	is a percentage of expended PC or provisional sum.)				
10	Bond clause 1.15				
11	Government Legislation and Regulations clause 1.16				
12	Import Duty and Value Added Tax clause 1.17 (Note this clause applies for materials supplied only)				
13	Insurance company Fees clause 1.18				
14	Provision of services by the Main contractor clause 1.19				
15	Samples and Materials Generally clause 1.21				
16	Supplies clause 1.20				
17	Bills of Quantities clause 1.23				
SUB-T	OTAL				

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
18	Contractor's Office in Kenya clause 1.24				
19	Builder's Work clause 1.25				
20	Setting to work and Regulating system clause 1.29				
21	Identification of plant components clause 1.30				

Page 64 of 92

22	Working Drawings clause 1.32		
23	Record Drawings (As Installed) and Instructions clause 1.33		
24	Maintenance Manual clause 1.34		
25	Hand over clause 1.35		
26	Painting clause 1.36		
27	Testing and Inspection – manufactured plant clause 1.38		
28	Testing and Inspection – Installation clause 3.39		
29	Storage of Materials clause 1.41		
30	Initial Maintenance clause 1.42	 	
SUB-TO	ΓAL		

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
31	Local and other Authorities notices and fees clause 1.60				
32	Temporary Works clause 1.63				
33	Patent Rights clause 1.64				
34	Mobilization and Demobilization Clause 1.65				
35	Supervision by engineer and site meetings clause 1.67				

Page 65 of 92

36	Allow for profit and Attendance for the above (item 35)	
37	Amendment to Scope of Contract Works Clause 1.68	
38	Contractor Obligation and Employers Obligation clause 1.69	
Sub-to	tal from above	
Sub-to	tal B/F	
Sub-to	tal B/F	
TOTAI	L CARRIED FORWARD TO PRICE SUMMARY PAGE - KEMSA	

Bidders MUST either insert percentage or indicate as NIL for the following clauses:

1)	Attendance upon Tradesmen, etc. (Insert percentage only) clause 1.58 of section C
2)	% Extended Preliminaries (Insert percentage only) Clause 1.66 of section C
	% per month

BILL No. 2

200 KVA GENERATOR SET

SCHEDULE 1 - GENERATING SET

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
1.1	Supply, deliver to site, install, test and commission a prime rated 200KVA 3 phase, 415V, 50Hz diesel generating set with a continuous power factor of 0.8 lagging and as fully described in the particular specifications. The generator set is to be complete with a sound attenuated canopy and an integral base/belly daily service fuel tank with an operational running capacity of 8 hours.	1	No		
1.2	Supply, deliver to site and install a steel exhaust pipe of not less than 14 SWG and of adequate diameter running from the generating set to the outside of the generator house	25	M		
1.3	Connect the exhaust pipe above in item 1.2 using steel pipes of adequate diameter, and flexible piping off engine exhaust manifold complete with heavy duty silencer	Item			
1.4	Complete earthing of generating set to electrical engineer's approval	Item			
1.5	1000L Auxiliary fuel tank complete with stand to allow free flow of fuel from the tank to	Item			

Page 67 of 92

the generator.				
SUB-TOTAL C/F TO PRICE COLLECTION	N PAC	GE -KEMS	SA	
-				

SCHEDULE 2- AMF CONTROL PANEL

ITEM	DESCRIPTION	QTY	UNIT	RATE	KSHS
	Supply, deliver to site, install, test and commission the following:				
2.1	An electrical control panel complete with suitable rated incoming MCCBs and contactors for automatic change over operation and complete with all other control accessories as fully described in clauses 9.3 to 9.10 of the particular specifications	1	No.		
2.2	Suitable rated manual by-pass switch with clearly labeled NORMAL-OFF-BYPASS positions for mains power supply and shall such be wired that when the switch is on either OFF or BYPASS position, the generator shall receive no signal to start	1	No.		
2.3	240V AC/12V DC mains power supply trickle battery charger as specified in clause 9.6 of specifications. The trickle charger shall charge the battery when the set is on IDLE mode, otherwise when the set is RUNNING, the battery shall be charged by the generator charger. Wiring shall be done such that the two chargers shall not operate at the same time.	1	No.		
2.4	12 volts battery as specified in clause 9.6 of the particular specifications	2	No.		

Page 69 of 92

2.5	Armored cables complete with glands and PVC sleeves:			
	(a) 95mm ² 4 core PVC/SWA/PVC power	30	M	
	copper cable.	30	M	
2.6	(b) 2.5mm ² , 4 core, PVC/SWA/PVC control copper cable	Item	Item	
	Inter wire the control panel with the existing Mains L.V board and the selector panel			
SUB-TO	OTAL C/F TO PRICE COLLECTION	ON PA	GE	

SCHEDULE 3- RECOMMENDED SPARE PARTS AND LUBRICATORS

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS
	For the supply to the site of the following spare parts and lubricators:				
3.1	Oil Filters	No.	4		
3.2	Air Filters	No.	4		
3.3	Fuel filters	No.	4		
3.4	Set of Fan belts to suit the set	No.	4		
3.5	20 Litres container of sump oil of grade*	No.	4		
3.6	2 Kilogram grease in a tin of	No.	4		

Page 70 of 92

					 70 01 9
	grade*				
3.7	10 Litre plastic container of distilled water	No.	1		
3.8	20 Litre of engine oil in a tin of grade*	No.	1		
3.9	Any other spare parts recommended by Tenderer **				
	*The tenderer to fill in the Grade quality to be supplied				
	**The tenderer to fill in the details and price of items but the price not to be included in total carried forward to summary page				
SHR -T	OTAL C/F TO PRICE COLLECTION	ON PAC	EF -KFM	IS A	
	orne or former collective	ONTAG	L -IXLIV.	1011	

SCHEDULE 4 -TOOLS TO BE SUPPLIED WITH THE SET

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS
	For the supply to site of the following tools:				
4.1	Metal tool box with lock and two keys		1		
4.2	Set of 8 No. Chrome vanadium ring spanners in sizes to suit the set		1		
4.3	Set of 3 screwdrivers, 75mm, 200mm and 300mm plus one 200mm Philips type		1		
4.4	- ditto -but open ended spanners		1		
4.5	Set of feeler gauges		1		
4.6	Grease gun to suit greasing points		1		
4.7	Oil can, trigger type				
4.8	Any other special tools which the tenderer recommends should be purchased as an optional:				
	NOTE* Tenderer should give details and prices of item 4.8 but the price should not be included in total carried forward.				
SUB -T	OTAL C/F TO PRICE COLLECTION	ON PAC	GE - KEN	MSA	

PRICE SUMMARY

Item	Description	Unit	Amount (Kshs)
1.0	Sub-Total for Contract Preliminaries	Sum	(210210)
2.0	Sub-Total for 200KVA Generator Set	Sum	
3.0	Sub-Total for AMF Panel	Sum	
4.0	Sub-Total for recommended Spare parts and lubricants	Sum	
5.0	Sub-Total for tools to be supplied with the set	Sum	
6.0	Allow for 2sets of "as installed Drawings"	Sum	
GRAN KEMS		SUM	

ГОТAL AMOUNT IN WORDS: - Kenya Shillings
Гenderer's Name and Stamp
1
SignatureDate

PIN No	VAT Certificate No
Witness	. Address
Signature of witness	Date

SCHEDULE OF UNIT RATES

- 1. The tenderer shall insert unit rates against the items in the following schedules and may add such other items as he considers appropriate.
- 2. The unit rates shall include for supply, transport, insurance, delivery to site, storage as necessary, assembling, cleaning, installing, connecting, profit and maintenance in defects liability and any other obligation under this contract.
- 3. The unit rates will be used to assess the value of additions or omissions arising from authorized variations to the contract works.
 - 5. Where trade names or manufacturer's catalogue numbers are mentioned in the specification, the reference is intended as a guide to the type of article or quality of material required. Alternative brands of **equal** and **approved** quality will be accepted.

SCHEDULE OF UNIT RATES

(To be completed by the Tenderer)

ITEM	DESCRIPTION	RATE (KSHS)
1.0	PVC/SWA/PVC Copper cables per Metre	
	a) 120mm² 4Core	
	b) 95mm ² 4Core	
	c) 150mm² 4 Core	
	d) 240mm² 4Core	
	e) 70mm² 4Core	
	f) 300mm ² Single Core armored	
	g) 300mm x 50mm perforated cable tray	
	h) 200mm diameter 14SWG Exhaust Pipe	
	i) 150mm diameter 14SWG Exhaust Pipe	
	j) 250mm diameter, 14SWG Exhaust Pipe	

IFT Number: KEMSA-ONT13-2021/2022

			For o	DER REG NO official use onl of tender notice ing date:	y	uary, 2022 n, 2022)22		P. O. NAIROB TEL: 254- FAX: 254	S AUTHOR BOX 4771	5, 00100,
NAM Addre	E OF FIRM QUOTING:								Single P	ide are alle	wod
	ess: e, fax, e-mail:								Siligie b	ids are allo	weu
Item	Item Description	Qua	ntity	Unit Price KEMSA Delivered	Net Tota Price	Brand	manuf r	acture	Country of origin	Delivery period	Remark s
1	Supply, Installation, Testing and Commissioning of Generator at KEMSA Embakasi Warehouse	1									
	Total cost										
NAME						Company	Seal				
Signation Date:	ture					 .					

	Page	76	of	92
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Currency	

Section H: Sample Tender Security Form	
IFT No.:	
Supply and delivery of	
To: Kenya Medical Supplies Authority	
WHEREAS [insert: name of Tenderer] (hereinafter called dated [insert: date of tender] for the performance of the "the Tender")	•
KNOW ALL PERSONS by these present that WE [ins bank] (hereinafter called "the Bank") are bound unto called "the Purchaser") in the sum of: [insert: amount made to the said Purchaser, the Bank binds itself, its suc	[insert: name of Purchaser] (hereinafter t], for which payment well and truly to be
Sealed with the Common Seal of the said Guarantor the [insert: year].	nis [insert: number] day of [insert: month],
tender validity specified in the instructions to tenderers if required or (b) Fails or refuses to furnish the instructions to tenderers We undertake to pay to the Procuring Entity up to twritten demand, without the Procuring Entity having to	fied of the acceptance of his tender by the 7: orm of agreement in accordance with the Performance Security, in accordance with the above amount upon receipt of its first o substantiate its demand, provided that in
its demand the Procuring Entity will note that the amo occurrence of one or both of the two conditions specifyi This guarantee will remain in full force up to and inctender validity and any demand in respect thereof sho above date.	ng the occurred condition or conditions. cluding thirty (30) days after the period of
Date:	Signature of the Guarantor
(Witness)	(Seal)

Insurance Tender Security Form	
IFT No.:	
Supply and delivery of	
To: Kenya Medical Supplies Authority WHEREAS [insert: name of Tenderer] (hereinafter called dated [insert: date of tender] for the performance of the "the Tender") KNOW ALL PERSONS by these present that WE [insert: address of insurance company] (hereinafter called name of Purchaser] (hereinafter called "the Purchaser") payment well and truly to be made to the said Purchase and assigns by these presents.	e above-named Contract (hereinafter called esert: name of the insurance company] of ed "the Guarantor") are bound unto [insert: in the sum of: [insert: amount], for which er, the guarantor binds itself, its successors
Sealed with the Common Seal of the said Guarantor the [insert: year].	nis [insert: number] day of [insert: month],
THE CONDITIONS of this obligation are: (b) If after tender opening the tender of tender validity specified in the ir 2. If the tenderer rejects the correct procuring entity and 3. If the tenderer, having been notic employer during the period of tender validity (a) Fails or refuses to execute the foundations to tenderers if required or	fied of the acceptance of his tender by the ried of the acceptance of his tender by the ried or agreement in accordance with the Performance Security, in accordance with the above amount upon receipt of its first to substantiate its demand, provided that in bunt claimed by it is due to it, owing to the ring the occurred condition or conditions.
Date:	Signature of the Guarantor
(Witness)	(Seal)

Section I: Sample Contract Form					
THIS AGREEMENT made the day of 20 between[name of Procurement entity) of[country of Procurement entity] (hereinafter called "the Procuring entity") of the one part and [name of tenderer] of [city and country of tenderer] (hereinafter called "the tenderer") of the other part:					
WHEREAS the Procuring entity invited tenders for procurement of spare parts for machine model MP 2501SP, MP 5002, MP 2501, MP 5002SP, MPC 4504EX, MP 2852 and MP 5055 on the basis of the rates specified on the appended schedules (hereinafter called "the Contract Price").					
NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:					
1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Conditions of Contract referred to.					
2. The following documents shall be deemed to form and be read and construed as part of this Agreement, viz.:					
(a) the Tender Form and the Price Schedule submitted by the tenderer;(b) the General Conditions of Contract;(c) the Special Conditions of Contract; and(d) the Procuring entity's Notification of Award					
3. In consideration of the payments to be made by the Procuring entity to the tenderer as hereinafter mentioned, the tenderer hereby covenants with the Procuring entity to provide the services and to remedy defects therein in conformity in all respects with the provisions of the Contract					
4. The Procuring entity hereby covenants to pay the tenderer in consideration of the provision of the services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.					
IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.					
Signed, sealed, delivered bythe(for the Procuring entity)					
Signed, sealed, delivered bythe(for the tenderer)					
in the presence of					
Section J: Performance Security Bank Guarantee (unconditional)					
IFT No.:					

To: Kenya, Medical Supplies Authority (KEMSA).

Supply and delivery of -----

Dear Sir or Madam:

We refer to the Contract Agreement ("the Contract") signed on [insert: date] between you and [insert: name of Tenderer] ("the Supplier") concerning the supply and delivery of [insert: a brief description of the Goods]. By this letter we, the undersigned, [insert: name of bank], a bank (or company) organized under the laws of [insert: country of bank] and having its registered/principal office at [insert: address of bank], (hereinafter, "the Bank") do hereby jointly and severally with the Tenderer irrevocably guarantee payment owed to you by the Tenderer, pursuant to the Contract, up to the sum of [insert: amount in numbers and words]. This guarantee shall be reduced or expire as provided for by GCC Sub-Clause 8.4.

We undertake to make payment under this Letter of Guarantee upon receipt by us of your first written demand signed by your duly authorized officer declaring the Tenderer to be in default under the Contract and without cavil or argument any sum or sums within the abovenamed limits, without your need to prove or show grounds or reasons for your demand and without the right of the Tenderer to dispute or question such demand. Our liability under this Letter of Guarantee shall be to pay to you whichever is the lesser of the sum so requested or the amount then guaranteed under this Letter in respect of any demand duly made under this Letter prior to expiry of this Letter of Guarantee, without being entitled to inquire whether or not this payment is lawfully demanded.

This Letter of Guarantee shall be valid from the date of issue until the date of expiration of the guarantee, as governed by the Contract. Except for the documents herein specified, no other documents or other action shall be required, notwithstanding any applicable law or regulation. Our liability under this Letter of Guarantee shall become null and void immediately upon its expiry, whether it is returned or not, and no claim may be made under this Letter after such expiry or after the aggregate of the sums paid by us to you shall equal the sums guaranteed under this Letter, whichever is the earlier. All notices to be given under this Letter shall be given by registered (airmail) post to the addressee at the address herein set out or as otherwise advised by and between the parties hereto.

We hereby agree that any part of the Contract may be amended, renewed, extended, modified, compromised, released, or discharged by mutual agreement between you and the Tenderer, and this security may be exchanged or surrendered without in any way impairing or affecting our liabilities hereunder without notice to us and without the necessity for any additional endorsement, consent, or guarantee by us, provided, however, that the sum guaranteed shall not be increased or decreased.

No action, event, or condition that by any applicable law should operate to discharge us from liability hereunder shall have any effect, and we hereby waive any right we may have to apply such law, so that in all respects our liability hereunder shall be irrevocable and, except as stated herein, unconditional in all respects.

Tot and on benait of the bank
Signed:
Date:
in the capacity of: [insert: title or other appropriate designation]
Common Seal of the Bank

For and on behalf of the Bank

SECTION K: DECLARATION OF UNDERTAKING $\underline{\textbf{ANNEX I}}$

SELF	DECLARATION	THAT	THE	PERSON	/TENDERER	WILL	NOT	ENGAGE	IN	ANY
CORI	RUPT OR FRAUDI	JLENT	PRAC	TICE.	•					

I,, of P. O Box
being a resident ofin the Republic
of
1. THAT, I am the Chief Executive/ Managing Director/ Principal Officer/ Director
of(insert
name of the company) who is a bidder in respect of Tender
No
title/ description) for(insert
name of the Procuring entity) and duly authorized and competent to make this statement.
2. THAT the aforesaid Bidder, its servant and/or agents/ subcontractors will not engage in any
corrupt or fraudulent practice and has not been requested to pay any inducement to any
member of the Board, Management, Staff and/ or employees and/or agents of
(insert name of the procuring entity) which is
the procuring entity.
3. THAT the aforesaid Bidder, its servant and/or agents/ subcontractors have not offered any
inducement to any member of the Board, Management, Staff and/ or employees and/or agents
of(insert name of the procuring entity)
4. THAT the aforesaid Bidder will not engage/ has not engaged in any corrosive practice with
other bidders participating in the subject tender.
5. THAT what is deponed to hereinabove is true to the best of my knowledge information and
belief.
(Title) (Signature) (Date)
(=)

Bidder Official Stamp

Bidder Official Stamp

ANNEX II

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

I.	, of Post
Ο	ffice Boxbeing a resident
of	in the Republic of
1.	THAT I am the Company Secretary/ Chief Executive/ Managing Director/ Principal Officer/Director of
	company) who is a Bidder in respect of Tender No
2.	duly authorized and competent to make this statement. THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.
3.	THAT what is deponed to hereinabove is true to the best of my knowledge, information and belief.
	(Title) (Signature) (Date)

SECTION L: CONFIDENTIAL BUSINESS QUESTIONNAIRE

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

	You are advised that it is a serious of Part General:	offence to give false information on this Form.
		Street/Road
		Fax Email
	Registration Certificate No	
Mavi	mum value of business which you ca	n handle at any one time Kshs
ινιαχι	•	Branch
	Name of your bankers	Drancii
	Part 2(a) - Sole Proprietor:	
		Age
		Country of origin
	1 tationality	country of origin
	Citizenship details	
	r	
	Party 2(b) - Partnership	
	Give details of partners as follows	
	1	
	Name Nationality	Citizenship Details Shares
1.		
2.		
3.		
4.		
5.		
D	2/ \	
	2(c) – Registered Company:	
	ate or public	
State	the nominal and issued capital of the	
	Nominal Kshs	
~ :	Issued Kshs	
Give	details of all directors as follows	
	Name Nationality	-
1.		
2.		
3.		
4.		
5.		
_		CI (T) 1
Date.		Signature of Lenderer

If a citizen, indicate under "Citizenship Details" whether by Birth, Naturalization or Registration

PART II: PERSONNEL

Please enclose copy of the organization chart of the firm indicating the positions as they relate to this Tender.

Please provide the following information for the key personnel proposed for administration of this Contract.

1.	Name				
2.	Age				
3.	Academic Qualification				
4.	Professional Qualificati	on			
5.	Work Experience				
6.	Length of service with t				
7.	Any other relevant deta	_			
	RT III: FINANCIAL/CO				
	·				
1.	Attach a copy of firm's				
2.	Summary of quick asse	ts and current liabiliti	es as of/20)(Date)	
	Assets				
	a) Cash in hand				
	b) Cash Deposite	ed in Banks (State Det	ails Below)		
	Total Cash				
	Name of Bank	Location	Deposit in Name of	Amount	
	Institution				
	i.				

	Deposited With	Name & Address	Purpose	Date of Recovery	Amount
i.					
ii.					
iii.					
iv.					

i. ii. iii. iv. Attach Letters of Reference from the firm's bankers regarding Volume of business transacted between the Government of company during the last 12 months, if any KShs Volume of business transacted with other parastatal or months, if any, KShs Work performed as a Service Provider of similar nature years. List details of contracts under way or committed, inc.		
Name and address of Owner i. ii. iii. iii. iv. Attach Letters of Reference from the firm's bankers regarding Volume of business transacted between the Government of company during the last 12 months, if any KShs Volume of business transacted with other parastatal or months, if any, KShs Work performed as a Service Provider of similar nature years. List details of contracts under way or committed, inclient Name Name of Client Contact Person Type of service provider		
i. ii. iii. iv. Attach Letters of Reference from the firm's bankers regarding Volume of business transacted between the Government of company during the last 12 months, if any KShs Volume of business transacted with other parastatal or months, if any, KShs Work performed as a Service Provider of similar nature years. List details of contracts under way or committed, incident Name Name of Client Contact Person Type of service provider of service	roved)	
i. ii. iii. iv. Attach Letters of Reference from the firm's bankers regarding Volume of business transacted between the Government of company during the last 12 months, if any KShs Volume of business transacted with other parastatal or months, if any, KShs Work performed as a Service Provider of similar nature years. List details of contracts under way or committed, incident Name Name of Client Contact Person Type of service provider of service		
i. ii. iii. iv. Attach Letters of Reference from the firm's bankers regarding Volume of business transacted between the Government of company during the last 12 months, if any KShs Volume of business transacted with other parastatal or months, if any, KShs Work performed as a Service Provider of similar nature years. List details of contracts under way or committed, incident Name Name of Client Contact Person Type of service provider of service		
i. ii. iii. iv. Attach Letters of Reference from the firm's bankers regarding Volume of business transacted between the Government of company during the last 12 months, if any KShs	Amount Receivable	
Attach Letters of Reference from the firm's bankers regarding. Volume of business transacted between the Government of company during the last 12 months, if any KShs Volume of business transacted with other parastatal or months, if any, KShs Work performed as a Service Provider of similar nature years. List details of contracts under way or committed, inclient Name Name of Client Contact Person Type of service provider p		
Attach Letters of Reference from the firm's bankers regarding. Volume of business transacted between the Government of company during the last 12 months, if any KShs Volume of business transacted with other parastatal or months, if any, KShs Work performed as a Service Provider of similar nature years. List details of contracts under way or committed, incident Name Name of Client Contact Person Type of service		
Attach Letters of Reference from the firm's bankers regarding. Volume of business transacted between the Government of company during the last 12 months, if any KShs Volume of business transacted with other parastatal or months, if any, KShs Work performed as a Service Provider of similar nature years. List details of contracts under way or committed, incident Name Name of Client Contact Person Type of service provider of the parastatal or months.		
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years. List details of contracts under way or committed, incient Name Name of Client Contact Person Type of servi		
	vices provided and letion	Value Contract
		<u> </u>

)	State whether or not you have experienced any problem(s) of non- performance with any

9. State whether or not you have experienced any problem(s) of non- performance with any contract(s) awarded to you during the last 12 months and give a brief explanation/ description of the problem(s). Please give the information on a separate sheet of paper.

PART IV: TENDERER'S REFERENCES

NAME OF TENDERER'S OTHER CLIENTS AND VALUES OF CONTRACT/ORDERS IN LAST TWELVE MONTHS

1.	First Client (Organization)
i)	Name of 1st client (Organization)
ii)	Address of Client (Organization)
iii)	Telephone No. of Client
iv)	Facsimile No of Client
v)	E-mail Address of Client
vi)	Name of Contact Person at the Client (Organization)
vii)	Value of Contracts/Orders
viii	Duration of ongoing Contracts/Orders
2.	Second Client (Organization)
i)	Name of 2 nd client (Organization)
ii)	Address of Client (Organization)
iii)	Telephone No. of Client
iv)	Facsimile No of Client
v)	E-mail Address of Client
vi)	Name of Contact Person at the Client (Organization)
vii)	Value of Contracts/Orders
viii)Duration of ongoing Contracts/Orders
3.	Third Client (organization)
i)	Name of 3rd client (Organization)
ii)	Address of Client (Organization)
iii)	Telephone No. of Client
iv)	Facsimile No of Client
v)	E-mail Address of Client
vi)	Name of Contact Person at the Client (Organization)
vii)	Value of Contracts/Orders
viii)Duration of ongoing Contracts/Orders
4.	Fourth Client (Organisation)

i)	Name of 4th client (Organization)
ii)	Address of Client (Organization)
iii)	Telephone No. of Client
iv)	Facsimile No of Client
v)	E-mail Address of Client
vi)	Name of Contact Person at the Client (Organization)
vii)	Value of Contracts/Orders
viii)Duration of ongoing Contracts/Orders
5.	Fifth Client (organization)
i)	Name of 5 th client (Organization)
ii)	Address of Client (Organization)
iii)	Telephone No. of Client
iv)	Facsimile No of Client
v)	E-mail Address of Client
vi)	Name of Contact Person at the Client (Organization)
vii)	Value of Contracts/Orders
viii)Duration of ongoing Contracts/Orders
(NI	3: You may include additional clients as you may wish to support your application)
PA	RT V: Tender Questionnaire
1.	Please fill in Block letters
2.	Full Name of Tenderer:
	Full address of tenderer to which tender correspondence is to be sent (unless an agent has been appointed below)
• • • •	
4.	Telephone number (s) of Tenderer
Э.	E-mail of Tenderer

perio	od.			
••••••				
7. Deta	ails of Tenderer's nominated agent, if any, to receive tender notices. This is es	ssential of the		
	erer does not have his registered address in Kenya.			
Nar				
	dress:			
Fax	ephone:			
	Mail Address:			
12-14	Tall Mudless.			
Signatui	re of Tenderer			
PART V	/I: Confidential Business Questionnaire			
	requested to give particulars indicated in Part1 and either Part 2(a), 2(b) or 2 to your type of business.	(c) whichever		
You are	advised that it is a serious offence to give false information on this Form			
Part 1-G	General			
	s Name			
Registra	ntion Ref No			
Location	n of business premises, i.e. Building			
Floor No	oRoom No			
Plot No.	Street/Road			
Postal A	AddressPostal Code			
Tel No	Fax No.			
Email	Website			
Nature o	of business			
Current	Trade License NoExpiry Date			
VAT Ce	ertificate NumberPIN Certificate No			
Local A	uthority License NoExpiry Date			
	NB: Attach copies of Registration Certificate, VAT Registration Certificate, PIN Certificate, Local Authority License and a Valid Tax Compliance Certificate.			
Maximu	ım Value of business which you can handle at any one time KShs			
Name of	Name of your main Bankers			
D 1	D			

6. Name of Tenderer's representative to be contacted on matters of the tender during the tender

Part 2 (a) Sole	Proprietor:		
My Name in f	ull	Ag	e
Nationality	ID/Pa	ssport No	Country of Origin
Part 2(b) Parti	nership		
Name	Nationality	*Citizenship Details	shares
1			
2			
3			
4			
5			
Part 2(c) Regi	stered Company		
State whether	Private or Public		
State the nom	inal and issued Capital	of the Company	
Nominal Kshs	3	Or Other Convertible o	currency
Issued KShs		Or Other Convertible	currency
Give Details o	of all Directors as follow	vs:	
Name	Nationality	*Citizenship Details	Shares
1			
2			
3			
4			
5			
Part 3- Names	s of all Associated or H	Holding Companies (If a	ny)
1			
2			
3			
4			

If more companies are applicable, please give the information on a separate sheet of paper.

Part 4 - Give Details of all Directors of the Companies you have listed above as follows:-
1
2
3
4
5
*If Kenyan Citizen, indicate under "Citizenship Details", whether by Birth,
Naturalization or Registration.
DECLARATION
Give Statement of compliance with the requirements of clause 1.2 of the General instructions to
Tenderers under section C.
I certify that all the above particulars are true
Name of Applicant (Officer)
Signature of Applicant
Position in the Company/Title
Date

NB: Please affix rubber stamp or seal

SECTION M: EVALUATION CRITERIA

A. PRELIMINARY EVALUATION CRITERIA

MANDATORY REQUIREMENTS

No	Requirements	YES/NO
MR 1	Must Provide a company's certificate of incorporation/Registration (MANDATORY)	
MR 2	Must Provide a valid Tax Compliance Certificate (MANDATORY)	
MR 3	Original Bid Bond provided and valid for 120 days from date of tender opening. Bid bond should be Ksh 80,000.00 from a reputable bank or an insurance company approved by Public Procurement Regulatory Authority (PPRA). (MANDATORY)	2
MR 4	Bidding documents must be paginated/serialized. All bidders are required to submit their documents paginated in a continuous ascending order from the first page to the last in this format; (i.e., 1, 2, 3 n where n is the last page) (MANDATORY)	3
MR 5	Tender form (on a letterhead showing the tenderers complete name and business address) duly completed and signed. The Form of Tender shall include the following Forms duly completed and signed by the Tenderer or authorized representative (attach power of attorney where applicable)	t I
	 i. Tenderer's Eligibility-Confidential Business Questionnaire (MANDATORY). ii. Certificate of Independent Tender Determination iii. Self-Declaration of the Tenderer (a) Duly completed and signed self-Declaration that the person/ tenderer is not debarred in the matter of the PPADA 2015 (b) Duly completed and signed self-Declaration that the person/ Tenderer will not engage in any corrupt/fraudulent practice (c) Duly completed and signed declaration and commitment to the code of ethics 	
MR 6	Product Brochure with detailed specifications (MANDATORY)	
MR 7	Manufacturers Authorization Certificate (MANDATORY)	

NOTE: Failure to comply with Mandatory requirements will lead to disqualification.

B. TECHNICAL EVALUATION

The technical evaluation will involve examination of specifications on the product brochure against the technical specifications spelt out in the tender document to confirm conformity.

The evaluation will be on a "Yes/No" basis;

NOTE: Only bidders who are successful at this stage will proceed to Financial Evaluation.

C. FINANCIAL EVALUATION

Bidders who are successful at preceding stages of evaluation will have their prices compared and award recommended to the lowest evaluated responsive bid.