RFX No: 1000002476



#### TENDER NO. KP1/9A.2/OT/045/SS/23-24

RE-TENDERING FOR THE PROPOSED DESIGN, SUPPLY, INSTALLATION, TESTING&COMMISSIONING OF ELECTRONIC SECURITY SYSTEMS IN SELECTED SUBSTATIONS, COMMERCIAL OFFICES & DEPOTS COMPANYWIDE

10th January 2024

# ALL TENDERERS ARE ADVISED TO READ CAREFULLY THIS TENDER DOCUMENT IN ITS ENTIRETY BEFORE MAKING ANY BID

TENDER DOCUMENT FOR WORKS (E-PROCUREMENT OPEN TENDER SYSTEM)

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## **ABBREVIATIONS**

AO Accounting officer

FY Fiscal year

ICT Information, Communications Technology

ITT Instructions to Tenderers

JV Joint Venture

KPLC Kenya Power and Lighting PLC

NCB National competitive tender

PE Procuring Entity

PPADA Public Procurement and Asset Disposal Act, 2015

PPRA Public Procurement Regulatory Authority

R Responsive

NR Not-Responsive

RFQ Request for Quotation

STD Standard Tender Documents

TDS Tender data Sheet

TEC Tender Evaluation Committee

TOR Terms of reference

SLA Service Level Agreement

#### **DEFINITION OF TERMS**

- In this tender, unless the context or express provision otherwise requires: -
- a) Any reference to any Act shall include any statutory extension, amendment, modification, re-amendment or replacement of such Act and any rule, regulation or order made there-under.
  - b) "Date of Tender Document" shall be the **start date** specified on the KPLC tendering portal.
- c) "Day" means calendar day and "month" means calendar month.
- d) "KEBS" wherever appearing means the Kenya Bureau of Standards or its successor(s) and assign(s) where the context so admits.
- e) "KENAS" wherever appearing means the Kenya National Accreditation Service or its successor(s) and assign(s) where the context so admits
- f) "KPLC"Wherever appearing means The Kenya Power and Lighting PLC and shall have the same meaning with "Kenya Power" or "Kenya Power and Lighting Company Limited"
- g) "PPRA" wherever appearing means The Public Procurement Regulatory Authority or its successor(s) and assign(s) where the context so admits.
- h) Reference to "the tender" or the "Tender Document" includes its appendices and documents mentioned hereunder and any reference to this tender or to any other document includes a reference to the other document as varied supplemented and/or replaced in any manner from time to time.
- i) "The Procuring Entity" means The Kenya Power and Lighting Company Limited or its successor(s) and assign(s) where the context so admits (hereinafter abbreviated as KPLC).
- *i)* "The Tenderer" means the person(s) submitting its Tender for the works in response to the Invitation to Tender.
- k) Where there are two or more persons included in the expression the "Tenderer", any act or default or omission by the Tenderer shall be deemed to be an act, default or omission by any one or more of such persons.
  - *Words importing the masculine gender only, include the feminine gender*
  - m) Words importing the singular number only include the plural number and vice-versa and where there are two or more persons included in the expression the "Tenderer" the covenants, agreements and obligations expressed to be made or performed by the Tenderer shall be deemed to be made or performed by such persons jointly and severally.
- n) KPLC's "authorized person" shall mean its MD & CEO who is designated by the PPAD Act 2015 to exercise such power, authority or discretion as is required under the tender and any contract arising therefrom, or such other KPLC staff delegated with such authority.
  - o) Citizen contractors-means a person/firm wholly owned and controlled by person(s) who are citizens of Kenya.
  - p) Local contractors- a firm shall be qualified as a local contractor if it is registered in Kenya.
- *q)* "DDP" refers to Delivered Duty Paid

#### INVITATION TO TENDER

Tender Date: 10<sup>th</sup> January 2024

**Tender No: TENDER NO. KP1/9A.2/OT/045/SS/23-24** 

Tender Name: RE-TENDERING: PROPOSED DESIGN, SUPPLY, INSTALLATION,

TESTING & COMMISSIONING OF ELECTRONIC SECURITY SYSTEMS IN SELECTED SUBSTATIONS, COMMERCIAL OFFICES & DEPOTS

COMPANYWIDE

#### 1.1 Introduction

The Kenya Power & Lighting Company Plc (KPLC) invites bids from eligible Tenderers for **Re-Tendering: Proposed Design, Supply, Installation, Testing & Commissioning of Electronic Security Systems in Selected Substations, Commercial Offices & Depots Companywide.**Interested Eligible Tenderers may obtain further information from the General Manager- Supply Chain, The Kenya Power & Lighting Company Plc at Stima Plaza, 3<sup>rd</sup> Floor, Kolobot Road, P.O. Box 30099 – 00100 Nairobi, Kenya.

#### 1.2 Obtaining tender documents.

1.2.1 Tender documents detailing the requirements may be obtained from the KPLC E- Procurement Portal – RFX No: 1000002476

Kindly ensure you are registered in Central Office as a Region in order for you to participate in this tender.

1.2.2 Prospective bidders may also download the tender document from KPLC's website (www.kplc.co.ke) free of charge.

#### 1.3 Submission of Tender documents

Completed Tenders are to be submitted in electronic format on the KPLC's E-procurement portal on the due date and time published on the portal. Tenderers are required to visit the portal from time to time for revised closing dates and addendums. The Tender is to be submitted **ONLINE** on or before the submission date and time indicated on the **KPLC tendering portal**.

## 1.4 Tender Closing Date and Time

Tender closing date and time is as specified in the KPLC's tendering portal.

## 1.5 Prices

Offered Price should be inclusive of all taxes, duties, levies and delivery costs to the premises (where applicable) of KPLC or other specified site, must be in Kenya Shillings and shall remain valid for **One Hundred and Eighty (180) days** from the closing date of the tender. *Please note that prices indicated on the KPLC tendering portal should be exclusive of VAT*.

## 1.6 Opening of submitted Tenders

Tenders will be opened promptly thereafter in the presence of the Tenderer's or their representatives who choose to attend at the Auditorium, Stima Plaza, Kolobot Road. All health protocols during opening *must* be observed and *only one representative* will be allowed in opening venue.

## 1.7 Pre-bid Meeting

There will be a **pre-bid meeting** on 15<sup>th</sup> **January**, 2024 at Stima Plaza Auditorium, Kolobot Road, Nairobi at 10:00 am to 11:00am. Attendance will be mandatory for bidders who had not participated in the previous cancelled Tender No. KP1/9A.2/OT/032/SS/23-24.

## **TENDER SUBMISSION CHECKLIST**

## Bidders are advised to clearly label their documents while uploading on the portal.

No.	Item	Tick Where
		Provided
1	Tender Security - Bank Guarantee or irrevocable letter of credit (issued by Banks	
	Licensed by the Central Bank of Kenya), Guarantee by a deposit taking Microfinance	
	Institution, Sacco Society, the Youth Enterprise Development Fund or the Women	
	Enterprise Fund.	
2	Declaration Form	
3	Duly completed Tender Form	
4	Copy of Company or Firm's Registration Certificate	
5	Copy of PIN Certificate	
6	Copy of Valid Tax Compliance Certificate	
7	Confidential Business Questionnaire (CBQ)	
8	National Construction Authorities(NCA) registration Certificate and a valid Tenderer's	
	Practicing License for the relevant category	
9	Proposed Work program (Work method & schedule)	
10	Duly completed and signed Site Visit Form	
11	Certificate of Confirmation of Directors and Shareholding (C.R.12) for registered	
	companies and if not a registered company registration of business name for those	
	trading as a sole proprietor or a registration of partnership deed registered under the	
	Kenyan law or equivalent certification for foreign tenderers.	
12	Names with full contact as well as physical addresses of previous customers of similar	
	works and reference letters from at least four (4) previous clients	
13	Priced Bill of Quantities (signed and stamped by bidder)	
14	Financial Statements. The audited financial statements required must be those that are	
	reported within eighteen (18) calendar months of the date of the tender document.	
	(For companies or firms that are registered or incorporated within the last one	
	calendar year of the Date of the Tender Document, they should submit certified copies	
	of bank statements covering a period of at least six months prior to the date of the	
	tender document. The copies should be certified by the Bank issuing the statements.	
	The certification should be original).	
15.	Any other document or item required by the Tender Document. (The Tenderer shall	
	specify such other documents or items he has submitted)	

## \*NOTES TO TENDERERS

- 1. Valid Tax Compliance Certificate shall be one issued by the relevant tax authorities and valid for at least up to the tender closing date. All Kenyan Registered Tenderers must provide a valid Tax Compliance Certificate.
- 2. All Kenyan Registered Tenderers must provide the Personal Identification Number Certificate (PIN Certificate).
- 3. Foreign Tenderers must provide equivalent documents to Tax Compliance and PIN certificates from their country of origin statements certifying that the equivalent documentation is not issued in the Tenderer's country of origin. Such Statement(s) shall be original and issued by the Tax authorities in the Tenderer's country of origin.



## SECTION I: INSTRUCTIONS TO TENDERERS

#### A General Provisions

## 1. Scope of Tender

1.1 Kenya Power as defined in the Appendix to Conditions of Contract invites tenders for Works Contract as described in the tender documents. The name, identification, and number of lots (contracts) of this Tender Document are specified in the **TDS**.

#### 2. Fraud and Corruption

- 2.1 Kenya Power requires compliance with the provisions of the Public Procurement and Asset Disposal Act, 2015, Section 62 "Declaration not to engage in corruption". The tender submitted by a person shall include a declaration that the person shall not engage in any corrupt or fraudulent practice and a declaration that the person or his or her sub-contractors are not debarred from participating in public procurement proceedings.
- 2.2 Kenya Power requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/or civil sanctions may be imposed. To this effect, Tenders shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.
- 2.3 Unfair Competitive Advantage Fairness and transparency in the tender process require that the firms or their Affiliates competing for a specific assignment do not derive a competitive advantage from having provided consulting services related to this tender. To that end, Kenya Power shall indicate in the **Data Sheet** and make available to all the firms together with this tender document all information that would in that respect give such firm any unfair competitive advantage over competing firms.
  - 2.4 Tenderers shall permit and shall cause their agents (where declared or not), subcontractors, sub consultants, service providers, suppliers, and their personnel, to permit KPLC to inspect all accounts, records and other documents relating to any initial selection process, prequalification process, tender submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by KPLC.

## 3. Eligible Tenderers

- 3.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 3.7 or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter into such an agreement supported by a letter of intent. Public employees and their close relatives (*spouses*, *children*, *brothers*, *sisters and uncles and aunts*) are not eligible to participate in the tender. In the case of a joint venture, all members shall be jointly and severally liable for the execution of the entire Contract in accordance with the Contract terms. The JV shall nominate a Representative who shall have the authority to conduct all business for and on behalf of any and all the members of the JV during the tendering process and, in the event the JV is awarded the Contract, during contract execution. The maximum number of JV members shall be specified in the **TDS**.
- 3.2 Public Officers of Kenya Power, their Spouses, Child, Parent, Brothers or Sister. Child, Parent, Brother or Sister of a Spouse, their business associates or agents and firms/organizations in which they have a substantial or controlling interest shall not be eligible to tender or be awarded a contract. Public Officers are also not allowed to participate in any procurement proceedings.
- 3.3 A Tenderer shall not have a conflict of interest. Any tenderer found to have a conflict of interest shall be disqualified. A tenderer may be considered to have a conflict of interest for the purpose of this tendering process, if the tenderer:
- a) Directly or indirectly controls, is controlled by or is under common control with another tenderer; or
- b) Receives or has received any direct or indirect subsidy from another tenderer; or
- c) Has the same legal representative as another tenderer; or
- d) Has a relationship with another tenderer, directly or through common third parties, that puts it in a position to influence the tender of another tenderer, or influence the decisions of Kenya Power regarding this

#### tendering process

- e) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender; or
- f) any of its affiliates has been hired (or is proposed to be hired) by Kenya Power as Engineer for the Contract implementation; or
- g) Would be providing goods, works, or non-consulting services resulting from or directly related to consulting services for the preparation or implementation of the contract specified in this Tender Document or
- h) Has a close business or family relationship with a professional staff of Kenya Power who:
- i) are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract; or
- ii) would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to Kenya Power throughout the tendering process and execution of the Contract.
- 3.4 A tenderer shall not be involved in corrupt, coercive, obstructive, collusive or fraudulent practice. A tenderer that is proven to have been involved any of these practices shall be automatically disqualified.
- 3.5 A Tenderer (either individually or as a JV member) shall not participate in more than one Tender, except for permitted alternative tenders. This includes participation as a subcontractor in other Tenders. Such participation shall result in the disqualification of all Tenders in which the firm is involved. A firm that is not a tenderer or a JV member may participate as a subcontractor in more than one tender. Members of a joint venture may not also make an individual tender, be a subcontractor in a separate tender or be part of another joint venture for the purposes of the same Tender.
- 3.6 A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT 4.8.A Tenderer shall be deemed to have the nationality of a country if the Tenderer is constituted, incorporated or registered in and operates in conformity with the provisions of the laws of that country, as evidenced by its articles of incorporation (or equivalent documents of constitution or association) and its registration documents, as the case may be. This criterion also shall apply to the determination of the nationality of proposed subcontractors or sub- consultants for any part of the Contract including related Services.
- 3.7 Tenderer that has been debarred from participating in public procurement shall be ineligible to tender or be awarded a contract. The list of debarred firms and individuals is available from the website of PPRA www.ppra.go.ke.
- 3.8 Tenderers that are state-owned enterprises or institutions may be eligible to compete and be awarded a Contract(s) only if they are accredited by PPRA to be (i) a legal public entity of the state Government and/or public administration, (ii) financially autonomous and not receiving any significant subsidies or budget support from any public entity or Government, and (iii) operating under commercial law and vested with legal rights and liabilities similar to any commercial enterprise to enable it compete with firms in the private sector on an equal basis.
- 3.9 A Firms and individuals may be ineligible if their countries of origin (a) as a matter of law or official regulations, Kenya prohibits commercial relations with that country, or (b) by an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods or contracting of works or services from that country, or any payments to any country, person, or entity in that country. A tenderer shall provide such documentary evidence of eligibility satisfactory to Kenya Power, as Kenya Power shall reasonably request.
- Foreign tenderers are required to source at least forty (40%) percent of their contract inputs (in supplies, subcontracts and labor) from national suppliers and contractors. To this end, a foreign tenderer shall provide in its tender documentary evidence that this requirement is met. Foreign tenderers not meeting this criterion will be automatically disqualified. Information required to enable Kenya Power determine if this condition is met shall be provided in for this purpose is be provided in "SECTION III EVALUATION AND QUALIFICATION CRITERIA".
- 3.11 Pursuant to the eligibility requirements of ITT 4.10, a tender is considered a foreign tenderer, if the tenderer is not registered in Kenya or if the tenderer is registered in Kenya and has <u>less than 51 percent</u> ownership by Kenyan

Citizens. JVs are considered as foreign tenderers if the individual member firms are not registered in Kenya or if

are registered in Kenya and have less than 51 percent ownership by Kenyan citizens. The JV shall not subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.

- 3.12 The National Construction Authority Act of Kenya requires that all local and foreign contractors be registered with the National Construction Authority and be issued with a Registration Certificate before they can undertake any construction works in Kenya. Registration shall not be a condition for tender, but it shall be a condition of contract award and signature. A selected tenderer shall be given opportunity to register before such award and signature of contract. Application for registration with National Construction Authority may be accessed from the website www.nca.go.ke.
- 3.13 The Competition Act of Kenya requires that firms wishing to tender as Joint Venture undertakings which may prevent, distort or lessen competition in provision of services are prohibited unless they are exempt in accordance with the provisions of Section 25 of the Competition Act, 2010. JVs will be required to seek for exemption from the Competition Authority. Exemption shall not be a condition for tender, but it shall be a condition of contract award and signature. A JV tenderer shall be given opportunity to seek such exemption as a condition of award and signature of contract. Application for exemption from the Competition Authority of Kenya may be accessed from the website www.cak.go.ke
- 3.14 A Kenyan tenderer shall provide evidence of having fulfilled his/her tax obligations by producing a valid tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

## 4. Eligible Goods, Equipment, and Services

- 4.1 Goods, equipment and services to be supplied under the Contract may have their origin in any country that is not eligible under ITT 3.9. At Kenya Power's request, Tenderers may be required to provide evidence of the origin of Goods, equipment and services.
- 4.2 Any goods, works and production processes with characteristics that have been declared by the relevant national environmental protection agency or by other competent authority as harmful to human beings and to the environment shall not be eligible for procurement.

## 5. Tenderer's Responsibilities

- 5.1 The tenderer shall bear all costs associated with the preparation and submission of his/her tender, and Kenya Power will in no case be responsible or liable for those costs.
- 5.2 The tenderer, at the tenderer's own responsibility and risk, is encouraged to visit and examine the Site of the Works and its surroundings, and obtain all information that may be necessary for preparing the tender and entering into a contract for construction of the Works. The costs of visiting the Site shall be at the tenderer's own expense.
- 5.3 The Tenderer and any of its personnel or agents will be granted permission by Kenya Power to enter upon its premises and lands for the purpose of such visit. The Tenderer shall indemnify Kenya Power against all liability arising from death or personal injury, loss of or damage to property, and any other losses and expenses incurred as a result of the inspection.
- 5.4 The tenderer shall provide in the Form of Tender and Qualification Information, a preliminary description of the proposed work method and schedule, including charts, as necessary or required.

#### **B.** Contents of Tender Documents

#### 6. Sections of Tender Document

- 6.1 The tender document consists of Parts 1, 2, and 3, which includes all the sections specified below, and which should be read in conjunction with any Addenda issued in accordance with ITT 8. PART 1 Tendering Procedures
- i) Section I Instructions to Tenderers (ITT)
- ii) Section II Tender Data Sheet (TDS)
- iii) Section III Evaluation and Qualification Criteria
- iv) Section IV Tendering Forms

v)

## **PART 2 Works Requirements**

- i) Section V Drawings
- ii) Section VI Specifications
- iii) Section VII Bills of Quantities

#### **PART 3 Conditions of Contract and Contract Forms**

- i) Section VIII General Conditions of Contract (GCC)
- ii) Section IX Special Conditions of Contract (SC)
- iii) Section X Contract Forms
- 6.2 The Invitation to Tender Document (ITT) issued by Kenya Power is not part of the Contract documents.
- 6.3 Unless obtained directly from Kenya Power, Kenya Power is not responsible for the completeness of the Tender document, responses to requests for clarification, the minutes of the pre-Tender meeting (if any), or Addenda to the Tender document in accordance with ITT 8. In case of any contradiction, documents obtained directly from Kenya Power shall prevail.

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

#### 7. Site Visit

7.1 The Tenderer, at the Tenderer's own responsibility and risk, is encouraged to visit and examine and inspect the Site of the Required Services and its surroundings and obtain all information that may be necessary for preparing the Tender and entering into a contract for the Services. The costs of visiting the Site shall be at the Tenderer's own expense.

#### 8. Pre-Tender Meeting

- 8.1 Kenya Power shall specify in the **TDS** if a pre-tender meeting will be held, when and where. Kenya Power shall also specify in the **TDS** if a pre-arranged pretender site visit will be held and when. The Tenderer's designated representative is invited to attend a pre-arranged pretender visit of the site of the works. The purpose of the meeting will be to clarify issues and to answer questions on any matter that may be raised at that stage.
- 8.2 The Tenderer is requested to submit any questions in writing, to reach Kenya Power not later than the period specified in the **TDS** before the meeting.
- 8.3 Minutes of the pre-Tender meeting and the pre-arranged pretender site visit of the site of the works, if applicable, including the text of the questions asked by Tenderers and the responses given, together with any responses prepared after the meeting, will be transmitted promptly to all Tenderers who have acquired the Tender Documents in accordance with ITT 6.3. Minutes shall not identify the source of the questions asked.
- 8.4 Kenya Power shall also promptly publish anonymized (*no names*) Minutes of the pre-Tender meeting and the pre-arranged pretender visit of the site of the works at the web page identified in the **TDS**. Any modification to the Tender Documents that may become necessary as a result of the pre-tender meeting and the pre-arranged pretender site visit, shall be made by Kenya Power exclusively through the issue of an Addendum pursuant to ITT 8 and not through the minutes of the pre-Tender meeting. Nonattendance at the pre-Tender meeting will not be a cause for disqualification of a Tenderer.

#### 9. Clarification and amendments of Tender Documents

9.1 A Tenderer requiring any clarification of the Tender Document shall contact Kenya Power in writing at Kenya Power's address specified in the **TDS** or raise its enquiries during the pre-Tender meeting and the pre-arranged pretender visit of the site of the works if provided for in accordance with ITT 8.4. Kenya Power will respond in writing to any request for clarification, provided that such request is received no later than the period specified in the **TDS** prior to the deadline for submission of tenders. Kenya Power shall forward copies of its response to all tenderers who have acquired the Tender Documents in accordance with ITT 6.3, including a description of the inquiry but without identifying its source. If specified in the **TDS**, Kenya

Power shall also promptly publish its response at the web page identified in the **TDS**. Should the clarification result in changes to the essential elements of the Tender Documents, Kenya Power shall amend the Tender Documents appropriately following the procedure under ITT 8.4.

## 10. Amendment of Tendering Document

- 10.1 At any time prior to the deadline for submission of Tenders, Kenya Power may amend the Tendering document by issuing addenda.
- Any addendum issued shall be part of the tendering document and shall be communicated in writing to all who have obtained the tendering document from Kenya Power in accordance with ITT 6.3. Kenya Power shall also promptly publish the addendum on Kenya Power's web page in accordance with ITT 8.4.
- 10.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, Kenya Power shall extend, as necessary, the deadline for submission of Tenders, in accordance with ITT 25.2 below.

## C. Preparation of Tenders

## 11. Cost of Tendering

11.1 The Tenderer shall bear all costs associated with the preparation and submission of its Tender, and Kenya Power shall not be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.

## 12. Language of Tender

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

## 13. Documents Comprising the Tender

- 13.1 The Tender shall comprise the following:
- a) Form of Tender prepared in accordance with ITT 14;
- b) Schedules including priced Bill of Quantities, completed in accordance with ITT 14 and ITT 16;
- c) Tender Security or Tender-Securing Declaration, in accordance with ITT 21.1;
- d) Alternative Tender, if permissible, in accordance with ITT 15;
- e) Authorization: written confirmation authorizing the signatory of the Tender to commit the Tenderer, in accordance with ITT 22.3;
- f) Qualifications: documentary evidence in accordance with ITT 19establishing the Tenderer's qualifications to perform the Contract if its Tender is accepted;
- g) Conformity: a technical proposal in accordance with ITT 18;
- h) Any other document required in the **TDS**.
- In addition to the requirements under ITT 11.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful Tender shall be signed by all members and submitted with the Tender together with a copy of the proposed Agreement. The Tenderer shall chronologically serialize pages of all tender documents submitted.
- 13.3 The Tenderer shall furnish in the Form of Tender information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Tender.

#### 14. Form of Tender and Schedules

14.1 The Form of Tender and Schedules, including the Bill of Quantities, shall be prepared using the relevant forms furnished in Section IV, Tendering Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITT 20.3. All blank spaces shall be

filled in with the information requested.

#### 15. Alternative Tenders

- 15.1 Unless otherwise specified in the **TDS**, alternative Tenders shall not be considered.
- When alternative times for completion are explicitly invited, a statement to that effect will be included in the **TDS**, and the method of evaluating different alternative times for completion will be described in Section III, Evaluation and Qualification Criteria.
- 15.3 Except as provided under ITT 13.4 below, Tenderers wishing to offer technical alternatives to the requirements of the Tender Documents must first price Kenya Power's design as described in the Tender Documents and shall further provide all information necessary for a complete evaluation of the alternative by Kenya Power, including drawings, design calculations, technical specifications, breakdown of prices, and proposed construction methodology and other relevant details. Only the technical alternatives, if any, of the Tenderer with the Winning Tender conforming to the basic technical requirements shall be considered by Kenya Power. When specified in the **TDS**, Tenderers are permitted to submit alternative technical solutions for specified parts of the Works, and such parts will be identified in the **TDS**, as will the method for their evaluating, and described in Section VII, Works' Requirements.

#### 16. Tender Prices and Discounts

- The prices and discounts (including any price reduction) quoted by the Tenderer in the Form of Tender and in the Bill of Quantities shall conform to the requirements specified below.
- 16.2 The Tenderer shall fill in rates and prices for all items of the Works described in the Bill of Quantities. Items against which no rate or price is entered by the Tenderer shall be deemed covered by the rates for other items in the Bill of Quantities and will not be paid for separately by Kenya Power. An item not listed in the priced Bill of Quantities shall be assumed to be not included in the Tender, and provided that the Tender is determined substantially responsive notwithstanding this omission, the average price of the item quoted by substantially responsive Tenderers will be added to the Tender price and the equivalent total cost of the Tender so determined will be used for price comparison.
- 16.3 The price to be quoted in the Form of Tender, in accordance with ITT 14.1, shall be the total price of the Tender, including any discounts offered.
- 16.4 The Tenderer shall quote any discounts and the methodology for their application in the Form of Tender, in accordance with ITT 14.1.
- 16.5 It will be specified in the **TDS** if the rates and prices quoted by the Tenderer are or are not subject to adjustment during the performance of the Contract in accordance with the provisions of the Conditions of Contract, except in cases where the contract is subject to <u>fluctuations and adjustments</u>, not fixed price. In such a case, the Tenderer shall furnish the indices and weightings for the price adjustment formulae in the Schedule of Adjustment Data and Kenya Power may require the Tenderer to justify its proposed indices and weightings.
- Where tenders are being invited for individual lots (contracts) or for any combination of lots (packages), tenderers wishing to offer discounts for the award of more than one Contract shall specify in their Tender the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITT 16.4, provided the Tenders for all lots (contracts) are opened at the same time.
- 16.7 All duties, taxes, and other levies payable by the Contractor under the Contract, or for any other cause, as of the date 30 days prior to the deadline for submission of Tenders, shall be included in the rates and prices and the total Tender Price submitted by the Tenderer.

## 17. Currencies of Tender and Payment

17.1 Tenderers shall quote entirely in Kenya Shillings. The unit rates and the prices shall be quoted by the Tenderer in the Bill of Quantities, entirely in Kenya shillings. A Tenderer expecting to incur expenditures in other currencies for inputs to the Works supplied from outside Kenya shall device own ways of getting foreign currency to meet those expenditures.

## 18. Documents Comprising the Technical Proposal

18.1 The Tenderer shall furnish a technical proposal including a statement of work methods, equipment, personnel, schedule and any other information as stipulated in Section IV, Tender Forms, in sufficient detail to demonstrate the adequacy of the Tenderer's proposal to meet the work's requirements and the completion time.

## 19. Documents Establishing the Eligibility and Qualifications of the Tenderer

- 19.1 Tenderers shall complete the Form of Tender, included in Section IV, Tender Forms, to establish Tenderer's eligibility in accordance with ITT 4.
- 19.2 In accordance with Section III, Evaluation and Qualification Criteria, to establish its qualifications to perform the Contract the Tenderer shall provide the information requested in the corresponding information sheets included in Section IV, Tender Forms.
- 19.3 A margin of preference will not be allowed. Preference and reservations will be allowed, individually or in joint ventures. Applying for eligibility for Preference and reservations shall supply all information required to satisfy the criteria for eligibility specified in accordance with ITT 33.1.
- 19.4 Tenderers shall be asked to provide, as part of the data for qualification, such information, including details of ownership, as shall be required to determine whether, according to the classification established by Kenya Power, a contractor or group of contractors qualifies for a margin of preference. Further the information will enable Kenya Power identify any actual or potential conflict of interest in relation to the procurement and/or contract management processes, or a possibility of collusion between tenderers, and thereby help to prevent any corrupt influence in relation to the procurement process or contract management.
- 19.5 The purpose of the information described in ITT 19.4 above overrides any claims to confidentiality which a tenderer may have. There can be no circumstances in which it would be justified for a tenderer to keep information relating to its ownership and control confidential where it is tendering to undertake public sector work and receive public sector funds. Thus, confidentiality will not be accepted by Kenya Power as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.
- 19.6 The Tenderer shall provide further documentary proof, information or authorizations that Kenya Power may request in relation to ownership and control which information on any changes to the information which was provided by the tenderer under ITT 6.3. The obligations to require this information shall continue for the duration of the procurement process and contract performance and after completion of the contract, if any change to the information previously provided may reveal a conflict of interest in relation to the award or management of the contract.
- 19.7 All information provided by the tenderer pursuant to these requirements must be complete, current and accurate as at the date of provision to Kenya Power. In submitting the information required pursuant to these requirements, the Tenderer shall warrant that the information submitted is complete, current and accurate as at the date of submission to Kenya Power.
- 19.8 If a tenderer fails to submit the information required by these requirements, its tender will be rejected. Similarly, if Kenya Power is unable, after taking reasonable steps, to verify to a reasonable degree the information submitted by a tenderer pursuant to these requirements, then the tender will be rejected.
- 19.9 If information submitted by a tenderer pursuant to these requirements, or obtained by Kenya Power (whether through its own enquiries, through notification by the public or otherwise), shows any conflict of interest which could materially and improperly benefit the tenderer in relation to the procurement or contract management process, then:
- i) if the procurement process is still ongoing, the tenderer will be disqualified from the procurement process,
- ii) if the contract has been awarded to that tenderer, the contract award will be set aside,
- the tenderer will be referred to the relevant law enforcement authorities for investigation of whether the tenderer or any other persons have committed any criminal offence.
- 19.10 If a tenderer submits information pursuant to these requirements that is incomplete, inaccurate or out-of-

date, or attempts to obstruct the verification process, then the consequences ITT 6.7 will ensue unless the tenderer can show to the reasonable satisfaction of Kenya Power that any such act was not material, or was due to genuine error which was not attributable to the intentional act, negligence or recklessness of the tenderer.

## 20. Period of Validity of Tenders

- 20.1 Tenders shall remain valid for the Tender Validity period specified in the **TDS**. The Tender Validity period starts from the date fixed for the Tender submission deadline (as prescribed by Kenya Power in accordance with ITT 24). A Tender valid for a shorter period shall be rejected by Kenya Power as non-responsive.
- 20.2 In exceptional circumstances, prior to the expiration of the Tender validity period, Kenya Power may request Tenderers to extend the period of validity of their Tenders. The request and the responses shall be made in writing. If a Tender Security is requested in accordance with ITT 21.1, it shall also be extended for thirty (30) days beyond the deadline of the extended validity period. A Tenderer may refuse the request without forfeiting its Tender security. A Tenderer granting the request shall not be required or permitted to modify its Tender, except as provided in ITT 20.3.
- 20.3 If the award is delayed by a period exceeding the number of days to be specified in the **TDS** days beyond the expiry of the initial tender validity period, the Contract price shall be determined as follows:
- a) In the case of **fixed price** contracts, the Contract price shall be the tender price adjusted by the factor specified in the **TDS**;
- b) In the case of **adjustable price** contracts, no adjustment shall be made; or in any case, tender evaluation shall be based on the tender price without taking into consideration the applicable correction from those indicated above.

## 21. Tender Security

- 21.1 The Tenderer shall furnish as part of its Tender, either a Tender-Securing Declaration or a Tender Security as specified in the **TDS**, in original form and, in the case of a Tender Security, in the amount and currency specified in the **TDS**. A Tender-Securing Declaration shall use the form included in Section IV, Tender Forms.
- 21.2 If a Tender Security is specified pursuant to ITT 19.1, the Tender Security shall be a demand guarantee in any of the following forms at the Tenderer's option:
- a) An unconditional Bank Guarantee issued by reputable commercial bank); or
- b) An irrevocable letter of credit;
- c) A Banker's cheque issued by a reputable commercial bank; or
- d) Another security specified in the TDS.
- 21.3 If an unconditional bank guarantee is issued by a bank located outside Kenya, the issuing bank shall have a correspondent bank located in Kenya to make it enforceable. The Tender Security shall be valid for thirty (30) days beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 20.2.
- 21.4 If a Tender Security or Tender-Securing Declaration is specified pursuant to ITT 19.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by Kenya Power as non-responsive.
- 21.5 If a Tender Security is specified pursuant to ITT 21.1, the Tender Security of unsuccessful Tenderers shall be returned as promptly as possible upon the successful Tenderer's signing the Contract and furnishing the Performance Security and any other documents required in the **TDS**. Kenya Power shall also promptly return the tender security to the tenderers where the procurement proceedings are terminated, all tenders were determined nonresponsive or a bidder declines to extend tender validity period.
- 21.6 The Tender Security of the successful Tenderer shall be returned as promptly as possible once the successful Tenderer has signed the Contract and furnished the required Performance Security, and any other documents required in the **TDS**.

- 21.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:
- e) If a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender, or any extension thereto provided by the Tenderer; or
- f) If the successful Tenderer fails to:
- i) Sign the Contract in accordance with ITT 50; or
- ii) Furnish a Performance Security and if required in the **TDS**, and any other documents required in the **TDS**.
- Where tender securing declaration is executed, Kenya Power shall recommend to the PPRA that PPRA debars the Tenderer from participating in public procurement as provided in the law.
- 21.9 The Tender Security or the Tender-Securing Declaration of a JV shall be in the name of the JV that submits the Tender. If the JV has not been legally constituted into a legally enforceable JV at the time of tendering, the Tender Security or the Tender-Securing Declaration shall be in the names of all future members as named in the letter of intent referred to in ITT 4.1 and ITT 11.2.
- 21.10 A tenderer shall not issue a tender security to guarantee itself.

## 22. Format and Signing of Tender

- 22.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 13 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 15, shall be clearly marked "ALTERNATIVE." In addition, the Tenderer shall submit copies of the Tender, in the number specified in the **TDS** and clearly mark them "COPY." In the event of any discrepancy between the original and the copies, the original shall prevail.
- 22.2 Tenderers shall mark as "CONFIDENTIAL" all information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 22.3 The original and all copies of the Tender shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Tenderer. This authorization shall consist of a written confirmation as specified in the **TDS** and shall be attached to the Tender. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the Tender where entries or amendments have been made shall be signed or initialed by the person signing the Tender.
- In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the Tender.

#### **D.** Submission and Opening of Tenders

#### 23. Sealing and Marking of Tenders

- 23.1 Depending on the sizes or quantities or weight of the tender documents, a tenderer may use an envelope, package or container. The Tenderer shall deliver the Tender in a single sealed envelope, or in a single sealed package, or in a single sealed container bearing the name and Reference number of the Tender, addressed to Kenya Power and a warning not to open before the time and date for Tender opening date. Within the single envelope, package or container, the Tenderer shall place the following separate, sealed envelopes:
- a) In an envelope or package or container marked "ORIGINAL", all documents comprising the Tender, as described in ITT 11; and
- b) In an envelope or package or container marked "COPIES", all required copies of the Tender; and
- c) If alternative Tenders are permitted in accordance with ITT 15, and if relevant:
- i) In an envelope or package or container marked "ORIGINAL -ALTERNATIVE TENDER", the alternative Tender; and
- ii) In the envelope or package or container marked "COPIES- ALTERNATIVE TENDER", all required copies of the alternative Tender.

The inner envelopes or packages or containers shall:

- a) Bear the name and address of Kenya Power.
- b) Bear the name and address of the Tenderer; and
- c) Bear the name and Reference number of the Tender.
- 23.2 If an envelope or package or container is not sealed and marked as required, Kenya Power will assume no responsibility for the misplacement or premature opening of the Tender. Tenders that are misplaced or opened prematurely will not be accepted.

#### 24. Deadline for Submission of Tenders

- 24.1 Tenders must be received by Kenya Power at the address specified in the **TDS** and no later than the date and time also specified in the **TDS**. When so specified in the **TDS**, Tenderers shall have the option of submitting their Tenders electronically. Tenderers submitting Tenders electronically shall follow the electronic Tender submission procedures specified in the **TDS**.
- 24.2 Kenya Power may, at its discretion, extend the deadline for the submission of Tenders by amending the Tender Documents in accordance with ITT 8, in which case all rights and obligations of Kenya Power and Tenderers previously subject to the deadline shall thereafter be subject to the deadline as extended.

#### 25. Late Tenders

25.1 Kenya Power shall not consider any Tender that arrives after the deadline for submission of tenders, in accordance with ITT 24. Any Tender received by Kenya Power after the deadline for submission of Tenders shall be declared late, rejected, and returned unopened to the Tenderer.

#### 26. Withdrawal, Substitution, and Modification of Tenders

- A Tenderer may withdraw, substitute, or modify its Tender after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization in accordance with ITT 22.3, (except that withdrawal notices do not require copies). The corresponding substitution or modification of the Tender must accompany the respective written notice. All notices must be:
- a) prepared and submitted in accordance with ITT 22 and ITT 23 (except that withdrawals notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
- b) received by Kenya Power prior to the deadline prescribed for submission of Tenders, in accordance with ITT 24.
- 26.2 Tenders requested to be withdrawn in accordance with ITT 26.1 shall be returned unopened to the Tenderers.
- 26.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tenders and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender or any extension thereof.

#### 27. Tender Opening

- 27.1 Except in the cases specified in ITT 23 and ITT 26.2, Kenya Power shall publicly open and read out all Tenders received by the deadline, at the date, time and place specified in the **TDS**, in the presence of Tenderers' designated representatives who chooses to attend. Any specific electronic Tender opening procedures required if electronic Tendering is permitted in accordance with ITT 24.1, shall be as specified in the **TDS**.
- 27.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelopes with the corresponding Tender shall not be opened, but returned to the Tenderer. No Tender withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at Tender opening.
- 27.3 Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Tender being substituted, and the substituted Tender shall not be opened, but returned to the Tenderer. No Tender substitution shall be permitted unless the corresponding substitution notice

- contains a valid authorization to request the substitution and is read out at Tender opening.
- 27.4 Next, envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Tender. No Tender modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Tender opening.
- 27.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and whether there is a modification; the total Tender Price, per lot (contract) if applicable, including any discounts and alternative Tenders; the presence or absence of a Tender Security or Tender-Securing Declaration, if required; and any other details as Kenya Power may consider appropriate.
- Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further for evaluation. The Form of Tender and pages of the Bills of Quantities are to be initialed by the members of the tender opening committee attending the opening. The number of representatives of Kenya Power to sign shall be specified in the **TDS**.
- 27.7 At the Tender Opening, Kenya Power shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 25.1).
- 27.8 Kenya Power shall prepare minutes of the Tender Opening that shall include, as a minimum:
- a) The name of the Tenderer and whether there is a withdrawal, substitution, or modification;
- b) The Tender Price, per lot (contract) if applicable, including any discounts;
- c) Any alternative Tenders;
- d) The presence or absence of a Tender Security, if one was required.
- e) Number of pages of each tender document submitted.
- 27.9 The Tenderers' representatives who are present shall be requested to sign the minutes. The omission of a Tenderer's signature on the minutes shall not invalidate the contents and effect of the minutes. A copy of the tender opening register shall be distributed to all Tenderers upon request.

#### E. Evaluation and Comparison of Tenders

## 28. Confidentiality

- 28.1 Information relating to the evaluation of Tenders and recommendation of contract award shall not be disclosed to Tenderers or any other persons not officially concerned with the Tender process until information on Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 46.
- 28.2 Any effort by a Tenderer to influence Kenya Power in the evaluation of the Tenders or Contract award decisions may result in the rejection of its tender.
- 28.3 Notwithstanding ITT 28.2, from the time of tender opening to the time of contract award, if a tenderer wishes to contact Kenya Power on any matter related to the tendering process, it shall do so in writing.

#### 29. Clarification of Tenders

- 29.1 To assist in the examination, evaluation, and comparison of the tenders, and qualification of the tenderers, Kenya Power may, at its discretion, ask any tenderer for a clarification of its tender, given a reasonable time for a response. Any clarification submitted by a tenderer that is not in response to a request by Kenya Power shall not be considered. Kenya Power 's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the tender shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by Kenya Power in the evaluation of the tenders, in accordance with ITT 33.
- 29.2 If a tenderer does not provide clarifications of its tender by the date and time set in Kenya Power's request for clarification, its Tender may be rejected.

### 30. Deviations, Reservations, and Omissions

- 30.1 During the evaluation of tenders, the following definitions apply:
- a) "Deviation" is a departure from the requirements specified in the tender document;

- b) "Reservation" is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the tender document; and
- c) "Omission" is the failure to submit part or all of the information or documentation required in the Tender document.

## 31. Determination of Responsiveness

- 31.1 Kenya Power's determination of a Tender's responsiveness is to be based on the contents of the tender itself, as defined in ITT 13.
- A substantially responsive Tender is one that meets the requirements of the Tender document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that, if accepted, would:
- a) affect in any substantial way the scope, quality, or performance of the Works specified in the Contract; or
- b) limit in any substantial way, inconsistent with the tender document, Kenya Power 's rights or the tenderer's obligations under the proposed contract; or
- c) if rectified, would unfairly affect the competitive position of other tenderers presenting substantially responsive tenders.
- 31.3 Kenya Power shall examine the technical aspects of the tender submitted in accordance with ITT 18, to confirm that all requirements of Section VII, Works' Requirements have been met without any material deviation, reservation or omission.
- 31.4 If a tender is not substantially responsive to the requirements of the tender document, it shall be rejected by Kenya Power and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.

#### 32. Non-material Non-conformities

- Provided that a tender is substantially responsive, Kenya Power may waive any non-conformities in the tender.
- Provided that a Tender is substantially responsive, Kenya Power may request that the tenderer submit the necessary information or documentation, within a reasonable period, to rectify nonmaterial non-conformities in the tender related to documentation requirements. Requesting information or documentation on such non-conformities shall not be related to any aspect of the price of the tender. Failure of the tenderer to comply with the request may result in the rejection of its tender.
- 32.3 Provided that a tender is substantially responsive, Kenya Power shall rectify quantifiable nonmaterial non-conformities related to the Tender Price. To this effect, the Tender Price shall be adjusted, for comparison purposes only, to reflect the price of a missing or non-conforming item or component in the manner specified in the **TDS**.

## 33. Arithmetical Errors

- 33.1 The tender sum as submitted and read out during the tender opening shall be absolute and final and shall not be the subject of correction, adjustment or amendment in any way by any person or entity.
- Provided that the Tender is substantially responsive, Kenya Power shall handle errors on the following basis:
- a) Any error detected if considered a major deviation that affects the substance of the tender, shall lead to disqualification of the tender as non-responsive.
- b) Any errors in the submitted tender arising from a miscalculation of unit price, quantity, and subtotal and total bid price shall be considered as a major deviation that affects the substance of the tender and shall lead to disqualification of the tender as non-responsive. and
- c) if there is a discrepancy between words and figures, the amount in words shall prevail
- 33.3 Tenderers shall be notified of any error detected in their bid during the notification of a ward.

## 34. Currency provisions

34.1 Tenders will priced be in Kenya Shillings only. Tenderers quoting in currencies other than in Kenya shillings will be determined non-responsive and rejected.

## 35. Margin of Preference and Reservations

- 35.1 No margin of preference shall be allowed on contracts for small works.
- Where it is intended to reserve the contract to specific groups under Small and Medium Enterprises, or enterprise of women, youth and/or persons living with disability, who are appropriately registered as such by the authority to be specified in the **TDS**, a procuring entity shall ensure that the invitation to tender specifically indicates that only businesses/firms belonging to those specified groups are the only ones eligible to tender. Otherwise if no so stated, the invitation will be open to all tenderers.

#### **36.** Nominated Subcontractors

- 36.1 Unless otherwise stated in the **TDS**, Kenya Power does not intend to execute any specific elements of the Works by subcontractors selected in advance by Kenya Power.
- 36.2 Tenderers may propose subcontracting up to the percentage of total value of contracts or the volume of works as specified in the **TDS**. Subcontractors proposed by the Tenderer shall be fully qualified for their parts of the Works.
- 36.3 The subcontractor's qualifications shall not be used by the Tenderer to qualify for the Works unless their specialized parts of the Works were previously designated by Kenya Power in the **TDS** as can be met by subcontractors referred to hereafter as 'Specialized Subcontractors', in which case, the qualifications of the Specialized Subcontractors proposed by the Tenderer may be added to the qualifications of the Tenderer.

#### 37. Evaluation of Tenders

- 37.1 Kenya Power shall use the criteria and methodologies listed in this ITT and Section III, Evaluation and Qualification Criteria. No other evaluation criteria or methodologies shall be permitted. By applying the criteria and methodologies Kenya Power shall determine the Best Evaluated Tender in accordance with ITT 40.
- 37.2 To evaluate a Tender, Kenya Power shall consider the following:
- a) Price adjustment due to discounts offered in accordance with ITT16;
- b) Converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT39;
- c) Price adjustment due to quantifiable nonmaterial non-conformities in accordance with ITT 30.3; and
- d) Any additional evaluation factors specified **in the TDS** and Section III, Evaluation and Qualification Criteria.
- 37.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be considered in Tender evaluation.
- 37.4 In the case of multiple contracts or lots, Tenderers shall be allowed to tender for one or more lots and the methodology to determine the lowest evaluated cost of the lot (contract) combinations, including any discounts offered in the Form of Tender, is specified in Section III, Evaluation and Qualification Criteria.

## 38. Comparison of Tenders

38.1 Kenya Power shall compare the evaluated costs of all substantially responsive Tenders established in accordance with ITT 38.2 to determine the Tender that has the lowest evaluated cost.

## 39. Abnormally Low Tenders

- 39.1 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price or that genuine competition between Tenderers is compromised.
- 39.2 In the event of identification of a potentially Abnormally Low Tender, Kenya Power shall seek written

clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.

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

## 40. Abnormally High Tenders

- 40.1 An abnormally high price is one where the tender price, in combination with other constituent elements of the Tender, appears unreasonably too high to the extent that Kenya Power is concerned that it (Kenya Power) may not be getting value for money or it may be paying too high a price for the contract compared with market prices or that genuine competition between Tenderers is compromised.
- 40.2 In case of an abnormally high tender price, Kenya Power shall make a survey of the market prices, check if the estimated cost of the contract is correct and review the Tender Documents to check if the specifications, scope of work and conditions of contract are contributory to the abnormally high tenders. Kenya Power may also seek written clarification from the tenderer on the reason for the high tender price. Kenya Power shall proceed as follows:
- i) If the tender price is abnormally high based on wrong estimated cost of the contract, Kenya Power <u>may</u> <u>accept or not accept</u> the tender depending on Kenya Power's budget considerations.
- ii) If specifications, scope of work and/or conditions of contract are contributory to the abnormally high tender prices, Kenya Power shall reject all tenders and may retender for the contract based on revised estimates, specifications, scope of work and conditions of contract, as the case may be.
- 40.3 If Kenya Power determines that the Tender Price is abnormally too high because genuine competition between tenderers is compromised (often due to collusion, corruption or other manipulations), Kenya Power shall reject all Tenders and shall institute or cause competent Government Agencies to institute an investigation on the cause of the compromise, before retendering.

#### 41. Unbalanced and/or Front-Loaded Tenders

- 41.1 If in Kenya Power's opinion, the Tender that is evaluated as the lowest evaluated price is seriously unbalanced and/or front loaded, Kenya Power may require the Tenderer to provide written clarifications. Clarifications may include detailed price analyses to demonstrate the consistency of the tender prices with the scope of works, proposed methodology, schedule and any other requirements of the Tender document.
- 41.2 After the evaluation of the information and detailed price analyses presented by the Tenderer, Kenya Power may as appropriate:
- a) Accept the Tender; or
- b) Require that the total amount of the Performance Security be increased at the expense of the Tenderer to a level not exceeding a 30% of the Contract Price; or
- c) Agree on a payment mode that eliminates the inherent risk of Kenya Power paying too much for undelivered works; or
- d) Reject the Tender,

#### 42. Qualifications of the Tenderer

- 42.1 Kenya Power shall determine to its satisfaction whether the eligible Tenderer that is selected as having submitted the lowest evaluated cost and substantially responsive Tender, meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 19. The determination shall not take into consideration the qualifications of other firms such as the Tenderer's subsidiaries, parent entities, affiliates, subcontractors (other than Specialized Subcontractors if permitted in the Tender document), or any other firm(s) different from the Tenderer.
- 42.3 An affirmative determination shall be a prerequisite for award of the Contract to the Tenderer. A negative

determination shall result in disqualification of the Tender, in which event Kenya Power shall proceed to the Tenderer who offers a substantially responsive Tender with the next lowest evaluated price to make a similar determination of that Tenderer's qualifications to perform satisfactorily.

- 42.4 An Abnormally Low Tender is one where the Tender price, in combination with other elements of the Tender, appears so low that it raises material concerns as to the capability of the Tenderer in regards to the Tenderer's ability to perform the Contract for the offered Tender Price.
- 42.5 In the event of identification of a potentially Abnormally Low Tender, Kenya Power shall seek written clarifications from the Tenderer, including detailed price analyses of its Tender price in relation to the subject matter of the contract, scope, proposed methodology, schedule, allocation of risks and responsibilities and any other requirements of the Tender document.
- 42.6 After evaluation of the price analyses, if Kenya Power determines that the Tenderer has failed to demonstrate its capability to perform the Contract for the offered Tender Price, Kenya Power shall reject the Tender.

#### 43. Best Evaluated Tender

- 43.1 Having compared the evaluated prices of Tenders, Kenya Power shall determine the Best Evaluated Tender. The Best Evaluated Tender is the Tender of the Tenderer that meets the Qualification Criteria and whose Tender has been determined to be:
  - a) Most responsive to the Tender document; and
  - b) The lowest evaluated price.

#### 44. Procuring Entity's Right to Accept Any Tender, and to Reject Any or All Tenders.

44.1 Kenya Power reserves the right to accept or reject any Tender and to annul the Tender process and reject all Tenders at any time prior to Contract Award, without thereby incurring any liability to Tenderers. In case of annulment, all Tenderers shall be notified with reasons and all Tenders submitted and specifically, Tender securities, shall be promptly returned to the Tenderers.

#### F. Award of Contract

#### 45. Award Criteria

45.1 Kenya Power shall award the Contract to the successful tenderer whose tender has been determined to be the Lowest Evaluated Tender.

#### 46. Notice of Intention to enter into a Contract

- 46.1 Upon award of the contract and Prior to the expiry of the Tender Validity Period Kenya Power shall issue a Notification of Intention to Enter into a Contract / Notification of award to all tenderers which shall contain, at a minimum, the following information:
- a) The name and address of the Tenderer submitting the successful tender;
- b) The Contract price of the successful tender;
- c) A statement of the reason(s) the tender of the unsuccessful tenderer to whom the letter is addressed was unsuccessful, unless the price information in (c) above already reveals the reason;
- d) The expiry date of the Standstill Period; and
- e) Instructions on how to request a debriefing and/or submit a complaint during the standstill period;

#### 47. Standstill Period

- 47.1 The Contract shall not be signed earlier than the expiry of a Standstill Period of 14 days to allow any dissatisfied tender to launch a complaint. Where only one Tender is submitted, the Standstill Period shall not apply.
- Where a Standstill Period applies, it shall commence when Kenya Power has transmitted to each Tenderer the Notification of Intention to Enter into a Contract with the successful Tenderer.

## 48. Debriefing by Kenya Power

- 48.1 On receipt of Kenya Power's Notification of Intention to Enter into a Contract referred to in ITT 46, an unsuccessful tenderer may make a written request to Kenya Power for a debriefing on specific issues or concerns regarding their tender. Kenya Power shall provide the debriefing within five days of receipt of the request.
- 48.2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending such a debriefing meeting.

#### 49. Letter of Award

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

#### 50. Signing of Contract

- 50.1 Upon the expiry of the fourteen days of the Notification of Intention to enter into contract and upon the parties meeting their respective statutory requirements, Kenya Power shall send the successful Tenderer the Contract Agreement.
- Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to Kenya Power.
- 50.3 The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period

## 51. Appointment of Adjudicator

Kenya Power proposes the person named in the TDS to be appointed as Adjudicator under the Contract, at the hourly fee specified in the TDS, plus reimbursable expenses. If the Tenderer disagrees with this proposal, the Tenderer should so state in his Tender. If, in the Letter of Acceptance, Kenya Power does not agree on the appointment of the Adjudicator, Kenya Power will request the Appointing Authority designated in the Special Conditions of Contract (SCC) pursuant to Clause 23.1 of the General Conditions of Contract (GCC), to appoint the Adjudicator.

#### 52. Performance Security

- 52.1 Within twenty-one (21) days of the receipt of the Letter of Acceptance from Kenya Power, the successful Tenderer shall furnish the Performance Security and, any other documents required in the **TDS**, in accordance with the General Conditions of Contract, subject to ITT 40.2 (b), using the Performance Security and other Forms included in Section X, Contract Forms, or another form acceptable to Kenya Power. A foreign institution providing a bank guarantee shall have a correspondent financial institution located in Kenya, unless Kenya Power has agreed in writing that a correspondent bank is not required.
- 52.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security and other documents required in the **TDS**, or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event Kenya Power may award the Contract to the Tenderer offering the next Best Evaluated Tender.
- 52.3 Performance security shall not be required for contracts estimated to cost less than Kenya shillings five million shillings.

#### 53. Publication of Procurement Contract

- 53.1 Within fourteen days after signing the contract, Kenya Power shall publish the awarded contract at its notice boards and websites; and on the Website of the Authority. At the minimum, the notice shall contain the following information:
- a) Name and address of Kenya Power;
- b) Name and reference number of the contract being awarded, a summary of its scope and the selection method used:

- c) The name of the successful Tenderer, the final total contract price, the contract duration.
- d) Dates of signature, commencement and completion of contract;
- e) Names of all Tenderers that submitted Tenders, and their Tender prices as read out at Tender opening.

## 54. Procurement Related Complaints and Administrative Review

- 54.1 The procedures for making Procurement-related Complaints are as specified in the **TDS**.
- 54.2 A request for administrative review shall be made in the form provided under contract forms.

## SECTION II - TENDER DATA SHEET (TDS)

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

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS			
A	General			
ITT 1.1	The name of the Contract is Proposed Design, supply, installation, testing commissioning of electronic security systems in selected substations, commercial offices & depots companywide			
	The reference number of the Tender is <b>KP1/9A.2/OT/045/SS/23-24</b>			
ITT 2.3	There is no information on competing firms.			
	, <del>,</del> <del>,</del>			
ITT 2.4	The firms that provided consulting services for the contract being tendered for are:  None			
ITT 3.1	Maximum number of members in a Joint Venture (JV) are three (3).			
	Adopt definition of 'relative' as provided for under section 59 (2)(b) of the Public			
	Procurement and Asset Disposal Act, 2015.			
ITT 3.10	Joint Venture Firms which may prevent, distort or lessen competition to seek approval from Competitions Authority before award of tender. The tender is Open to Local Contractors Only.			
ITT 3:11	Eligible Tenderers : Local bidders.			
ITT 7.1	There <b>shall be a mandatory</b> site visits to be conducted on the following dates for			
	Bidder who did not visit the site for the previous cancelled Tender No.			
	KP1/9A.2/OT/032/SS/23-24.			
	Tuesday 16.01.2024 – Friday 19.01.2024			
	From 9.00 a.m. – 4.00 p.m. (Nairobi, Coast, Mt. Kenya, North Eastern, Western, Central Rift, North Rift,			
	and South Nyanza Regions			
	a site visit form shall be duly filled and signed by the representatives of the firms			
	present.			
	J/B bidders who had visited the sites on the cancelled tender no.			
	KP1/9A.2/OT/032/SS/23-24, need not to visit the sites, however they will be			
	required to submit the signed site visit form for that Tender.			
В	Contents of Tender Document			
ITT 8.1	There will be a <b>pre-bid meeting</b> on 15 <sup>th</sup> <b>January</b> , 2024 at Stima Plaza Auditorium,			
	Kolobot Road, Nairobi at 10:00 am to 11:00am. Attendance will be mandatory for			
	bidders who had not participated in the previous cancelled Tender No.			
	KP1/9A.2/OT/032/SS/23-24.			
ITT 8.2	Any questions in writing, shall reach KPLC not later than Seven (7) days prior to			
	tender closing date and shall be requested through the e-mail addresses on the cover			
	page of this tender document.			
ITT 8.4	Minutes of the pre-Tender meeting and site visit of the site of the works will be			
	published at the website on the KPLC website <u>www.kplc.co.ke</u> and on our E-			
	Procurement portal.			
ITT 9.1	KPLC shall publish its response at the website and on their E-Procurement Portal			
	through an addendum for general queries or email for specific queries.			
	For Clarification of <b>Tender purposes</b> only, KPLC's address is:			
	General Manager, Supply Chain & Logistics			
	The Kenya Power and Lighting Company PLC			
	Stima Plaza, 3rd Floor Kolobot Road, Parklands			
	P.O Box 30099 - 00100			
	Nairobi.			
	Kenya Telephone: +254-20-3201821			
	Electronic mail address: Procurement@kplc.co.ke; SKKariuki@kplc.co.ke, and copy			

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS			
	to JMutai@kplc.co.ke, JMuigai@kplc.co.ke			
C	Preparation of Tenders			
ITT 13.1(h)		Il submit the following additional documents in	its tander: as nor the	
111 13.1(11)		teria with and including the documents listed in		
ITT 15.1		ers shall not be considered.	t the Check List	
ITT 15.1		s for completion shall be as specified in Section I	III (Fyaluation and	
111 13.2	Qualification Cr	iteria).	m (Evaluation and	
ITT 15.3	Alternative tech	nical solutions shall not be permitted		
ITT 20.3	Price variation of	n the basis of extending tender validity period is	Not applicable	
ITT 21.2	The Tender valid	lity period shall be <i>One Hundred and Eighty (18</i>	80) days. A Tender	
		period shall be rejected.		
ITT 21.1		ty valid for 210 days shall be required in form of		
	only. The amoun	t and currency of the Tender Security shall be as	s follows:	
	Tender Security	in Kenya Shillings worth		
			Tender	
	C-4/T -4	C4-4:/D	Security in	
	Category/Lot	Station/Description	Kenya	
			Shillings worth	
	1	Installation of CCTV major Distribution/ Transmission substations	400,000.00	
	2	Installation of CCTV for key offices	600,000.00	
	_	•	000,000.00	
	3	Installation of Access Control in Substations & key offices	500,000.00	
	4	Security systems for facilities and infrastructure	500,000.00	
	5	Installation of Electric Fences for Key Substations	400,000.00	
	6		150,000,00	
	The Original Tender Security should be kept in an envelope clearly labelled with the			
	Tender number & name, and shall be deposited in the Tender Security Box on 3rd Floor Supply Chain at Stima Plaza, Kolobot Road, before the tender opening time.  a. Bidders should clearly indicate the category/Lot of interest on the tender			
	security  b. Bidders who are interested in bidding for all categories/lots should submit one consolidated tender security.			
ITT 21.2 (d)		security shall be as specified in ITT 21.1 above.		
D		Opening of Tenders		
ITT 24.1	All tenders shall portal in PDF for	be submitted through the KPLC SAP online tendrate.		
	(Issuing Tendering Documents, Submission of Tenders, Opening of Tenders) Proof of receipt will be done via the bidders Submitted Response Number for RFX: 1000002476			
ITT 26	Withdrawals, substitutions and modifications to be done online through KPLC tendering portal.			
ITT 27.1	Public opening	will be done through the KPLC tendering por	tal at Stima	
ITT 27.6	Plaza, Auditorium as specified in the KPLC Tendering Portal.  There shall be tender opening minutes and electronic report generated electronically from KPLC ONLINE TENDERING PORTAL and the minimum number of representatives of KPLC to sign is Three (3).			
<b>E.</b>	_	Comparison of Tenders		
ITT 36.1	KPLC does not	intend to execute certain specific parts of the velocited in advance by KPLC.	Works by	
ITT 36.2	Contractor's may propose subcontracting: Maximum percentage of subcontracting permitted is: 20 % of the total contract amount. Tenderers			

ITT Reference			
	planning to subcontract more than 10% of total volume of work shall specify, in the Form of Tender, the activity(ies) or parts of the Works to be subcontracted		
	along with complete details of the subcontractors and their qualification and		
	experience. Specialized subcontractors shall be so qualified in their respective		
	specialties and are subject to evaluations.		
ITT 36.3	The parts of the Works for which the KPLC permits Tenderers to propose		
	Specialized Subcontractors are designated as follows:  1. Electrical Installation Services (BS)		
	2. Internal Plumbing & Drainage Installations (BS)		
	For the above-designated parts of the Works that may require Specialized		
	Subcontractors, the relevant qualifications of the proposed Specialized		
	Subcontractors will be added to the qualifications of the Tenderer for the purpose		
	of evaluation.		
ITT 37.2	(b) The currency of the tender shall be Kenya Shillings		
	(d)Additional requirements apply. These are detailed in the evaluation		
	criteria in Section III, Evaluation and Qualification Criteria.		
ITT45.1	Award of Contract: Award shall be to the lowest evaluated bidder per Lot.		
	Tenderers must quote for all line items in a given Lot in order to qualify for award.		
	The maximum a bidder can get is 2 lots only per category/lot for the lowest		
	evaluated bid		
ITT 47	The standstill period shall be 14 days irrespective of the number of bids that shall be submitted.		
ITT 54.1	The procedures for making a Procurement-related Complaint are detailed in the		
	"Notice of Intention to Award the Contract" herein and are also available from the		
	PPRA website info@ppra.go.ke or complaints@ppra.go.ke		
	General Manager, Supply Chain & Logistics,		
	The Kenya Power and Lighting Company PLC,		
	Stima Plaza, 3rd Floor		
	Kolobot Road, Parklands		
	P.O Box 30099 – 00100		
	Nairobi, Kenya		
	Telephone: +254-20-3201821		
	Electronic mail address: procurement@kplc.co.ke		
	In summary, a Procurement-related Complaint may challenge any of the following:		
	(i) the terms of the Tendering Documents; and		
	(ii)KPLC's decision to award the contract.		

### SECTION III - EVALUATION AND QUALIFICATION CRITERIA

#### 1. General Provisions

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

- a) For construction turnover or financial data required for each year Exchange rate prevailing on the last day of the respective calendar year (in which the amounts for that year is to be converted) was originally established.
- b) Value of single contract Exchange rate prevailing on the date of the contract signature.
- c) Exchange rates shall be taken from the publicly available source identified in the ITT 14.3. Any error in determining the exchange rates in the Tender may be corrected by Kenya Power.

This section contains the criteria that the KPLC shall use to evaluate tender and qualify tenderers. No other factors, methods or criteria shall be used other than specified in this tender document. The Tenderer shall provide all the information requested in the forms included in Section IV, Tendering Forms.

#### Evaluation and contract award Criteria

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

#### 2. Preliminary examination for Determination of Responsiveness

Kenya Power will start by examining all tenders to ensure they meet in all respects the eligibility criteria and other requirements in the ITT, and that the tender is complete in all aspects in meeting the requirements of "Part 2 – KPLC's "Works Requirements", including checking for tenders with unacceptable errors, abnormally low tenders, abnormally high tenders and tenders that are front loaded. Tenders that do not pass the Preliminary Examination will be considered irresponsive and will not be considered further.

# **3.1 Part 1 - Preliminary Examination Criteria. These are mandatory requirements.** This shall include confirmation of the following: -

- 3.1.1 Submission of Tender Security Checking its validity, whether it is Original; whether it is sufficient; whether it is authentic; whether it is issued by a local Bank/institution and whether it is strictly in the format required in accordance with the sample Tender Security Form(s).
- 3.1.2 Submission of the following duly completed, signed and stamped forms:
  - (a) Form of Tender
  - (b) Certificate of Independent Tender Determination
  - (c) Self Declaration Forms as hereunder:
    - Confidential Business Questionnaire
    - Form SD1
    - Form SD2
  - (d) Declaration and Commitment to the Code of Ethics
  - (e) Form EL1 1.1 Tenderer Information Sheet
  - (f) Form EL1 1.2 (if applicable) Party to JV Information Sheet
- 3.1.3 Submission and considering the following: -
- 3.1.3.1 For local Tenderers
  - a) Company or Firm's Registration Certificate
  - *b) PIN Certificate.*
  - c) Valid Tax Compliance Certificate.
  - d) Valid Business Permit

- 3.1.4 That the Tender is valid for the period required.
- 3.1.5 The tenderer must be registered with National Construction Authority with a valid Practicing license NCA 1- NCA 7 (Electrical Categories- for all Categories/lots).
- 3.1.6 Communication Authority of Kenya (CAK) Certificate for Category 6-Intruder alarms Lot
- 3.1.7 Submission of a Completed site visit form signed by authorized KPLC Officer (Bidders who had visited the site in the previous tender should submit the duly filled and stamped site visit form for that tender).
- 3.1.8 Submission of a proposed detail technical Implementation Work Plan / Program, Work Method
- 3.1.9 Submission of a Price Bill of Quantities, signed and stamped by bidder.
- 3.1.10 Duly filled Form EXP 4.1 and names with full contact as well as physical addresses of previous customers of similar works with reference letters from at least four (4) previous customers.
- 3.1.11 Submission of a complete and current CR12 Form (dated within 12 months before date of tender opening) obtained from the Registrar of Companies showing the Directorship and their respective shareholding of the firm, and in case of a corporate shareholder, bidders must separately submit a CR12 Form of the corporate shareholder until all the human Directors and their shareholding are disclosed.
- 3.1.12 Submission of the audited financial Statements are those that are reported within eighteen (18) calendar months of the date of the tender document together with a copy of the Auditors/Audit Firm valid ICPAK practicing license.
- 3.1.13 Power of Attorney authorizing the signatory of the Tender to commit the Tenderer in accordance with the Tender requirements. Proof of authorization shall be furnished in the form of power of attorney which shall accompany the tender if the signatory to the tender is not a director of the company (provide name and attach proof of citizenship of the signatory to the tender).
- 3.1.14 Record of unsatisfactory or default in performance obligations in any contract shall be considered. This shall include any tenderer with unresolved case(s) in its performance obligations for more than two (2) months in any contract.
- 3.1.15 Notwithstanding the above, considering any outstanding contracts where applicable and the execution capacity indicated by the Tenderer.

Tenders will proceed to the Technical Stage only if they qualify in compliance with Part 1 above, Preliminary Evaluation.

#### 3.2 Part II - Technical Evaluation Criteria under ITT 29.3.

- 3.2.1 Stage 1 of II Technical Evaluation Criteria under clause 29.3 of the ITT. Evaluation of the relevancy of the following technical information against Tender requirements and Specifications: -
  - 3.2.1.1 For goods manufactured outside Kenya, applicable relevant ISO standard valid certification or for Goods manufactured in Kenya valid KEBS Mark of Quality Certificate and / or KEBS Standardization Mark Certificate
  - 3.2.1.2 Submission of Relevant Manufacturer's or Principal's Authorization
    - a) CCTV Camera / NVR / NAS / Access Control (Must be compatible with Genetec System)
    - b) Genetec Software
    - c) Electric Fences Energizer
    - d) Intruder alarm system
  - 3.2.1.3 Type Test reports and certificates from the relevant International or National Testing/Standards Authority or ISO/IEC 17025 accredited independent laboratory for full compliance with Tender Specifications
  - 3.2.1.4 The accreditation certificate for the testing laboratory to ISO/IEC 17025 (Applicable for firms without KEBS Certification)
  - 3.2.1.5 As contained in the following documents
    - a) Manufacturer's Warranty duly filled, signed, and stamped
    - b) Drawings and/or Catalogues and/ or Brochures
    - c) Schedule of Guaranteed Technical Particulars as per Technical Specifications.

Table 1: Mandatory Technical Requirements (against Tender Requirements and Technical Specifications). Verification and consideration of the following:

	Criteria	KPLC Requirement	Bidder's Offer – Yes or No
1	Valid ISO 9001:2015 certification or equivalent	Applicable for goods manufactured outside Kenya	
2	Valid KEBS Diamond Mark of Quality Certificate or KEBs Standardization Mark certificate	Applicable for goods manufactured in Kenya	
3	Type Test reports and certificates from the relevant International or National Testing/Standards Authority or ISO/IEC 17025 accredited independent laboratory for full compliance with Tender Specifications	Shall NOT be more than five (5) years old prior to the Date of the Tender document.	
4	Accreditation certificate for the testing laboratory to ISO/ IEC 17025 (Applicable for firms without KEBS Certification)	Should be relevant to the tender and from designated body	
5	Catalogues/Brochures	Relevancy to the Tender (Shall be those from the manufacturer / Tenderer)	
6	Full compliance of Guaranteed Technical Particulars	Required as per specifications	
7	Manufacturer's Warranty	Required in the format given in the Tender document	
8	Financial Statements	Valid ICPAK Practicing License or equivalent. for foreign tenderers Last 3 Financial Years Latest is not more than 18 months	

## **NOTES TO TABLE 1:**

- 1. Where the Tenderer's offer fails to satisfy any one or more of the requirements as per the Criteria in Table 1 above, that Tenderer will be declared to have failed "Failed on Mandatory Technical Requirements."
- 2. The Tenderer shall not qualify for further evaluation.
- 3. Where the Tenderer's offer complies with all the requirements in Table 1 above, that offer shall proceed for further evaluation as per criteria set out in Table 2.

Tenders will proceed to the Detailed Technical Stage only if they qualify in compliance with Part II clause 3.2.1 above, and Preliminary Evaluation under ITT 29.2.

## 3.2.2 Stage 2 of Part II – Detailed Technical Evaluation under ITT 29.3

## Table 2: Detailed Technical Requirements (against Tender Requirements and Technical Specifications).

3.2.2.1 Verification and consideration of the following: - full compliance to the Schedule of Guaranteed Technical Particulars as per Technical Specifications

# **3.2.3** Further Technical Evaluation. (Scoring Criteria):

NO.	EVALUATION CRITERIA		Maximum Marks	
			Max.	Attained
3.2.4.1	Previous experience and capability to deal with similar security installations	Recommendation letters from previous clients to a maximum of 5 for similar work undertaken within the last 5 years  - Each reference letter (3 marks)	15	
3.2.4.2	Capacity of bidder to handle similar assignments	Provide duly filled Form EXP 4(a) and copies of copies of LPO/ contracts and/or completion certificate to a maximum of 5 for works done within the last 5 years based on Contract Value  - ksh. 20m and above per contract (4 mks) per contract/ Completion Certificate  - Between ksh.10m and 19m per contract (3 mk) per contract/ Completion Certificate  - Between ksh. 2m and 9m per contract (2 mk) per contract/ Completion Certificate  - Below ksh 1m per contract (1 mks)	20	
		- No contract (0 mks)		
3.2.4.3	Schedule of contractors' equipment and transport	Proof of running fleet. Attached copies of log books of fleet of owned or leased (with leased agreements) to a maximum of 5:  - 1 mks per owned/ lease agreement logbook. For lease agreement must provide for lease agreement.	5	
		For each specific equipment up to a maximum of 5 (All categories): Provide duly filled FORM EQP per Equipment - 2mks each	10	
3.2.4.4	Proof of training, Experience and qualifications of Staff scheduled for the project.	Provide duly filled FORM PER 1 and attach copies of certificates & CVs of employees and proof of employment (up to 5no. maximum technical staff) (All categories): Qualifications - Relevant Degree 3mks per staff - Relevant Diploma 2mks per staff - Relevant Certificate 1mk per staff	15	
		Manufacturers training certification for at least two technical staff per corresponding tendered category (All categories):  - 2mks per staff up to maximum of 5 technical staff.	10	
3.2.4.5	PSRA registration	<ul> <li>PSRA training certification for director's/key staff (5mks)</li> <li>Submission of PSRA Registration Certificate for the Company.</li> </ul>	10	

3.2.2.6	Detailed Technical Proposals and Implementation Plan	- Attach Proposed Detailed Technical Proposals and Implementation Plan with Preliminary design proposal with Block/schematic drawing, description of work method, proposed work schedule/program & implementation team.	15	
	TOTAL	Required minimum Grand Total Score of 70%.	100	

Tenderers will proceed to Financial Evaluation stage only if they score a minimum of 70% of the Technical Evaluation under clause 3.37.

#### 3.3 Part III - Financial Examination Criteria

Evaluation of the following financial information against Tender Requirements and Specifications:

- 3.3.1 This will include the following:
  - a) Confirmation of and considering that the Bill of Quantities is duly completed and signed and is in original KPLC format and not mutilated
  - b) Considering information submitted in the Confidential Business Questionnaire against other information in the bid including: i. Declared maximum value of business ii. Shareholding and citizenship for preferences where applicable.
  - c) Detailed financial review of the priced Bill of Quantities.
  - d) Conducting a financial comparison based on the analysis of the Bidder's priced quantity.
  - e) Confirming that the bidder has quoted in Kenya Shillings.
- 3.4 The award shall be to the bidders with the lowest evaluated price and that is within the prevailing market price.

## **QUALIFICATION FORMS**

# 1. FORM EQU: EQUIPMENT

The Tenderer shall provide adequate information to demonstrate clearly that it has the capability to meet the requirements for the key equipment listed in Section III, Evaluation and Qualification Criteria. A separate Form shall be prepared for each item of equipment listed, or for alternative equipment proposed by the Tenderer.

Item of equipm	ent	
Equipment information	Name of manufacturer	Model and power rating
	Capacity	Year of manufacture
Current status	Current location	
	Details of current commitments	
Source	Indicate source of the equipment  ☐ Owned ☐ Rented ☐ I	eased
Omit the follow	ring information for equipment owned b	by the Tenderer.
Owner	Name of owner	
	Address of owner	
	Telephone	Contact name and title
	Fax	Telex
Agreements	Details of rental / lease / manufacture	agreements specific to the project

## 2. FORMPER-1

## Contractor's Representative and Key Personnel Schedule

Tenderers should provide the names and details of the suitably qualified Contractor's Representative and Key Personnel to perform the Contract. The data on their experience should be supplied using the Form PER-2 below for each candidate.

## **Contractor' Representative and Key Personnel**

1.	Title of position: Contractor's Representative			
	Name of candidate:			
	Duration of	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		
2.	Title of position: [			
	Name of candidate:			
	Duration of	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		
3.	Title of position: [	]		
	Name of candidate:			
	Duration of	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		
4.	T i i i i i i i i i i i i i i i i i i i			
	Name of candidate:			
	Duration of	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		
5.	<b>Title of position:</b> [insert t	itle]		
	Name of candidate			
	Duration of	[insert the whole period (start and end dates) for which this position will be		
	appointment:	engaged]		
	Time commitment: for	[insert the number of days/week/months/ that has been scheduled for this		
	this position:	position]		
	<b>Expected time schedule</b>	[insert the expected time schedule for this position (e.g. attach high level		
	for this position:	Gantt chart]		

#### **3. FORM PER-2:**

Resume and Declaration - Contractor's Representative and Key Personnel.

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Name of Tenderer		

Position [#1]:	[title of position from Form PER-	II			
Personnel information	Name:	Date of birth:			
	Address:	E-mail:			
	Professional qualifications:				
	Academic qualifications:				
	Language proficiency: [language and levels of speaking, reading and writing skills]				
Details					
	Address of Procuring Entity:				
	Telephone:	Contact (manager / personnel officer):			
	Fax:				
	Job title:	Years with present Procuring Entity:			

Summarize professional experience in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Project	Role	Duration of involvement	Relevant experience
[main project details]	[role and responsibilities on the project]	[time in role]	[describe the experience relevant to this position]

#### **Declaration**

I, the undersigned [insert either "Contractor's Representative" or "Key Personnel" as applicable], certify that to the best of my knowledge and belief, the information contained in this Form PER-2 correctly describes myself, my qualifications and my experience.

I confirm that I am available as certified in the following table and throughout the expected time schedule for this position as provided in the Tender:

Commitment	Details		
Commitment to duration of contract:	[insert period (start and end dates) for which this		
	Contractor's Representative or Key Personnel is available		
	to work on this contract]		
Time commitment:	[insert period (start and end dates) for which this		
	Contractor's Representative or Key Personnel is available		
	to work on this contract]		

I understand that any misrepresentation or omission in this Form may:

- a) be taken into consideration during Tender evaluation;
- b) result in my disqualification from participating in the Tender;
- c) result in my dismissal from the contract.

Name of Contractor's Representative or Key Personnel: [in	nsert name]
Signature:	
Date: (day month year):	Counter signature of
authorized representative of the Tenderer:	
Signature:	
Date: (day month year):	

# 4. TENDERER'S QUALIFICATION WITHOUT PRE-QUALIFICATION

To establish its qualifications to perform the contract in accordance with Section III, Evaluation and Qualification Criteria the Tenderer shall provide the information requested in the corresponding Information Sheets included hereunder.

#### 4.1 FORM ELI -1.1

1 enderer Information Form	
Date:	
ITT No. and title:	
Tenderer's name	
In case of Joint Venture (JV), name of each member:	
Tenderer's actual or intended country of registration:	
[indicate country of Constitution]	
Tenderer's actual or intended year of incorporation:	
Tenderer's legal address [in country of registration]:	
Tenderer's authorized representative information	
Name:	
Address:	
Telephone/Fax numbers:	
E-mail address:	
1. Attached are copies of original documents of	
☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or	
documents of registration of the legal entity named above, in accordance with ITT 3.6	
☐ In case of JV, letter of intent to form JV or JV agreement, in accordance with ITT 3.5	
☐ In case of state-owned enterprise or institution, in accordance with ITT 3.8, documents	
establishing:	
<ul> <li>Legal and financial autonomy</li> <li>Operation under commercial law</li> </ul>	
Operation under commercial law	
<ul> <li>Establishing that the Tenderer is not under the supervision of Kenya Power</li> </ul>	
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.	

## 4.2 **FORM ELI -1.2**

**Tenderer's JV Information Form** (to be completed for each member of Tenderer's JV) Date: \_\_\_\_\_ ITT No. and title: \_\_\_\_\_ Tenderer's JV name: JV member's name: JV member's country of registration: JV member's year of constitution: JV member's legal address in country of constitution: JV member's authorized representative information Name: Address: Telephone/Fax numbers: \_\_\_\_\_ E-mail address: 1. Attached are copies of original documents of ☐ Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITT 3.6. ☐ In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and that they are not under the supervision of Kenya Power, in accordance with ITT 3.8. 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

# 4.3 FORM CON - 2

# Historical Contract Non-Performance, Pending Litigation and Litigation History

Tendere	er's Name:		
Date: _			
JV Men	nber's Name		
ITT No.	. and title:		
Non-Pe		accordance with Section III, Evaluation and Qualification C	
	-	mance did not occur since 1st January [insert year] specified in	n Section III,
Evaluat	ion and Qualification	Criteria, Sub-Factor 2.1.	
		ormed since 1st January [insert year] specified in Section III,	Evaluation and
Qualific	cation Criteria, requir	ement 2.1	
Year	_	Contract Identification	Total Contract
	portion of		Amount (current
	contract		value, currency,
			exchange rate and
			Kenya Shilling
r ·	f:		equivalent)
[insert	[insert amount	Contract Identification: [indicate complete contract name/	[insert amount]
year]	and percentage]	number, and any other identification]	
		Kenya Power: [insert full name]	
		Address of Procuring Entity: [insert street/city/country]	
		Reason(s) for nonperformance: [indicate main reason(s)]	
Pending		nce with Section III, Evaluation and Qualification Criteria	
		n in accordance with Section III, Evaluation and Qualification	on Criteria, Sub-
Factor 2			
		accordance with Section III, Evaluation and Qualification Crit	teria, Sub-Factor 2.3
as indic	ated below.		

Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
		Contract Identification:	
		Kenya Power:	
		Address of Procuring Entity:	
		Matter in dispute:	
		Party who initiated the dispute:	
		Status of dispute:	
		Contract Identification:	
		Kenya Power:	
		Address of Procuring Entity:	
		Matter in dispute:	
		Party who initiated the dispute:	
		Status of dispute:	
Litigation H	istory in accordance with S	ection III, Evaluation and Qualification Criter	ria
		lance with Section III, Evaluation and Qualific	
	gation History in accordance	e with Section III, Evaluation and Qualification	n Criteria, Sub-Factor 2.4

as indicated	as indicated below.				
Year of award	Outcome as percentage of Net Worth	Contract Identification	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)		
[insert year]	[insert percentage]	Contract Identification: [indicate complete contract name, number, and any other identification]  Kenya Power: [insert full name]  Address of Procuring Entity: [insert street/city/country]  Matter in dispute: [indicate main issues in dispute]  Party who initiated the dispute: [indicate "Procuring Entity" or "Contractor"]  Reason(s) for Litigation and award decision [indicate main reason(s)]	[insert amount]		

# 4.4 FORM FIN – 3.1: Financial Situation and Performance

Tenderer's Name: \_\_\_\_\_

JV Member's Name\_\_\_\_\_\_ITT No. and title: \_\_\_\_\_\_

Date: \_

Type of Financial information in	Historic in	nformation for	r previous	years,	
(currency)	(amount in currency, currency, exchange rate*, USD equivalent)				
	Year 1	Year 2	Year 3	Year 4	Year 5
Statement of Financial Position (	Information:	from Balance	Sheet)		
Total Assets (TA)					
Total Liabilities (TL)					
Total Equity/Net Worth (NW)					
Current Assets (CA)					
Current Liabilities (CL)					
Working Capital (WC)					
Information from Income Statem	nent				
Total Revenue (TR)					
Profits Before Taxes (PBT)					
Cash Flow Information					
Cash Flow from Operating Activities					

<sup>\*</sup>Refer to ITT 15 for the exchange rate

## 4.4.2 Sources of Finance

Specify sources of finance to meet the cash flow requirements on works currently in progress and for future contract commitments.

No.	Source of finance	Amount (Kenya Shilling equivalent)
1		
2		
3		

#### 4.4.3 Financial documents

The Ter	nderer and its parties shall provide copies of financial statements foryears pursuant Section III,
Evaluat	ion and Qualifications Criteria, Sub-factor 3.1. The financial statements shall:
(a)	reflect the financial situation of the Tenderer or in case of JV member, and not an affiliated entity (such as
parent o	company or group member).
(b)	be independently audited or certified in accordance with local legislation.
(c)	be complete, including all notes to the financial statements.
(4)	compound to accounting manieds almostly compileted and audited

## 4.5 FORM FIN – 3.2: Average Annual Construction Turnover

Tenderer's Name:	
Date:	
JV Member's Name_	
ITT No. and title:	

	Annual turnover data (construction only)				
Year	Amount	Exchange rate	Kenya Shilling equivalent		
	Currency				
[indicate year]	[insert amount and indicate				
	currency]				
Average					
Annual					
Construction					
Turnover *					

\* See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

<sup>&</sup>lt;sup>1</sup> If the most recent set of financial statements is for a period earlier than 12 months from the date of Tender, the reason for this should be justified.

## 4.6 FORM FIN – 3.3: Financial Resources

Specify proposed sources of financing, such as liquid assets, unencumbered real assets, lines of credit, and other financial means, net of current commitments, available to meet the total construction cash flow demands of the subject contract or contracts as specified in Section III, Evaluation and Qualification Criteria

Fina	Financial Resources			
No.	Source of financing	Amount (Kenya Shilling equivalent)		
1				
2				
3				

#### <u>FORM FIN – 3.4:</u> Current Contract Commitments / Works in Progress

Tenderers and each member to a JV should provide information on their current commitments on all contracts that have been awarded, or for which a letter of intent or acceptance has been received, or for contracts approaching completion, but for which an unqualified, full completion certificate has yet to be issued.

	<b>Current Contract Commitments</b>						
	Name of Contract	Procuring Entity's Contact Address, Tel,	Value of Outstanding Work [Current Kenya Shilling /month Equivalent]	Estimated Completion Date	Average Monthly Invoicing Over Last Six Months [Kenya Shilling /month)]		
1							
2							
3							
4							
5							

## FORM EXP - 4.1 General Construction Experience

Date:			
JV Membe ITT No. an	er's Name nd title:		
ii i ivo. an	id titic	<del></del>	
Page		_ofpages	
Starting Year	Ending Year	Contract Identification	Role of Tenderer
		Contract name:	
		Brief Description of the Works performed by the Tenderer:	
		Amount of contract:	
		Address: Contract name:	
		Brief Description of the Works performed by the Tenderer:	
		Amount of contract:	
		Address:	
		Contract name:Brief Description of the Works performed by the Tenderer:	
		Amount of contract:Client/P.E:	
		Address: Contract name:	
		Brief Description of the Works performed by the Tenderer:	
		Amount of contract: Client/P.E: Address	
		Contract name:Brief Description of the Works performed by the Tenderer:	
		Amount of contract: Client/P.E:	
		Contract name:Brief Description of the Works performed by the	
		Tenderer:Amount of contract: Client/P.E:	

Address: \_\_\_\_\_

# FORM EXP - 4.2(a) Specific Construction and Contract Management Experience

Tenderer's Name:				
Date:				
JV Member's Name				
ITT No. and title:				
Similar Contract No.	Information			
Contract Identification				
Award date				
Completion date				
Role in Contract	Prime Contractor □	Member in JV □	Management Contractor □	Sub- contractor
Total Contract Amount		1	Kenya Shilling	
If member in a JV or sub-contractor,				
specify participation in total Contract				
amount				
Procuring Entity's Name:				
Address:				
Telephone/fax number				
E-mail:				

# FORM EXP - 4.2 (a) (cont.)

# **Specific Construction and Contract Management Experience (cont.)**

Similar	r Contract No.	Information
Descrip	tion of the similarity in accordance	
with Su	b-Factor 4.2(a) of Section III:	
1.	Amount	
2.	Physical size of required works	
items		
3.	Complexity	
4.	Methods/Technology	
5.	Construction rate for key activities	
6.	Other Characteristics	

# FORM EXP - 4.2(b)

<sup>2</sup> If applicable

# **Construction Experience in Key Activities**

Tenderer's Name: Date:					
Sub-contractor's Name <sup>2</sup> (as per ITT 34):		_			
ITT No. and title:					
All Sub-contractors for key activities must of Evaluation and Qualification Criteria, Sub-		orma	tion in this f	orm as per ITT	34 and Section I
1. Key Activity No One: _					
Contract Identification	Information				
Award date					
Completion date					
Role in Contract	Prime Contractor	Meı JV □	mber in	Management Contractor □	Sub-contractor
Total Contract Amount				Kenya Shilling	<u> </u>
Quantity (Volume, number or rate of production, as applicable) performed under the contract per year or part of the year	Total quantity the contract (i)	in	Percentage participation (ii)		Actual Quantity Performed (i) x (ii)
Year 1					
Year 2					
Year 3					
Year 4					
Year 5					
Year 6					
Procuring Entity's Name:					
Address: Telephone/fax number E-mail:					
Description of the key activities in accordance with Sub-Factor 4.2(b) of Section III:					
2. Activity No. Two					

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#### SECTION IV -TENDERING FORMS

#### **INSTRUCTIONS TO TENDERERS**

- *i)* The Tenderer must prepare this Form of Tender on stationery with its letterhead clearly showing the Tenderer's complete name and business address.
- *ii)* All italicized text is to help Tenderer in preparing this form.
- iii) Tenderer must complete and sign CERTIFICATE OF INDEPENDENT TENDER

  DETERMINATION and the SELF DECLARATION OF THE TENDERER attached to this Form of
  Tender.
- iv) The Form of Tender shall include the following Forms duly completed and signed by the Tenderer.
  - Tenderer's Eligibility-Confidential Business Questionnaire
  - Certificate of Independent Tender Determination
  - Self-Declaration of the Tenderer

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

**Request for Tender No.:** [insert identification]

Name and description of Tender [Insert as per ITT]

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

To: [insert complete Kenya Power] Dear Sirs,

1. In accordance with the Conditions of Contract, Specifications, Drawings and Bills of Quantities for the execution of the above named Works, we, the undersigned offer to construct and complete the Works and remedy any defects therein for the sum of;

Category/lot no.	Tendered Amount (KSH)
Category 1: Installation of Cctv	Total Amount in Figures: Kenya Shillings
major distribution/ transmission substation	Amount in w words: Kenya Shillings
Category 2: Installation of Cctv	Total Amount in Figures: Kenya Shillings
for Key offices	Amount in w words: Kenya Shillings
Category 3: Installation of	Total Amount in Figures: Kenya Shillings
access control in	A
substations & key offices	Amount in w words: Kenya Shillings
Category 4: Security systems for facilities and	Total Amount in Figures: Kenya Shillings

infrastructure	Amount in w words: Kenya Shillings
Category 5: Installation of	Total Amount in Figures: Kenya Shillings
electric fences for	Amount in w words: Kenya Shillings
key substations	Amount in w words. Kenya Simmigs
Category 6:	
Installation of	Total Amount in Figures: Kenya Shillings
intruder alarms	Amount in a words, Venya Chillings
Systems	Amount in w words: Kenya Shillings

- 2. We undertake, if our tender is accepted, to commence the Works as soon as is reasonably possible after the receipt of the Project Manager's notice to commence, and to complete the whole of the Works comprised in the Contract within the time stated in the Special Conditions of Contract.
- 3. We agree to adhere by this tender until **210 days** from the date of tender opening, and it shall remain binding upon us and may be accepted at any time before that date.
- 4. Unless and until a formal Agreement is prepared and executed this tender together with your written acceptance thereof, shall constitute a binding Contract between us. We further understand that you are not bound to accept the lowest or any tender you may receive.
- 5. We, the undersigned, further declare that:
  - i) <u>No reservations</u>: We have examined and have no reservations to the tender document, including Addenda issued in accordance with ITT 28;
  - ii) <u>Eligibility:</u> We meet the eligibility requirements and have no conflict of interest in accordance with ITT 3 and 4;
  - iii) <u>Tender-Securing Declaration</u>: We have not been suspended nor declared ineligible by Kenya Power based on execution of a Tender-Securing or Proposal-Securing Declaration in Kenya Power 's Country in accordance with ITT 19.8;
  - *Conformity*: We offer to execute in conformity with the tendering documents and in accordance with the implementation and completion specified in the construction schedule, the following Works: [insert a brief description of the Works];
  - v) <u>Tender Price:</u> The total price of our Tender, excluding any discounts offered in item 1 above is: [Insert one of the options below as appropriate]

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

#### Option 2, in case of multiple lots:

- a) <u>Total price of each lot</u> [insert the total price of each lot in words and figures, indicating the various amounts and the respective currencies]; and
- b) <u>Total price of all lots</u> (sum of all lots) [insert the total price of all lots in words and figures, indicating the various amounts and the respective currencies];
- vii) <u>Discounts:</u> The discounts offered and the methodology for their application are:
- viii) The discounts offered are: [Specify in detail each discount offered.]

- ix) The exact method of calculations to determine the net price after application of discounts is shown below: [Specify in detail the method that shall be used to apply the discounts];
- x) <u>Tender Validity Period</u>: Our Tender shall be valid for the period specified in TDS 18.1 (as amended, if applicable) from the date fixed for the Tender submission deadline specified in TDS 22.1 (as amended, if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- xi) <u>Performance Security:</u> If our Tender is accepted, we commit to obtain a Performance Security in accordance with the Tendering document;
- xii) <u>One Tender Per Tender</u>: We are not submitting any other Tender(s) as an individual Tender, and we are not participating in any other Tender(s) as a Joint Venture member or as a subcontractor, and meet the requirements of ITT 3.4, other than alternative Tenders submitted in accordance with ITT 13.3;
- xiii) <u>Suspension and Debarment</u>: We, along with any of our subcontractors, suppliers, Project Manager, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the Public Procurement Regulatory Authority or any other entity of the Government of Kenya, or any international organization.
- xiv) <u>State-owned enterprise or institution:</u> [select the appropriate option and delete the other] [We are not a state-owned enterprise or institution] / [We are a state-owned enterprise or institution but meet the requirements of ITT 3.8];
- xv) <u>Commissions, gratuities, fees</u>: We have paid, or will pay the following commissions, gratuities, or fees with respect to the tender process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity].

Name of Recipient	Address	Reason	Amount

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

- xvi) <u>Binding Contract</u>: We understand that this Tender, together with your written acceptance thereof included in your Letter of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- xvii) Not Bound to Accept: We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other Tender that you may receive;
- xviii) <u>Fraud and Corruption:</u> We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf engages in any type of Fraud and Corruption;
- xix) <u>Collusive practices</u>: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.
- xx) We undertake to adhere by the Code of Ethics for Persons Participating in Public Procurement and Asset Disposal, copyavailable from \_\_\_\_\_(specify website) during the procurement process and the execution of any resulting contract.
- xxi) We, the Tenderer, have completed fully and signed the following Forms as part of our Tender:
  - a) Tenderer's Eligibility; Confidential Business Questionnaire to establish we are not in any conflict to interest.
  - b) Certificate of Independent Tender Determination to declare that we completed the tender without colluding with other tenderers.
  - c) Self-Declaration of the Tenderer to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
  - d) Declaration and commitment to the Code of Ethics for Persons Participating in Public

#### Procurement and Asset Disposal

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

**Name of the Tenderer:** \*[insert complete name of person signing the Tender]

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

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

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

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

Date signed	da	v of	

#### Notes

<sup>\*</sup> In the case of the Tender submitted by joint venture specify the name of the Joint Venture as Tenderer

<sup>\*</sup> Person signing the Tender shall have the power of attorney given by the Tenderer to be attached with the Tender.

## 5. FORMS OF TENDER

## A. <u>TENDERER'S ELIGIBILITY-CONFIDENTIAL BUSINESS QUESTIONNAIRE</u>

#### **Instruction to Tenderer**

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

## (a) Tenderer's details

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

## **General and Specific Details**

b)	<b>Sole Proprietor,</b> provide the following details.
Name	in full
Age_	
Natio	nality
Coun	try of Origin
Citize	enship

Partnership, provide the following details.

c)

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

d)	<b>Registered Company,</b> provide the following details. If director/shareholder is a company
	is a company, give details of human directors until human directors are disclosed (Provide
	CR12 for that other registered Company

i)	Private or public Company
ii)	State the nominal and issued capital of the Company
	Nominal Kenya Shillings
	(Equivalent)
	(Equivalent)

iii) Give details of Directors as follows.

	Names of Director	Nationality	Citizenship	% Shares owned
1				
2				
3				

# (e) DISCLOSURE OF INTEREST-Interest of the Firm in Kenya Power.

i)	Are there any person/persons in	(Kenya	Power) who has/have an intere	st
	or relationship in this firm? Yes/No			

If yes, provide details as follows.

	Names of Person	Designation in Kenya Power	Interest or Relationship with Tenderer
1			
2			
3			

## ii) Conflict of interest disclosure

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

	Type of Conflict	Disclosure	If YES provide details of
		YES OR	the relationship with
		NO	Tenderer
	professional staff of Kenya Power who are directly or		
	indirectly involved in the preparation of the Tender		
	document or specifications of the Contract, and/or the		
	Tender evaluation process of such contract.		
8	Tenderer has a close business or family relationship with a		
	professional staff of Kenya Power who would be involved		
	in the implementation or supervision of the such Contract.		
9	Has the conflict stemming from such relationship stated in		
	item 7 and 8 above been resolved in a manner acceptable to		
	Kenya Power throughout the tendering process and		
	execution of the Contract.		

•	C 1.C	4 •
f)	Certifi	aatian
		CALIGII
-,	CCI CIII	CHUIDII

On behalf of the Tenderer, I certify that the information at the date of submission.	on given above is complete, current and accurate as
Full Name	
Title or Designation	
(Signature)	(Date)

## B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the for:_	undersigned, in submitting the accompanying Letter of Tender to the [Kenya Power]  [Name and number of r] in response to the request for tenders made by: [Name of the content
tende Tend	r] in response to the request for tenders made by:[Name of erer] do hereby make the following statements that I certify to be true and complete in every respect:
I certi	fy, on behalf of[Name of Tenderer] that:
1.	I have read and I understand the contents of this Certificate;
2.	I understand that the Tender will be disqualified if this Certificate is found not to be true and complete in every respect;
3.	I am the authorized representative of the Tenderer with authority to sign this Certificate, and to submit the Tender on behalf of the Tenderer;
4.	For the purposes of this Certificate and the Tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:
	<ul> <li>a) has been requested to submit a Tender in response to this request for tenders;</li> <li>b) could potentially submit a tender in response to this request for tenders, based on their qualifications, abilities or experience;</li> </ul>
5.	<ul> <li>The Tenderer discloses that [check one of the following, as applicable:</li> <li>a) The Tenderer has arrived at the Tender independently from, and without consultation, communication, agreement or arrangement with, any competitor;</li> <li>b) the Tenderer has entered into consultations, communications, agreements or arrangements with one or more competitors regarding this request for tenders, and the Tenderer discloses, in the attached document(s), complete details thereof, including the names of the competitors and the nature of, and reasons for, such consultations, communications, agreements or arrangements;</li> </ul>
6.	In particular, without limiting the generality of paragraphs (5)(a) or (5)(b) above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:  a) prices; b) methods, factors or formulas used to calculate prices; c) the intention or decision to submit, or not to submit, a tender; or d) the submission of a tender which does not meet the specifications of the request for Tenders; except as specifically disclosed pursuant to paragraph (5)(b) above;
7.	In addition, there has been no consultation, communication, agreement or arrangement with any competitor regarding the quality, quantity, specifications or delivery particulars of the works or services to which this request for tenders relates, except as specifically authorized by the procuring authority or as specifically disclosed pursuant to paragraph (5)(b) above;
8.	the terms of the Tender have not been, and will not be, knowingly disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening, or of the awarding of the Contract, whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph (5)(b) above.
	NameTitleDate
8.	the terms of the Tender have not been, and will not be, knowingly disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening, or of the awarding of the Contract, whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph (5)(b) above.

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## C. <u>SELF - DECLARATION FORMS</u>

#### FORM SD1

# SELF DECLARATION THAT THE PERSON/TENDERER IS NOT DEBARRED IN THE MATTER OF THE PUBLIC PROCUREMENTAND ASSET DISPOSALACT 2015.

I, . of	, of Post Office Box being a resident
	in the Republic of
1.	THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal  Officer/Director of
2.	THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.
3.	THAT what is deponed to herein above is true to the best of my knowledge, information and belief.
	(Signature) (Date)
	Bidder Official Stamp

## FORM SD2

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

resio	of P. O. Box being a dent of in the Republic of do hereby make a statement as ows: -
1.	THAT I am the Chief Executive/Managing Director/Principal Officer/Director of
	(insert tender title/description) for (insert name of Kenya Power) and duly authorized and competent to make this statement.
2.	THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and/or employees and/or agents of
3.	THAT the aforesaid Bidder, its servants and/or agents /subcontractors have not offered any inducement to any member of the Board, Management, Staff and/or employees and/or agents of (name of Kenya Power)
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 herein above is true to the best of my knowledge information and belief.

Bidder's Official Stamp

## DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I	(person) on behalf of (Name of the Business/
Company/Firm)	declare that I have read and fully
	nent & Asset Disposal Act, 2015, Regulations and the
	Public Procurement and Asset Disposal and my
responsibilities under the Code.	
responsionities under the code.	
I do hereby commit to abide by the provisions of th	ne Code of Ethics for persons participating in Public
Procurement and Asset Disposal.	e code of Eulies for persons participating in Fuoric
Trocurement and Asset Disposar.	
Name of Authorized signatory	
Sign	
51511	
Position.	
Office address	
Telephone	
п. 1	
E-mail	
Name of the Firm/Company	
Name of the Firm/Company	
Date	(Company
Seal/ Rubber Stamp where applicable)	
Witness	
Ni	C'
Name	Sign
D .	
Date	

#### E. APPENDIX 1-FRAUDAND CORRUPTION

(Appendix 1 shall not be modified)

#### a. Purpose

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

#### c. Requirements

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

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

- 1. A person to whom this Act applies shall not be involved in any corrupt, coercive, obstructive, collusive or fraudulent practice; or conflicts of interest in any procurement or asset disposal proceeding;
- 2. A person referred to under subsection (1) who contravenes the provisions of that sub-section commits an offence;
- 3. Without limiting the generality of the subsection (1) and (2), the person shall be:
  - a. Disqualified from entering into a contract for a procurement or asset disposal proceeding; or
  - b. If a contract has already been entered into with the person, the contract shall be voidable;
- 4. The voiding of a contract by Kenya Power under subsection (7) does not limit any legal remedy Kenya Power mayhave;
- 5. An employee or agent of Kenya Power or a member of the Board or committee of Kenya Power whohas a conflict of interest with respect to a procurement:
  - a. Shall not take part in the procurement proceedings;
  - b. Shall not, after a procurement contract has been entered into, take part in any decision relating to the procurement or contract; and
- c. Shall not be a subcontractor for the bidder to whom was awarded contract, or a member of the group of bidders to whom the contract was awarded, but the subcontractor appointed shall meet all the requirements of this Act.
- 6. An employee, agent or member described in subsection (1) who refrains from doing anything prohibited under that subsection, but for that subsection, would have been within his or her duties shall disclose the conflict of interest to Kenya Power;
- 7. If a person contravenes subsection (1) with respect to a conflict of interest described in subsection (5)(a) and the contract is awarded to the person or his relative or to another person in whom one of them had a direct or indirect pecuniary interest, the contract shall be terminated and all costs incurred by the public entity shall be made good by the awarding officer. Etc.
  - ii. In compliance with Kenya's laws, regulations and policies mentioned above, Kenya Power:

- a) Defines broadly, for the purposes of the above provisions, the terms set forth below as follows:
  - "corrupt practice" is the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
  - ii) "fraudulent practice" is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
  - iii) "collusive practice" is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
  - iv) "coercive practice" is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party;
  - v) "obstructive practice" is:
    - Deliberately destroying, falsifying, altering, or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede investigation by Public Procurement Regulatory Authority (PPRA) or any other appropriate authority appointed by Government of Kenya into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation; or
    - Acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3 e. below.
- b) Defines more specifically, in accordance with the above procurement Act provisions set forth for fraudulent and collusive practices as follows:
  - "fraudulent practice" includes a misrepresentation of fact in order to influence a procurement or disposal process or the exercise of a contract to the detriment of Kenya Power or the tenderer or the contractor, and includes collusive practices amongst tenderers prior to or after tender submission designed to establish tender prices at artificial non-competitive levels and to deprive Kenya Power of the benefits of free and open competition.
- c) Rejects a proposal for award <sup>1</sup> of a contract if PPRA determines that the firm or individual recommended for award, any of its personnel, or its agents, or its sub-consultants, sub-contractors, service providers, suppliers and/ or their employees, has, directly or indirectly, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
- d) Pursuant to the Kenya's above stated Acts and Regulations, may sanction or recommend to appropriate authority (ies) for sanctioning and debarment of a firm or individual, as applicable under the Acts and Regulations;
- e) Requires that a clause be included in Tender documents and Request for Proposal documents requiring (i) Tenderers (applicants/proposers), Consultants, Contractors, and Suppliers, and their Sub-contractors, Sub-consultants, Service providers, Suppliers, Agents personnel, permit the PPRA or any other appropriate authority appointed by Government of Kenya to inspect<sup>2</sup> all accounts, records and other documents relating to the procurement process, selection and/or contract execution, and to have them audited by auditors appointed by the PPRA or any other appropriate authority appointed by Government of Kenya; and
- f) Pursuant to Section 62 of the above Act, requires Applicants/Tenderers to submit along with their Applications/Tenders/Proposals a "Self-Declaration Form" as included in the procurement document declaring that they and all parties involved in the procurement process and contract execution have not engaged/will not engage in any corrupt or fraudulent practices.

 $<sup>^{1}</sup>$ For the avoidance of doubt, a party's ineligibility to be awarded a contract shall include, without limitation, (i) applying for pre-qualification, expressing interest in a consultancy, and tendering, either

directly or as a nominated sub-contractor, nominated consultant, nominated manufacturer or supplier, or nominated service provider, in respect of such contract, and (ii) entering into an addendum or amendment introducing a material modification to any existing contract.

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

# FORM OF TENDER SECURITY- [Option 1–Demand Bank Guarantee] **Beneficiary: Request for Tenders No:** Date: TENDER GUARANTEE No.: Guarantor: \_\_\_\_\_ 1. We have been informed that\_\_\_\_ (here inafter called "the Applicant") has submitted or will submit to the Beneficiary its Tender (here inafter called" the Tender") for the under Request for Tenders No. execution of "the ITT"). 2. Furthermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender guarantee. At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of \_\_\_\_\_(\_\_) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant: (a) Has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Applicant; or b) Having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) thirty days after the end of the Tender Validity Period. Consequently, any demand for payment under this guarantee must be received by us at the office indicated above onor before that date. [signature(s)]

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

# 7. FORMAT OF TENDER SECURITY [Option 2–Insurance Guarantee]

ΓEN	DER GUARANTEE No.:	
1.	its tender dated [Date of	derer] (hereinafter called "the tenderer") has submitted submission of tender] for the
2.	Insurance Company] having our Guarantor"), are bound unto . Procuring Entity") in the sum of	resents that WE of
	Sealed with the Common Seal of the	said Guarantor thisday of 20
3.	NOW, THEREFORE, THE CONDIT	TION OF THIS OBLIGATION is such that if the Applicant:
		ing the period of Tender validity set forth in the Principal's Validity Period"), or any extension thereto provided by the
	Tender Validity Period or any execute the Contract agreement; of accordance with the Instructions document, then the guarantee under above amount upon receipt of the Procuring Entity having to substitute the substitute of the procuring to substitute the procuring to substitute the procuring the	ptance of its Tender by the Procuring Entity during the extension thereto provided by the Principal; (i) failed to for (ii) has failed to furnish the Performance Security, in to tenderers ("ITT") of the Procuring Entity's Tendering trakes to immediately pay to the Procuring up to the Procuring Entity's first written demand, without the tantiate its demand, provided that in its demand the the demand arises from the occurrence of any of the ent(s) has occurred.
4.	of copies of the contract agreement and, or (b) if the Applicant is receipt of a copy of the Benefic	the Applicant is the successful Tenderer, upon our receipt nt signed by the Applicant and the Performance Security not the successful Tenderer, upon the earlier of (i) our iary's notification to the Applicant of the results of the ght days after the end of the Tender Validity Period.
5.	Consequently, any demand for paymindicated above on or before that dat	nent under this guarantee must be received by us at the office e.
	[Date ]	[Signature of the Guarantor]
	[Witness]	[Seal]

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

# 8. TENDER-SECURING DECLARATION FORM

[The	Bidder shall complete this Form in accordance with the instructions indicated]
Date: Tend To:	
that:	
1.	I/We understand that, according to your conditions, bids must be supported by a Tender-Securing Declaration.
2.	I/We accept that I/we will automatically be suspended from being eligible for tendering in any contract with the Purchaser for the period of time of [insert number of months or years] starting on [insert date], if we are in breach of our obligation(s) under the bid conditions, because we – (a) have withdrawn our tender during the period of tender validity specified by us in the Tendering Data Sheet; or (b) having been notified of the acceptance of our Bid by the Purchaser during the period of bid validity, (i) fail or refuse to execute the Contract, if required, or (ii) fail or refuse to furnish the Performance Security, in accordance with the instructions to tenders.
3.	I/We understand that this Tender Securing Declaration shall expire if we are not the successful Tenderer(s), upon the earlier of:  a) Our receipt of a copy of your notification of the name of the successful Tenderer; or  b) Thirty days after the expiration of our Tender.
4.	I/We understand that if I am/we are/in a Joint Venture, the Tender Securing Declaration must be in the name of the Joint Venture that submits the bid, and the Joint Venture has not been legally constituted at the time of bidding, the Tender Securing Declaration shall be in the names of all future partners as named in the letter of intent.
	Signed:
	Capacity / title (director or partner or sole proprietor, etc.)
	Name: Duly
	authorized to sign the bid for and on behalf of: [insert complete name of Tenderer]
	Dated on

# 9. Appendix to Tender

# **Schedule of Currency requirements**

Summary of currencies of the Tender for	[insert name of Section of the	he
Works]		

Name of currency	Amounts payable
Local currency:	
Foreign currency #1:	
Foreign currency #2:	
Foreign currency #3:	
Provisional sums expressed in local currency	[To be entered by Kenya Power]



## SECTION V – DRAWINGS

See drawings annexed in a separate section. (Contractor to Avail Design Drawing-Annex I)

# SECTION VI – SPECIFICATIONS & BILLS OF QUANTITIES

# SECTION VI (A) – SCHEDULE OF REQUREMENT

I) FI FCTRONIC SEC	CURITY SYSYTEMS TENDER CATEGO	RIFS /I OTS
SUMMARY	EXIT SISTIEMS TEMBER CATEGO	KIES/EOTS
CATEGORY/LOT	STATION/DESCRIPTION	
	INSTALLATION OF CCTV MAJOR	
	DISTRIBUTION/ TRANSMISSION	
CATEGORY/LOT 1	SUBSTATION	
	INSTALLATION OF CCTV FOR KEY	
CATEGORY/LOT 2	OFFICES	
	INSTALLATION OF ACCESS	
	CONTROL IN SUBSTATIONS & KEY	
CATEGORY/LOT 3	OFFICES	
	SECURITY SYSTEMS FOR	
CATEGORY/LOT 4	FACILITIES AND INFRASTRUCTURE	
	INSTALLATION OF ELECTRIC	
CATEGORY/LOT 5	FENCES FOR KEY SUBSTATIONS	
	INSTALLATION OF INTRUDER	
CATEGORY/LOT 6	ALARMS	

NO	STATION/DESCRIPTION	SYSTEMS	LOCATION
1	Nairobi West Substation	CCTV	Nairobi West
2	Kitale depot Substation	CCTV	Kitale
3	Webuye Substation	CCTV	Webuye
4	New Bamburi Substation	CCTV	Bamburi
5	Embu Depot Substation	CCTV	Embu
6	Manufacturers Training-3no technical persons	CCTV	To be determined

CATEGORY/LOT 2: INSTALLATION OF CCTV FOR KEY OFFICES			
NO	Station/Description	Systems	Location
1	Kakamega Office	CCTV	Kakamega
2	Kericho Depot	CCTV	Kericho
3	Kisii Depot	CCTV	Kisii
4	Nakuru Depot	CCTV	Nakuru
5	Nairobi South	CCTV	Nairobi South
6	Lukenya Substation	CCTV	Lukenya
7	Manufacturers Training-3no technical persons	CCTV	To be determined

CATEGORY/LOT 3: INSTALLATION OF ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES									
NO	STATION/DESCRIPTION	SYSTEMS	LOCATION						
1	Electricity House Kisumu	Access control & CCTV	Kisumu						
2	Electricity House Mombasa	Access control	Mombasa						
3	Electricity House Nakuru	Access control	Nakuru						
	Manufacturers Training-3no technical								
4	persons	Access control	To be determined						

NO	STATION/DESCRIPTION	SYSTEMS	LOCATION
1	Machakos Substation	CCTV & Access Control	Machakos
2	New Industrial Substation	CCTV & Access Control	Enterprise Rd Nairobi
3	Kikuyu Substation	CCTV & Access Control	Kikuyu
4	Nyahururu stores/ Substation	CCTV & Access Control	Nyahururu
5	Kilifi Substation	CCTV & Access Control	Kilifi
6	Homabay Stores	CCTV & Access Control	Homabay
8	Njoro Substation	CCTV & Access Control	Njoro ,Nakuru
9	Emali Stores	CCTV & Access Control	Emali
10	Garissa Office	CCTV & Access Control	Garissa
11	Manufacturers Training-3no technical persons	CCTV	To be determined

	CATEGORY/LOT 5: CATEGORY/LOT 5: INSTALLATION OF ELECTRIC FENCES/PERIMETER INTRUSION SYSTEM FOR KEY SUBSTATIONS									
NO	STATION/DESCRIPTION	SYSTEMS	LOCATION							
1.	Kiboko Substation	Electric Fence	Kiboko Substation							
2.	Kipevu Substation	Electric Fence	Kipevu SS							
3.	Makuyu Substation	Electric Fence	Makuyu							
4.	Mamlaka Substation	CCTV intrusion system	Mamlaka Substation							
5.	Thika industrial Substation	CCTV intrusion system	Thika industrial SS							
6.	Sarmat Substation	CCTV- intrusion system	sarmat Substation							
7.	Villa Franka Substation	CCTV intrusion system	Villa Franka							
8.	Eldoret depot and Substation	CCTV intrusion system	Eldoret							
	Manufacturers Training-3no technical									
9.	persons	Electric Fence/CCTV	To be determined							

NO	STATION/DESCRIPTION	SYSTEMS	LOCATION	
1	CATEGORY/LOT 6: INSTALLATION OF INTRUDER ALARMS		200111011	
2	Eldoret depot	Intrusion detection	Eldoret	
3	Naivasha office	Intrusion detection	Naivasha	
4	Ukunda Banking hall-Stores	Intrusion detection	Ukunda	
5	Nairobi South Depot	Intrusion detection	Nairobi	
6	Kisii Depot	Intrusion detection	Kisii	
8	Westlands Substation	Electric Fence	Westlands Substation	
9	Nairobi North SS	Electric Fence	Nairobi North SS	
10	Webuye Substation	Electric Fence	Webuye	
11	Manufacturers Training-3no technical persons	Intrusion and Electric Fence	To be determined	

#### PRICE SCHEDULE /BILLS OF QUANTITIES

(Unit Price in all Categories/Lots shall include 12 Months Warranty service and maintenance during the defect Liability period as described in the SLA as well as the manufacturer's equipment warranty as described in the tender)

### SECTION VI (A1) – PRICE SCHEDULE /BILLS OF QUANTITIES

(See specifications in a separate section)

# CATEGORY/LOT /LOT 1: INSTALLATION OF CCTV MAJOR DISTRIBUTION/ TRANSMISSION SUBSTATION

NAIROBI WEST DEPOT IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers		
A.	5 MPX, WDR Fixed Dome Camera	No.	37						
В.	2MPX PTZ Camera	No.	1						
C.	64-Channel NVR and storage Server upto 40TB	No.	1						
D.	Genetec Video License (per Camera).	No.	38						
E.	IP Access Control System (TYPE B) at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per Door)	No.	6						
F.	40 Inch 1080P LED Monitor C/W mount accessories	No.	1						
G.	32 Inch 1080P LED Monitor C/W mount accessories	No.	1						
Н.	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2						
	Total Carried to Collection Nairobi west depot page 1								

Bill of Quantities Page 2								
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers	
I.	Allow for cabling, ducting and necessary accessories		1					
J.	Network Devices accessories&cabinets-3 Edge switches ,1 core switch	LOT	1					
K	6 Kva true online UPS	NO	1					
L	3 Kva true online UPS	NO	2					
M	1.5 Kva true online UPS	NO	1					
N	Allow for integration of the system to existing GENETEC server	LOT	1					
O	Client Work station	LOT	1					
P	Installation, Testing and Commissioning to client satisfaction	LOT	1					
Q.	Biometric Access Control cards	No.	200					
	Total Carried to Collection Nairobi west depot page 2							

SUMMARY PAGE NAIROBI WEST DEPOT IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES						
Total Carried to collection Page 1 Nairobi west depot						
Total Carried to collection Page 2 Nairobi west depot						
SUB-TOTAL- NAIROBI WEST DEPOT IP- CCTV &ACCESS CONTROL						

### KITALE DEPOT IP- CCTV &ACCESS CONTROL

	Item Description			Country of	Rate in	Amount	Part
No		Unit	QTY	Country of origin	KES(Vat Exc)	KES(Vat Exc)	Numbers
Α.	5 MPX, WDR Fixed Dome Camera	No.	21				
В.	32-Channel NVR and storage Server upto 40TB	No.	1				
C.	Genetec Video License (per Camera).	No.	21				
D.	IP Access Control System at Entry (TYPE B) (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	6				
Е.	40 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to collection K		l				

	Bill of Quantities Kitale depot Page 2								
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers		
G.	Allow for cabling, ducting and necessary accessories	LOT	1						
Н.	Network Devices accessories&cabinets-3 Edge switches	LOT	1						
I.	3 Kva true online UPS	NO	2						
J.	Allow for integration of the system to existing GENETEC server	LOT	1						
K.	Client Work station	LOT	1						
L.	Installation, Testing and Commissioning to client satisfaction	LOT	1						
N	Biometric Access Control cards	No.	200						
	Total Carried								

SUMMARY PAGE KITALE DEPOT IP- CCTV &ACCESS CONTROL IP- CCTV &ACCESS							
CONTROL CCTV BILL OF QUANTITIES							
Total Carried to collection Kitale							
depot Page 1							
Total Carried to collection Kitale							
depot Page 2							
GAID MODIAL VIVEAL E DEDOCTAD COMMI							
SUB-TOTAL- KITALE DEPOT IP- CCTV							
&ACCESS CONTROL							

#### WEBUYE SUBSTATION IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	16				
В	2MPX PTZ Camera	No.	2				
С	32-Channel NVR and storage Server upto 40TB	No.	1				
D	Genetec Video License (per Camera).	No.	18				
E	IP Access Control System at Entry (TYPE A) (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (Per Door)	No.	4				
F	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to collection We						

	Bill of Quantities Webuye Substation Page 2								
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers		
Н	Allow for cabling, ducting and necessary accessories	LO T	1						
Ι	Network Devices accessories&cabinets-3 Edge switches ,1 core switch	LOT	1						
K	3 Kva true online UPS	NO	1						
L	Allow for integration of the system to existing GENETEC server	LOT	1						
M	Client Work station	LOT	1						
N	Installation, Testing and Commissioning to client satisfaction	LOT	1						
О	Biometric Access Control Cards	No.	200						
	Total Carried to co	Page 2							

SUMMARY PAGE WEBUYE SUBSTATION IP- CCTV &AC &ACCESS CONTROL CCTV BILL OF QUANTITIES	CESS CONTROL IP- CCTV
Total Carried to collection Webuye Substation Page 1	
Total Carried to collection Webuye Substation Page 2	
SUB-TOTAL-WEBUYE SUBSTATION IP- CCTV &ACCESS CONTROL	

#### NEW BAMBURI SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A.	5 MPX, WDR Fixed Dome Camera	No.	29				
B.	2MPX PTZ Camera	No.	1				
C.	32-Channel NVR and storage Server upto 40TB	No.	1				
D.	Genetec Video License (per Camera).	No.	30				
E.	TYPE A at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licenses, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	3				
F.	40 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to collection	n New H	Bamburi	Substation Pa	ige 1		

	Bill of Q	uantiti	es New 1	Bamburi Subst	ation Page 2		_
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers
H.	Allow for cabling, ducting and necessary accessories	LOT	1				
I.	Network Devices accessories&cabinets-3 Edge switches ,1 core switch	LOT	1				
J.	3 Kva true online UPS	NO	2				
K.	1.5 Kva true online UPS	NO	1				
L.	Allow for integration of the system to existing GENETEC server	LOT	1				
M.	Client Work station	LOT	1				
N.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
O.	Biometric Access Control cards	NO.	200				
	Total Carried to co	ollection	New Ba	amburi Substa	tion Page 2		

SUMMARY PAGE NEW BAMBURI SUBSTATION IP- CCTV &A CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES	CCESS CONTROL IP-
Total Carried to collection New Bamburi Substation Page 1	
Total Carried to collection New Bamburi Substation Page 2	
SUB-TOTAL-NEW BAMBURI SUBSTATION IP- CCTV &ACCESS CONTROL	

#### EMBU DEPOT/SUBSTATION IP- CCTV &ACCESS CONTROL

				Country of	Rate in	Amount	Part
No	Item Description	Unit	QTY	origin	KES(Vat Exc)	KES(Vat Exc)	Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	10				
С	32-Channel NVR and storage Server upto 40TB	No.	1				
D	Genetec Video License (per Camera).	No.	10				
E	Entry TYPE B (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
F	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to collection Embu Depot/ Substation Page 1						

	Bill of Quantities Embu Depot/ Substation Page 2						
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
Ι	Allow for cabling, ducting and necessary accessories	LOT	1				
J	Network Devices accessories&cabinets-3 Edge switches ,1 core switch	LOT	1				
L	3 Kva true online UPS	NO	2				
M	1.5 Kva true online UPS	NO	1				
N	Allow for integration of the system to existing GENETEC server	LOT	1				
Р	Client Work station	LOT	1				
Q	Installation, Testing and Commissioning to client satisfaction	LOT	1				
R.	Biometric Access Control cards	No.	200				
	Total Carried to col	on Page 2					

SUMMARY PAGE EMBU DEPOT/ SUBSTATION IP- CO CCTV &ACCESS CONTROL CCTV BILL OF QUANTIT	
Total Carried to collection Embu Depot/ Substation Page 1	
Total Carried to collection Embu Depot/ Substation Page 2	
SUB-TOTAL- EMBU DEPOT/SUBSTATION IP- CCTV &ACCESS CONTROL	

### TECHNICAL TRAINING

	Bill of Quantities CATEGORY/LOT 1-Technical Training Page 1						
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	Manufacturers Training: Factor costs as follows:						
i)	Manufacturers Training at the manufacturers for 3no technical persons (Factor only the cost of training i.e venue ,trainers, transport to and from the training venue and certification)						
ii)	Travelling and accommodation for 3no technical persons	LOT	1		3,500,00.00	3,500,00.00	
	Total Carried to collection Bill of Quantities CATEGORY/LOT 1-Technical Training Page 1						

SUMMARY PAGE CATEGORY/LOT 1: INSTALLATION OF CCTV MAJOR DISTRIBUTION/

TRANSMISSION SUBSTATION BILL OF QUANTITIES

Tidii (Mizibbio) ( Gebruii 101 ( Bibb of Gein ( 1111 Bb	
Sub-total- Nairobi west depot Ip-	Amount
Cctv &access control	KES(Vat
	Exc)
Sub-total- Kitale depot/	
Substation Ip- Cctv &access control	
Sub-total- Webuye Substation	
Ip- Cctv &access control	
Sub-total- New Bamburi	
Substation Ip- Cctv &access control	
Sub-total- Embu Depot /Substation Ip-	
Cctv &access control	
Sub-total- TECHNICAL TRAINING	
Sub-total- TECHNICAL TRAINING	
SUB-TOTAL- CCTV MAJOR	
DISTRIBUTION/ TRANSMISSION	
SUBSTATION	
Add 16% Vat	
Auu 10 /0 Vat	
GRAND TOTAL CATEGORY/LOT 1:	
INSTALLATION OF CCTV MAJOR	
DISTRIBUTION/ TRANSMISSION	
SUBSTATION	

# SCHEDULE OF MAINTENANCE CATEGORY/LOT 1: INSTALLATION OF CCTV MAJOR DISTRIBUTION/ TRANSMISSION SUBSTATION

Item	Description	Unit of measure	Quantity	Unit Price VAT Exclusive ( Ksh)	Total Price VAT Exclusive ( Ksh)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		

#### CATEGORY/LOT 1-RECOMMENDED SCHEDULE OF SPARE PARTS

Item	Description	Qty	<b>Unit Price VAT</b>		Total Price VAT
			Excl (Ksh)	VAT Excl (	Incl (Ksh)
				Ksh)	
		•	•	•	

NB: The cost of spare parts shall be budgeted for and consumed in subsequent repair $\&$
Maintenance budget after the warranty period on as-and- when needed-basis.

Name of Tenderer\_\_\_\_\_\_Signature & Official Stamp

# 

#### CATEGORY/LOT 2: INSTALLATION OF IP-CCTV FOR KEY OFFICES KAKAMEGA OFFICE IP- CCTV &ACCESS CONTROL

				C4	Rate in	Amount	Dont
No	<b>Item Description</b>	Unit	QTY	Country of origin	KES(Vat Exc)	KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	18				
В	32-Channel NVR and storage Server upto 20TB	No.	1				
С	Genetec Video License (per Camera).	No.	18				
D	IP Access Control System TYPE  B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	6				
F	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Kakan						

#### Bill of Quantities Kakamega Office Page 2 Rate in Amount **Country of** Part QTY No **Item Description** Unit KES(Vat KES(Vat origin Numbers Exc) Exc) Allow for cabling, ducting and Η 1 necessary accessories Network Devices I accessories&cabinets-3 Edge LOT 1 switches ,1 core switch K 3 Kva true online UPS NO 2 Allow for integration of the M system to existing GENETEC LOT 1 server Client Work station LOT O 1 Installation, Testing and P Commissioning LOT to client 1 satisfaction Q Biometric Access Control cards No. 200

**Total Carried to Collection Kakamega Office page 2** 

SUMMARY PAGE KAKAMEGA OFFICE IP- CCTV &ACCESS QUANTITIES	CONTROL CCTV BILL OF
Total Carried to collection Page 1 Kakamega Office	
Total Carried to collection Page 2 Kakamega Office	
SUB-TOTAL- KAKAMEGA OFFICE - CCTV &ACCESS CONTROL	

#### KERICHO DEPOT IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	19				
В	32-Channel NVR and storage Server up to 20TB	No.	1				
С	Genetec Video License (per Camera).	No.	19				
D	TYPE B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	7				
Е	40 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Ker						

	Bill of Quantities Kericho Depot Page 2								
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers		
Н	Allow for cabling, ducting and necessary accessories		1						
Ι	Network Devices accessories&cabinets-3 Edge switches ,1 core switch	LOT	1						
J	3 Kva true online UPS	NO	1						
K	1.5 Kva true online UPS	NO	2						
L	Allow for integration of the system to existing GENETEC server	LOT	1						
N	Client Work station	LOT	1						
О	Installation, Testing and Commissioning to client satisfaction	LOT	1						
Р	Biometric Access Control cards	No.	200						
	Total Carried to Collection Kericho Depot page 2								

SUMMARY PAGE KERICHO DEPOT IP- CCTV &ACCESS CO QUANTITIES	NTROL CCT	V BILL OF
Total Carried to collection Page 1 Kericho Depot		
Total Carried to collection Page 2 Kericho Depot		
SUB-TOTAL- KERICHO DEPOT - CCTV &ACCESS CONTROL		

#### KISII DEPOT IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	19				
В	32-Channel NVR and storage Server upto 20TB	No.	1				
С	Genetec Video License (per Camera).	No.	19				
D	System TYPE B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	4				
Е	40 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection	on Kisii	Depot p	page 1			

	Bill of Quantities Kericho Depot Page 2										
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers				
G	Allow for cabling, ducting and necessary accessories		1								
Н	Network Devices accessories&cabinets-3 Edge switches ,1 core switch	LOT	1								
I	3 Kva true online UPS	NO	1								
J	1.5 Kva true online UPS	NO	2								
K	Allow for integration of the system to existing GENETEC server	LOT	1								
M	Client Work station	LOT	1								
N	Installation, Testing and Commissioning to client satisfaction	LOT	1								
О	Biometric Access Control cards	No.	200								
	Total Carried to Collection Kisii Depot page 2										

SUMMARY PAGE KISH DEPOT IP- CCTV &ACCESS CONQUANTITIES	NTROL CCTV BILL OF
Total Carried to collection Page 1 Kisii Depot	
Total Carried to collection Page 2 Kisii Depot	
SUB-TOTAL- KISH DEPOT - CCTV &ACCESS CONTROL	

#### NAKURU DEPOT IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	32				
В	64-Channel NVR and storage Server up to 24TB	No.	1				
С	Genetec Video License (per Camera).	No.	32				
D	IP Access Control System TYPE  B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (Per door).	No.	4				
Е	40 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Naku						

	Bill o	f Quant	tities Na	kuru Depot Pa	nge 2		
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
G	Allow for cabling, ducting and necessary accessories	LOT	1				
Н	Network Devices accessories&cabinets-3 switches,1 core switch	LOT	1				
I	3 Kva true online UPS	NO	1				
J	1.5 Kva true online UPS	NO	2				
K	Allow for integration of the system to existing GENETEC server	LOT	1				
M	Client Work station	LOT	1				
N	Installation, Testing and Commissioning to client satisfaction	LOT	1				
О	Biometric Access Control cards	No.	200				
	Total Carried to Coll	ection I	Nakuru 1	Depot page 2			

SUMMARY PAGE NAKURU DEPOT IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES					
Total Carried to collection Page 1 Nakuru Depot					
Total Carried to collection Page 2 Nakuru  Depot					
SUB-TOTAL- NAKURU DEPOT - CCTV &ACCESS CONTROL					

#### NAIROBI SOUTH DEPOT IP- CCTV &ACCESS CONTROL

				Country of	Rate in	Amount	Part
No	Item Description	Unit	QTY	origin	KES(Vat Exc)	KES(Vat Exc)	Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	48				
В	2MPX PTZ Camera	No.	4				
С	64-Channel NVR and storage Server upto 40TB	No.	1				
D	Genetec Video License (per Camera).	No.	52				
E	IP Access Control System TYPE B at Entry (Finger print Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	6				
F	40 Inch 1080P LED Monitor C/W mount accessories	No.	2				
G	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Nai						

Bill of Quantities Nairobi South Depot Page 2							
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
Н	Allow for cabling, ducting, poles& necessary accessories	LOT	1				
I	Network Devices accessories&cabinets-6 switches ,1 core switch	LOT	1				
J	6 Kva true online UPS	NO	1				
K	3 Kva true online UPS	NO	3				
L	1.5 Kva true online UPS	NO	3				
М	Allow for integration of the system to existing GENETEC server	LOT	1				
О	Client Work station	LOT	1				
Р	Installation, Testing and Commissioning to client satisfaction	LOT	1				
Q	Biometric Access Control cards	No.	200				
	Total Carried to Collection Nairobi South Depot page 2						

SUMMARY PAGE NAIROBI SOUTH DEPOT IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES				
Total Carried to collection Page 1 Nairobi South Depot	Amount KES(Vat Exc)			
Total Carried to collection Page 2 Nairobi South Depot				
SUB-TOTAL- NAIROBI SOUTH DEPOT -				
CCTV &ACCESS CONTROL				

#### CATEGORY/LOT 2: INSTALLATION OF IP-CCTV FOR KEY OFFICES

#### LUKENYA SUBSTATION IP- CCTV &ACCESS CONTROL

				Country of	Rate in	Amount	Part
No	Item Description	Unit	QTY	Country of origin	KES(Vat Exc)	KES(Vat Exc)	Numbers
A.	5 MPX, WDR Fixed Dome Camera	No.	16				
В.	32-Channel NVR and storage Server upto 12TB	No.	1				
C.	Genetec Video License (per Camera).	No.	16				
D.	TYPE A at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	1				
E.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection L						

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers
F.	Allow for cabling, ducting, poles& necessary accessories		1				
G.	Network Devices accessories&cabinets-1 Edge switch	LOT	1				
Н.	3 Kva true online UPS	NO	1				
I.	Allow for integration of the system to existing GENETEC server	LOT	1				
J.	Client Work station	LOT	1				
K.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
L.	Biometric Access Control cards	No.	200				

OF QUANTITIES				
Total Carried to collection Page 1 Lukenya Substation				
Total Carried to collection Page 2 Lukenya Substation				
SUB-TOTAL-LUKENYA SUBSTATION				
CCTV &ACCESS CONTROL				

## CATEGORY/LOT 2: INSTALLATION OF CCTV MAJOR DISTRIBUTION/ TRANSMISSION SUBSTATION

#### TECHNICAL TRAINING

	Bill of Quantities CATEGORY/LOT 2-Technical Training Page 1						
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	Manufacturers Training: Factor costs as follows:						
i)	Manufacturers Training at the manufacturers for 3no technical persons (Factor only the cost of training i.e venue ,trainers, transport to and from the training venue and certification)	LOT	1				
ii)	Travelling and accommodation for 3no technical persons	LOT	1		3,500,00.00	3,500,00.00	
	Total Car CATEGORY/L						

#### SUMMARY PAGE CATEGORY/LOT 2 BILL OF QUANTITIES: INSTALLATION OF IP-CCTV FOR KEY OFFICES

Sub-total- Kakamega Office CCTV IP- CCTV & Access control	
Sub-total- Kericho Depot CCTV IP- CCTV & Access control	
Sub-total- Kisii Depot CCTV IP- CCTV & Access control	
Sub-total- Nakuru Depot CCTV IP- CCTV & Access control	
Sub-total- Nairobi South Depot CCTV IP- CCTV & Access control	
Sub-total- Lukenya Substation CCTV IP- CCTV & Access control	
Sub-total- Technical Training	
SUB-TOTAL- INSTALLATION OF IP- CCTV FOR KEY OFFICES	
Add 16% Vat	
GRAND TOTAL CATEGORY/LOT 2 BILL OF QUANTITIES: INSTALLATION OF IP-CCTV FOR KEY OFFICES	

### SCHEDULE OF MAINTENANCE CATEGORY/LOT 2: INSTALLATION OF IP-CCTV FOR KEY OFFICES

Item	Description	Unit of measure	Quantity	Unit Price VAT Exclusive ( Ksh)	Total Price VAT Exclusive ( Ksh)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4	(IXSII)	( KSII)

#### CATEGORY/LOT 2-RECOMMENDED SCHEDULE OF SPARE PARTS

Item	Description	Qty	Unit Price VAT Excl (Ksh)	Total Price VAT Excl ( Ksh)	Total Price VAT Incl (Ksh)

	oudgeted for and consumed in subsequent repair & nty period on as-and- when needed-basis.
Name of Tenderer	Signature & Official Stamp

#### SECTION VI (A3) – PRICE SCHEDULE /BILLS OF QUANTITIES

(See specifications in a separate section)

### CATEGORY/LOT 3: INSTALLATION OF ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES

ELECTRICITY HOUSE KISUMU IP- CCTV &ACCESS CONTROL

	ELECTRICITY HOUSE KISUMU				Rate in	Amount	D 4
No	Item Description	Unit	QTY	Country of origin	KES(Vat Exc)	TZTCC/XZ-4	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	55				
В	64-Channel NVR and storage Server upto 40TB	No.	1				
С	Genetec Video License (per Camera).	No.	55				
В	Visitor Management system with following components 1 No. Visitor management kiosk, 1No. Visitor management smartphone with app, 1 No. visitor management badging printer with 100 badge printing rolls No, 1No. Hand Held visitor scanner, complete with software and licenses as per the specifications and other accessories necessary to complete the installation.	Lot	1				
D	IP Access Control System <b>TYPE</b> C at Entry (Facial Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (Per door).	No.	12				
Е	40 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Electricity Hou	ıse Kisı	ımu pag	e 1			1

	Bill of Quantities Electricity House Kisumu Page 2						
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs
Н	Allow for cabling, ducting and necessary accessories	LOT	1				
I	Network accessories&cabinets-6 switches ,1 core switch	LOT	1				
J	6 Kva true online UPS	NO	1				
K	3 Kva true online UPS	NO	3				
L	1.5 Kva true online UPS	NO	2				
М	Allow for integration of the system to existing GENETEC server	LOT	1				
О	Client Work station	LOT	1				
Р	Installation, Testing and Commissioning to client satisfaction	LOT	1				
Q	Establishment of regional Security Control Room	LOT	1		3,500,000		
R	Biometric Access Control cards	No.	1000				
	Total Carried to Collection Electricity House Kisumu page 2						

SUMMARY PAGE ELECTRICITY HOUSE KISUMU-IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES					
Total Carried to collection Page 1 Electricity House Kisumu					
Total Carried to collection Page 2 Electricity House Kisumu					
SUB-TOTAL- ELECTRICITY HOUSE KISUMU-IP- CCTV &ACCESS					

### CATEGORY/LOT 3: INSTALLATION OF ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES

#### ELECTRICITY HOUSE NAKURU ACCESS CONTROL SYSTEMS

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
A	IP Access Control System <b>TYPE</b> C at Entry (Facial Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (Per door).	No.	10							
В	Visitor Management system with following components 1 No. Visitor management kiosk, 1No. visitor management smartphone with app, 1 No. visitor management badging printer with 100 badge printing rolls No, 1No. Hand Held visitor scanner, complete with software and licenses as per the specifications and other accessories necessary to complete the installation.	Lot	1							
С	ACCESS Control enrollment reader compatible with Type A,B&C readers	No.	1							
D	Client Workstation	No.	1							
Н	Walkthrough detector as per specifications	NO.	2							
I	Sliding gate as per specifications	LOT	1							
J	Network Devices accessories&cabinets-4no Edge switches and 1 core switch.	LOT	1							
K	3 Kva true online UPS	NO	3							
M	Installation, Testing, Training and Commissioning to client satisfaction	LOT	1							
N	Biometric Access Control cards	No.	200							
	Total Carried to Collection Electricity House Nakuru									

## CATEGORY/LOT 3: INSTALLATION OF ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES

#### ELECTRICITY HOUSE MOMBASA ACCESS CONTROL SYSTEMS

No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
A	IP Access Control System <b>TYPE C</b> at Entry (Facial Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (Per door).	No.	18							
В	Visitor Management system with following components 1 No. Visitor management kiosk, 1No. visitor management smartphone with app, 1 No. visitor management badging printer with 100 badge printing rolls No, 1No. Hand Held visitor scanner, complete with software and licenses as per the specifications and other accessories necessary to complete the installation.	Lot	1							
С	ACCESS Control enrollment reader compatible with Type A,B&C readers	No.	1							
D	Network Devices accessories&cabinets-4no Edge switches	LOT	1							
Е	3 Kva true online UPS	No.	3							
G	Installation, Testing, Training and Commissioning to client satisfaction	LOT	1							
Н	Biometric Access Control cards	No.	200							
	Total Carried to Collection Electricity House Mombasa									

## CATEGORY/LOT 3: INSTALLATION OF ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES

#### TECHNICAL TRAINING

	Bill of Q	Training					
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	Manufacturers Training: Factor costs as follows:						
i)	Manufacturers Training at the manufacturers for 3no technical persons (Factor only the cost of training i.e venue ,trainers, transport to and from the training venue and certification)	LOT	1				
ii)	Travelling and accommodation for 3no technical persons	LOT	1		3,500,00.00	3,500,00.00	
	Total Car CATEGOR						

## SUMMARY PAGE: INSTALLATION OF ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES BILL OF QUANTITIES

Total Carried to collection Electricity House	
Kisumu	
Total Carried to collection Electricity House	
Nakuru	
Total Carried to collection	
Electricity House Mombasa	
Total – Technical Training	
SUB-TOTAL FOR ACCESS CONTROL IN	
SUBSTATIONS & KEY OFFICES	
Add 16% Vat	
GRAND TOTAL INSTALLATION OF	
ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES	

### SCHEDULE OF MAINTENANCE CATEGORY/LOT 3: INSTALLATION OF ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES

Item	Description	Unit of measure	Quantity	Unit Price VAT Exclusive ( Ksh)	Total Price VAT Exclusive ( Ksh)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		

#### CATEGORY/LOT 3-RECOMMENDED SCHEDULE OF SPARE PARTS

Item	Description	Qty	Unit Price VAT Excl (Ksh)	Total Price VAT Excl ( Ksh)	Total Price VAT Incl (Ksh)

NB: The cost of spare parts shall be budgeted for and consumed in subsequent repa	ıir &
Maintenance budget after the warranty period on as-and- when needed-basis.	

Name of Tenderer	Signature & Official Stamp
Name of Tenderer	Signature & Official Stamp

#### SECTION VI (A4) – PRICE SCHEDULE /BILLS OF QUANTITIES

(See specifications in a separate section)

### CATEGORY/LOT 4: SECURITY SYSTEMS FOR FACILITIES AND INFRASTRUCTURE MACHAKOS SUBSTATION IP- CCTV &ACCESS CONTROL

	Item Description			<b>C</b> 4	Rate in	Amount	D 4
No		Unit	QTY	Country of origin	KES(Vat Exc)	KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	16				
В	16-Channel NVR and storage Server upto 12TB	No.	1				
С	Genetec Video License (per Camera).	No.	16				
D	IP Access Control System <b>TYPE A</b> at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
Е	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Mach						

	Bill of Quantities Machakos Substation Page 2								
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs		
F	Allow for cabling, ducting and necessary accessories	LOT	1						
G	Network Devices accessories&cabinets-1-Edge switch.	LOT	1						
M	3 Kva true online UPS	NO	1						
N	Allow for integration of the system to existing GENETEC server	LOT	1						
Р	Client Work station	LOT	1						
Q	Installation, Integration, Testing and Commissioning to client satisfaction	LOT	1						
R	Biometric Access Control cards	No.	200						
	Total Carried to Collection Machakos Substation page 2								

SUMMARY PAGE MACHAKOS SUBSTATION-IP- CCTV &AC BILL OF QUANTITIES	SUMMARY PAGE MACHAKOS SUBSTATION-IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES						
Total Carried to collection Page 1 Machakos Substation							
Total Carried to collection Page 2 Machakos Substation							
SUB-TOTAL-MACHAKOS SUBSTATION- IP- CCTV &ACCESS							

#### NEW INDUSTRIAL SUBSTATION IP- CCTV &ACCESS CONTROL

	Item Description			C4	Rate in	Amount	Dowt
No		Unit	QTY	Country of origin	KES(Vat Exc)	KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	10				
В	16-Channel NVR and storage Server upto 12TB	No.	1				
С	Genetec Video License (per Camera).	No.	10				
D	IP Access Control System TYPE  A at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
Е	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection New						

	Bill of Quantities New Industrial Substation Page 2										
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount	Part Numbe rs				
F	Allow for cabling, ducting and necessary accessories	LOT	1								
G	Network Devices accessories&cabinets-1-Edge switches .	LOT	1								
Н	3 Kva true online UPS	NO	1								
J	Allow for integration of the system to existing GENETEC server	LOT	1								
L	Client Work station	LOT	1								
M	Installation, Testing and Commissioning to client satisfaction	LOT	1								
N	Biometric Access Control cards	No.	200								
	Total Carried to Collection										

SUMMARY PAGE NEW INDUSTRIAL SUBSTATION-IP- CCTV BILL OF QUANTITIES	CCTV &ACCESS CONTROL
Total Carried to collection Page 1 New Industrial Substation	
Total Carried to collection Page 2 New Industrial Substation	
SUB-TOTAL-NEW INDUSTRIAL SUBSTATION-IP- CCTV &ACCESS	

#### KIKUYU SUBSTATION IP- CCTV &ACCESS CONTROL

				Country of	Rate in	Amount	- Part		
No	Item Description	Unit	QTY	origin	KES(Vat Exc)	KES(Vat Exc)	Numbers		
A	5 MPX, WDR Fixed Dome Camera	No.	10						
В	16-Channel NVR and storage Server upto 12TB	No.	1						
С	Genetec Video License (per Camera).	No.	10						
D	TYPE A at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2						
Е	32 Inch 1080P LED Monitor C/W mount accessories	No.	1						
F	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2						
	Total Carried to Collection Kikuyu Substation page 1								

	Bill of Quantities Kikuyu Substation Page 2								
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs		
G	Allow for cabling, ducting and necessary accessories	LOT	1						
Н	Network Devices accessories&cabinets-1-Edge switches .	LOT	1						
I	3 Kva true online UPS	NO	1						
J	1.5 Kva true online UPS	NO							
К	Allow for integration of the system to existing GENETEC server	LOT	1						
M	Client Work station	LOT	1						
N	Installation, Testing and Commissioning to client satisfaction	LOT	1						
О	Biometric Access Control cards	No.	200						
	Total Carried to Collec								

SUMMARY PAGE KIKUYU SUBSTATION IP- CCTV & AC QUANTITIES	CESS CONTROL BILL OF
Total Carried to collection Page 1 Kikuyu Substation	
Total Carried to collection Page 2 Kikuyu Substation	
SUB-TOTAL-KIKUYU SUBSTATION-IP- CCTV &ACCESS	

#### NYAHURURU DEPOT/ SUBSTATION IP- CCTV &ACCESS CONTROL

				Country of	Rate in	Amount	- Part
No	Item Description	Unit	QTY	Country of origin	KES(Vat Exc)	KES(Vat Exc)	Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	16				
В	32-Channel NVR and storage Server upto 12TB	No.	1				
С	Genetec Video License (per Camera).	No.	16				
D	TYPE B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	1				
Е	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Ny	e 1					

	Bill of Qua	ntities N	Nyahuru	ıru Depot/	<b>Substation Page</b>	2	
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs
G	Allow for cabling, ducting and necessary accessories	LOT	1				
Н	Network Devices accessories&cabinets-2-Edge switches.	LOT	1				
I	3 Kva true online UPS	NO	1				
J	1.5 Kva true online UPS	NO	1				
K	Allow for integration of the system to existing GENETEC server	LOT	1				
М	Client Work station	LOT	1				
N	Installation, Testing and Commissioning to client satisfaction	LOT	1				
0	Biometric Access Control cards	No.	200				
	Total Carried to Collectio	n Nyah	ururu D	epot/Subs	tation page 2		

SUMMARY PAGE NYAHURURU DEPOT/ SUBSTATION-IP- CO CCTV BILL OF QUANTITIES	CTV &ACCESS CONTROL
Total Carried to collection Page 1 Nyahururu Depot/Substation	
Total Carried to collection Page 2 Nyahururu Depot/Substation	
SUB-TOTAL-NYAHURURU DEPOT/ SUBSTATION-IP- CCTV &ACCESS	

#### KILIFI DEPOT/ SUBSTATION IP- CCTV &ACCESS CONTROL

<b>3.</b> 7	T. D. C.	<b>T</b> T •4	O/EXY	Country of	Rate in	Amount	- Part
No	Item Description	Unit	QTY	origin	KES(Vat Exc)	KES(Vat Exc)	Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	4				
В	2MPX PTZ Camera	No.	1				
С	5 MPX, WDR Fixed Bullet Camera	No.	14				
D	32-Channel NVR and storage Server upto 30TB	No.	1				
Е	Genetec Video License (per Camera).	No.	19				
F	IP Access Control System TYPE B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	3				
G	40 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Ki	lifi Dep	ot/ Subst	ation page 1			•

	Bill of Quantities Kilifi Depot/ Substation Page 2									
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs			
I	Allow for cabling, ducting, Poles and necessary accessories	LOT	1							
J	Network Devices accessories&cabinets-2-Edge switches.	LOT	1							
K	3 Kva true online UPS	NO	2							
L	Allow for integration of the system to existing GENETEC server	LOT	1							
M	Client Work station	LOT	1							
N	Installation, Testing and Commissioning to client satisfaction	LOT	1							
О	Biometric Access Control cards	No.	200							
	Total Carried to Collection Kilifi Depot/Substation page 2									

SUMMARY PAGE KILIFI DEPOT/ SUBSTATION-IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES					
Total Carried to collection Page 1 Kilifi Depot/Substation					
Total Carried to collection Page 2 Kilifi Depot/Substation					
SUB-TOTAL-KILIFI DEPOT/ SUBSTATION-IP- CCTV &ACCESS					

# CATEGORY/LOT 4: SECURITY SYSTEMS FOR FACILITIES AND INFRASTRUCTURE HOMABAY STORES IP- CCTV &ACCESS CONTROL

		Country of	Rate in	Amount	Dowt		
No	Item Description	Unit	QTY	Country of origin	KES(Vat Exc)	KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	12				
В	24-Channel NVR and storage Server upto 30TB	No.	1				
C	Genetec Video License (per Camera).	No.	12				
D	System TYPE A at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
Е	40 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection		I				

Bill of Quantities Homabay Stores Page 2										
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs			
G	Allow for cabling, ducting, Poles and necessary accessories	LOT	1							
Н	Network Devices accessories&cabinets-2- Edge switches	LOT	1							
I	3 Kva true online UPS	NO	1							
J	Allow for integration of the system to existing GENETEC server	LOT	1							
L	Client Work station	LOT	1							
М	Installation, Testing and Commissioning to client satisfaction	LOT	1							
N	Biometric Access Control cards	No.	200							
	Total Carried to Collection Homabay Stores page 2									

SUMMARY PAGE HOMABAY STORES-IP- CCT QUANTITIES	SUMMARY PAGE HOMABAY STORES-IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES					
Total Carried to collection Page 1 Homabay Stores						
Total Carried to collection Page 2 Homabay Stores						
SUB-TOTAL-HOMABAY STORES-IP- CCTV &ACCESS						

#### NJORO SUBSTATION IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	10				
В	16-Channel NVR and storage Server upto 12TB	No.	1				
С	Genetec Video License (per Camera).	No.	10				
D	System TYPE A at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
Е	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection						

	Bill of Quantities Njoro Substation Page 2									
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount	Part Numbe rs			
G	Allow for cabling, ducting and necessary accessories	LOT	1							
Н	Network Devices accessories&cabinets-1-Edge switches.	LOT	1							
I	3 Kva true online UPS	NO	1							
J	Allow for integration of the system to existing GENETEC server	LOT	1							
L	Client Work station	LOT	1							
M	Installation, Testing and Commissioning to client satisfaction	LOT	1							
N	Biometric Access Control cards	No.	200							
	Total Carried to Collection Njoro Substation page 2									

CCTV BILL OF QUANTITIES  Total Carried to collection Page 1	
Njoro Substation	
Total Carried to collection Page 2 Njoro Substation	
SUB-TOTAL-NJORO SUBSTATION-IP-	

## CATEGORY/LOT 4: SECURITY SYSTEMS FOR FACILITIES AND INFRASTRUCTURE

#### EMALI OFFICE IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	5				
В	16-Channel NVR and storage Server up to 12TB	No.	1				
С	Genetec Video License (per Camera).	No.	5				
D	IP Access Control System TYPE B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licenses, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
Е	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection						

	Bill of Quantities Emali Office Page 2								
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs		
G	Allow for cabling, ducting and necessary accessories	LOT	1						
Н	Network Devices accessories&cabinets-1-Edge switches.	LOT	1						
J	1.5 Kva true online UPS	NO	1						
K	Allow for integration of the system to existing GENETEC server	LOT	1						
M	Client Work station	LOT	1						
N	Installation, Testing and Commissioning to client satisfaction	LOT	1						
0	Biometric Access Control cards	No.	200						
	Total Carried to C								

Total Carried to collection Page 1 Emali	
Office	
Total Carried to collection Page 2 Emali	
Office	
SUB-TOTAL-EMALI OFFICE-IP- CCTV	

#### CATEGORY/LOT 4: SECURITY SYSTEMS FOR FACILITIES AND INFRASTRUCTURE

#### GARRISA OFFICE IP- CCTV &ACCESS CONTROL

				Country of	Rate in	Amount	Dowt
No	Item Description	Unit	QTY	Country of origin	KES(Vat Exc)	KES(Vat Exc)	Part Numbers
A	5 MPX, WDR Fixed Dome Camera	No.	10				
В	16-Channel NVR and storage Server up to 12TB	No.	1				
С	Genetec Video License (per Camera).	No.	10				
D	TYPE B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licenses, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
Е	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Ga		1				

	Bill of Quantities Garrisa Office Page 2									
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES (Vat Exc)	Part Numbe rs			
G	Allow for cabling, ducting and necessary accessories	LOT	1							
Н	Network Devices accessories&cabinets-1-Edge switches.	LOT	1							
I	3 Kva true online UPS	NO	1							
J	Allow for integration of the system to existing GENETEC server	LOT	1							
L	Client Work station	LOT	1							
М	Installation, Testing and Commissioning to client satisfaction	LOT	1							
N	Biometric Access Control cards	No.	200							
	Total Carried to Collection Garrisa Office page 2									

SUMMARY PAGE GARRISA OFFICE-IP- CCTV &ACCE QUANTITIES	SS CONTROL CCTV BILL O
Total Carried to collection Page 1 Garrisa Office	
Total Carried to collection Page 2 Garrisa Office	
SUB-TOTAL-GARRISA OFFICE-IP-	
CCTV &ACCESS	

# CATEGORY/LOT 4: SECURITY SYSTEMS FOR FACILITIES AND INFRASTRUCTURE $TECHNICAL\ TRAINING$

	Bill of Quantities CATEGORY/LOT 4-Technical Training Page 1								
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers		
A	Manufacturers Training: Factor costs as follows:								
i)	Manufacturers Training at the manufacturers for 3no technical persons (Factor only the cost of training i.e venue ,trainers, transport to and from the training venue and certification)	LOT	1						
ii)	Travelling and accommodation for 3no technical persons	LOT	1		3,500,00.00	3,500,00.00			
	Total Car CATEGORY/L								

# SUMMARY PAGE CATEGORY/LOT 4 BILL OF QUANTITIES: SECURITY SYSTEMS FOR FACILITIES AND INFRASTRUCTURE

Sul	b-total- Machakos Substation CCTV IP- CCTV		
	Access control		
	Access control		
Sul	b-total- New Industrial Substation CCTV IP-		
	CTV & Access control		
	b-total- kikuyu Substation CCTV IP- CCTV &		
Ac	cess control		
Sul	b-total- Nyahururu stores/ Substation CCTV		
IP-	CCTV & Access control		
Sul	b-total- Kilifi Substation CCTV IP- CCTV &		
	cess control		
Sul	b-total- Homabay Stores CCTV IP- CCTV &		
	cess control		
AC	cess control		
C1	LA-A-1 NI C-L-A-A COTY ID COTY 0		
	b-total- Njoro Substation CCTV IP- CCTV &		
Ac	cess control		
	b-total- Emali Stores CCTV IP- CCTV &		
Ac	cess control		
	b-total- Garissa Office CCTV IP- CCTV &		
Ac	cess control		
C1	b-total- Athi River Substation CCTV IP- CCTV		
	Access control		
To	tal – Technical Training		
ar.			
	tal Carried to collection Bill of Quantities		
CA	TEGORY/LOT 4-Technical Training Page 1		
	SUB-TOTAL- SECURITY SYSTEMS FOR		
	FACILITIES AND INFRASTRUCTURE		
	Add 16% Vat		
	RAND TOTAL CATEGORY/LOT 4 BILL OF		
	QUANTITIES: SECURITY SYSTEMS FOR		
	FACILITIES AND INFRASTRUCTURE		

# SCHEDULE OF MAINTENANCE CATEGORY/LOT 4: SECURITY SYSTEMS FOR FACILITIES AND INFRASTRUCTURE MACHAKOS SUBSTATION IP- CCTV &ACCESS CONTROL

Item	Description	Unit of measure	Quantity	Unit Price VAT	Total Price VAT Exclusive (
		meagare		Exclusive ( Ksh)	Ksh)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		

## CATEGORY/LOT 4-RECOMMENDED SCHEDULE OF SPARE PARTS

Item	Description	Qty	Unit Price VAT		Total Price VAT
			Excl (Ksh)	VAT Excl ( Ksh)	Incl (Ksh)
				IXSII)	
		]			

NB: The cost of spare parts shall be budgeted for and consumed in subsequent repair	&
Maintenance budget after the warranty period on as-and- when needed-basis.	

Name of Tenderer\_\_\_\_\_\_Signature & Official Stamp

# SECTION VI (A5) – PRICE SCHEDULE /BILLS OF QUANTITIES (See specifications in a separate section)

### CATEGORY/LOT 5: INSTALLATION OF ELECTRIC FENCES &INTRUSION SYSTEM FOR **KEY SUBSTATIONS:**

### KIBOKO SUBSTATION ELECTRIC FENCE

	Bill of Quantities Kiboko Substation Page 1								
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers		
	FREE-STANDING 16 -Lines elephant protection Electric Fence to cover 423m Perimeter comprising 16 strands spaced 100mm comprising of Well treated Wooden Poles and with necessary accessories in conformity with relevant standards and general good practice and allow for works to be installed, tested and Commissioned to client's satisfaction with the following:								
A	Adequate mains energizer Nemtek minimum 10J Output or equivalent and approved complete with back-up battery and Keypad as per the specifications.	No.	2						
В	GSM/IP Module as per detailed specifications.	No	1						
С	Lead out under gate cable including excavating in road works with necessary ducting and making good disturbed surfaces	М	500						
D	Allow for redesigning while repairing and replacing damaged Concreate Poles up to 30% of existing Poles								
	Total Carried to Collection Kiboko Su								

	Bill of Quantities Kiboko Substation Page 2								
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers		
A	High tensile 2.5mm fence wire (HT)	M	6598						
В	Fence Poles Allow for well treated Elephant wooden poles as per Elephant protection Electric fence standards	No.	183						
С	Siren Kit complete with box, sounder and strobe 12V,DC Security sounder and strobe with a range of 1 km as per detailed specifications.	No.	1						
D	W-Insulators High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1						
Е	Chain Link Allow for redesigning and reconstructing existing Chain Link with new one while utilizing up to 50% of existing.	Item	1						
	Total Carried to Collection Kiboko								

	Bill of Quantities Kiboko Substation Page 3									
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
A	Strain –S-insulators STF Black-High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1							
В	Earthing of the Electric fence as per the IEE regulations and to be done at intervals of 30M	Item	1							
С	Hatari signs	No	40							
D	Provide for power and Alarm cable as per IEE Standards	Item	1							
E	Supply and fix Razor wire along the free-stranding electric fence, conforming to the following specifications:- 980mm diameter coil size Double Galvanized Razor wire; Blade profile - Ripper Razor Wire; Stretch factor - maximum of 10M per coil and secured with steel plates at 1M centers and with two coatings to prevent rust.	М	550							
	Total Carried to Collection Kiboko S									

	Bill of Quantities Kiboko Substation Page 4								
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers		
A	Energizer Cabinet with following specs: Energizer steel cabinet 500x500x250mm fabricated from 25x25x3mm angle line framing and 3mm thick plain sheet with lockable door including painting and mounting to Clients approval.	No.	1						
В	AVS 30A voltage guard	No.	1						
C	Allow for installation, configurations, Training, Testing and Commissioning to clients satisfaction. Installation to include all necessary civil and electrical works. Contractor to submit 3no identical handover box files will all correspondences of works and including drawings, layouts, manuals. To be done in consultation with the client for more details and format.	Item	1						
	Total Carried to Collection Kibo								

SUMMARY PAGE KIBOKO SUBSTATION ELECTRIC FEB BILL OF QUANTITIES	NCE
Total Carried to Collection Kiboko Substation page 1	
Total Carried to Collection Kiboko Substation page 2	
Total Carried to Collection Kiboko Substation page 3	
Total Carried to Collection Kiboko Substation page 4	
SUB-TOTAL- KIBOKO SUBSTATION ELECTRIC FENCE	

### KIPEVU SUBSTATION ELECTRIC FENCE

	Bill of Quantities Kipevu Substation Page 1									
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
	ELECTRIC FENCE ABOVE MASONRY WALLING The following in electric fence to cover 262m Perimeter comprising 8 strands spaced 100mm centers above the walling and comprising necessary accessories in conformity with relevant standards and general good practice and allow for works to be installed, tested and Commissioned to client's satisfaction with the following:									
A	Adequate mains energizer DRUID 15Nemtek 4.6J Output or equal and approved complete with back-up battery and Keypad as per the specifications.	No.	1							
В	GSM/IP Module as per detailed specifications.	No	1							
С	Lead out under gate cable including excavating in road works with necessary ducting and making good No.	М	300							
	Total Carried to Collection Kipevu Substation page 1									

	Bill of Quantities Kipevu Substation Page 2									
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
A	High tensile 1.6mm fence wire (HT)	M	2550	J						
В	Fence Poles Double Galvanized Electroplated, double galvanized square tube 25 x 25 x 1.5mm thick steel Hollow Square Tube for W and S insulators posts with plastic top caps. Apply Metal primer before installing and 2 finishing coats of 1st quality gloss paint "Crown" including embedding 200mm deep in the reinforced columns and walls Complete with metal lugs and approved by the client.	No.	100							
С	Siren Kit complete with box, sounder and strobe 12V,DC Security sounder and strobe with a range of 1 km as per detailed specifications.	No.	1							
D	W-Insulators High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1							
	Total Carried to Collection Kipevu Substation page 2									

	Bill of Quantities Kipevu Substation Page 3									
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
A	Strain –S-insulators STF Black-High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1							
В	Earthing of the Electric fence as per the IEE regulations and to be done at intervals of 30M	Item	1							
С	Hatari signs	No	30							
D	Provide for power and Alarm cable as per IEE Standards	Item	1							
Е	Supply and fix Razor wire at the top of the boundary wall conforming to the following specifications:- coil size - 450mm diameter, Blade profile - Ripper Razor Wire, Stretch factor - maximum of 10M per coil and secured with steel plates at 1M centers (Galvanized)	М	301							
	Total Carried to Collection Kipevu Substation page 3									

	Bill of Quantities Kipevu Substation Page 4									
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
A	Energizer Cabinet with following specs: Energizer steel cabinet 500x500x250mm fabricated from 25x25x3mm angle line framing and 3mm thick plain sheet with lockable door including painting and mounting to Clients approval.	No.	1							
В	AVS 30A voltage guard	No.	1							
С	Allow for installation, configurations, Training, Testing and Commissioning to clients satisfaction. Installation to include all necessary civil and electrical works. Contractor to submit 3no identical handover box files will all correspondences of works and including drawings, layouts, manuals. To be done in consultation with the client for more details and format.	Item	1							
	Total Carried to Collection Ki									

SUMMARY PAGE KIPEVU SUBSTATION ELECTRIC BILL OF QUANTITIES  Total Carried to Collection Kipevu Substation page 1	FENCE
Total Carried to Collection Kipevu Substation page 2	
Total Carried to Collection Kipevu Substation page 3	
Total Carried to Collection Kipevu Substation page 4	
SUB-TOTAL- KIPEVU SUBSTATION ELECTRIC FENCE	

#### MAKUYU SUBSTATION ELECTRIC FENCE

	Bill of Quantities Makuyu Substation Page 1									
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
	ELECTRIC FENCE ABOVE MASONRY WALLING The following in electric fence to cover 297m Perimeter comprising 8 strands spaced 100mm centers above the walling and comprising necessary accessories in conformity with relevant standards and general good practice and allow for works to be installed, tested and Commissioned to client's satisfaction with the following:									
A	Adequate mains energizer DRUID 15 Nemtek 4.6J Output or equal and approved complete with back-up battery and Keypad as per the specifications.	No.	1							
В	GSM/IP Module as per detailed specifications.	No	1							
С	Lead out under gate cable including excavating in road works with necessary ducting and making good No.	М	200							
	Total Carried to Collection	Makuyu	ı Substati	on page 1						

	Bill of Quant	ities Ma	kuyu Sı	ıbstation Pa	ge 2		
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	High tensile 1.6mm fence wire ( HT )	M	3088				
В	Fence Poles Double Galvanized Electroplated, double galvanized square tube 25 x 25 x 1.5mm thick steel Hollow Square Tube for W and S insulators posts with plastic top caps. Apply Metal primer before installing and 2 finishing coats of 1st quality gloss paint "Crown" including embedding 200mm deep in the reinforced columns and walls Complete with metal lugs and approved by the client.	No.	130				
С	Siren Kit complete with box, sounder and strobe 12V,DC Security sounder and strobe with a range of 1 km as per detailed specifications.	No.	1				
D	W-Insulators High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1				
	Total Carried to Collection Makuyu						

	Bill of Quantities Makuyu Substation Page 3								
No	Item Description	Unit	QTY	Country of origin	Rate in KES(V at Exc)	Amount KES(Vat Exc)	Part Numbers		
A	Strain –S-insulators STF Black-High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1						
В	Earthing of the Electric fence as per the IEE regulations and to be done at intervals of 30M	Item	1						
С	Hatari signs	No	30						
D	Provide for power and Alarm cable as per IEE Standards	Item	1						
Е	Supply and fix Razor wire at the top of the boundary wall conforming to the following specifications:- coil size - 450mm diameter, Blade profile - Ripper Razor Wire, Stretch factor - maximum of 10M per coil and secured with steel plates at 1M centers (Galvanized)	М	386						
	Total Carried to Collection Makuyu Sub								

	Bill of Quantities Makuyu Substation Page 4								
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers		
A	Energizer Cabinet with following specs: Energizer steel cabinet 500x500x250mm fabricated from 25x25x3mm angle line framing and 3mm thick plain sheet with lockable door including painting and mounting to Clients approval.	No.	1						
В	AVS 30A voltage guard	No.	1						
C	Allow for installation, configurations, Training, Testing and Commissioning to clients satisfaction. Installation to include all necessary civil and electrical works. Contractor to submit 3no identical handover box files will all correspondences of works and including drawings, layouts, manuals. To be done in consultation with the client for more details and format.	Item	1						
	Total Carried to Collection Make								

BILL OF QUANTITIES  Total Carried to Collection Makuyu	
Substation page 1	
Total Carried to Collection Makuyu Substation page 2	
Total Carried to Collection Makuyu Substation page 3	
Total Carried to Collection Makuyu Substation page 4	
SUB-TOTAL- MAKUYU SUBSTATION ELECTRIC FENCE	

#### MAMLAKA SUBSTATION CCTV

				Country	Rate in		Part Numbers
No	Item Description	Unit	QTY	of origin	KES(Vat Exc)	KES(Vat Exc)	
0	5 MPX, WDR Fixed Dome Camera	No.	10				
0	16-Channel NVR and storage Server upto 12TB	No.	1				
0	Genetec Video License (per Camera).	No.	10				
0	IP Access Control System <b>TYPE A</b> at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
0	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
0	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				

Bill of Quantities Mamlaka Page 2       No     Item Description     Unit     QTY     Country of origin     Rate in KES(Vat Exc)     Amount KES(Vat Exc)     Part Numbers       o     Allow for cabling, ducting and necessary accessories     LOT     1     Image: Allow for cabling, ducting and necessary accessories     LOT     1       o     Network accessories&cabinets-1-Edge switches.     LOT     1     Image: Allow for cabling, ducting and necessary accessories     LOT     1       o     3 Kva true online UPS     NO     1     Image: Allow for cabling, ducting and necessary accessories     Image: Allow for cabling, d								
No	Item Description	Unit	QTY	y of			Numbe	
0		LOT	1					
0	accessories&cabinets-1-Edge	LOT	1					
0	3 Kva true online UPS	NO	1					
0	Allow for integration of the system to existing GENETEC server	LOT	1					
0	Client Work station	LOT	1					
0	Installation, Testing and Commissioning to client satisfaction	LOT	1					
M.	Biometric Access Control cards	No.	200					
	Total Carried to Collection Mamlaka page 2							

SUMMARY PAGE I BILL OF QUANTIT	MAMLAKA SUBSTATION-II TES	P- CCTV &ACCESS CO	ONTROL CCTV
	lection Page 1 Mamlaka ostation		
	lection Page 2 Mamlaka ostation		
	ILAKA SUBSTATION- V &ACCESS		

#### THIKA INDUSTRIAL SUBSTATION CCTV

	Bill of Qua	ntities T	Thika Ind	ustrial Subs	tation Page 1		
				Country	Rate in	Amount	Part Numbers
No	Item Description	Unit	QTY	of origin	KES(Vat Exc)	KES(Vat Exc)	
A.	5 MPX, WDR Fixed Dome Camera	No.	10				
B.	16-Channel NVR and storage Server up to 12TB	No.	1				
C.	Genetec Video License (per Camera).	No.	10				
D.	IP Access Control System <b>TYPE A</b> at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
E.	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Th						

	Bill of Quantities Thika Industrial Page 2									
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs			
J	Allow for cabling, ducting and necessary accessories	LOT	1							
K	Network Devices accessories&cabinets-1-Edge switches.	LOT	1							
М	3 Kva true online UPS	NO	1							
P	Allow for integration of the system to existing GENETEC server	LOT	1							
R	Client Work station	LOT	1							
S	Installation, Testing and Commissioning to client satisfaction	LOT	1							
Т	Biometric Access Control cards	No.	200							
	Total Carried to Col									

SUMMARY PAGE THIKA INDUSTRIAL SUBSTATION- CCTV BILL OF QUANTITIES	IP- CCTV &ACCESS CONTRO
Total Carried to collection Page 1 Thika Industrial Substation	
Total Carried to collection Page 2 Thika Industrial Substation	
SUB-TOTAL-THIKA INDUSTRIAL SUBSTATION-IP- CCTV &ACCESS	

#### SARMACH SUBSTATION CCTV

	Bill of Q	uantitie	s Sarmac	h Substation	Page 1		
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A.	5 MPX, WDR Fixed Dome Camera	No.	10				
B.	16-Channel NVR and storage Server up to 12TB	No.	1				
C.	Genetec Video License (per Camera).	No.	10				
D.	IP Access Control System <b>TYPE A</b> at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licences, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2				
E.	32 Inch 1080P LED Monitor C/W mount accessories	No.	1				
F.	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2				
	Total Carried to Collection Sarm	ach pag	e 1	l			I

	Bill of Quantities Sarmach Page 2									
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs			
G.	Allow for cabling, ducting and necessary accessories	LOT	1							
H.	Network Devices accessories&cabinets-1-Edge switches.	LOT	1							
I.	3 Kva true online UPS	NO	1							
J.	Allow for integration of the system to existing GENETEC server	LOT	1							
K.	Client Work station	LOT	1							
L.	Installation, Testing and Commissioning to client satisfaction	LOT	1							
М	Biometric Access Control cards	No.	200							
	Total Carried to									

SUMMARY PAGE SARMACH SUBSTATION-IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES	
Total Carried to collection Page 1 Sarmach Substation	
Total Carried to collection Page 2 Sarmach Substation	
SUB-TOTAL-SARMACH SUBSTATION- IP- CCTV &ACCESS	

# CATEGORY/LOT 5: INSTALLATION OF ELECTRIC FENCES &INTRUSION SYSTEM FOR KEY SUBSTATIONS:

#### VILLA FRANCA SUBSTATION CCTV

	Bill of Quantities Villa Franca Substation Page 1									
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
В	5 MPX, WDR Fixed Dome Camera	No.	10							
	16-Channel NVR and storage Server upto 12TB	No.	1							
Е	Genetec Video License (per Camera).	No.	10							
F	IP Access Control System <b>TYPE A</b> at Entry (Proximity Reader) and Exit (Proximity Reader) complete with Licenses, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	2							
	32 Inch 1080P LED Monitor C/W mount accessories	No.	1							
Н	Gig Ethernet To Gig rack-mount Fiber optic Media Converter 30km Range industrial type	No.	2							
	Total Carried to Collection Villa		ı							

	Bill of Quantities Villa Franca Page 2									
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs			
J	Allow for cabling, ducting and necessary accessories	LOT	1							
K	Network Devices accessories&cabinets-1-Edge switches.	LOT	1							
M	3 Kva true online UPS	NO	1							
Р	Allow for integration of the system to existing GENETEC server	LOT	1							
R	Client Work station	LOT	1							
S	Installation, Testing and Commissioning to client satisfaction	LOT	1							
Т	Biometric Access Control cards	No.	200							
	Total Carried to Collection Villa Franca page 2									

SUMMARY PAGE VILLA FRANCA SUBSTATION-IP- CCTV & BILL OF QUANTITIES	SUMMARY PAGE VILLA FRANCA SUBSTATION-IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES						
Total Carried to collection Page 1 Villa Franca Substation							
Total Carried to collection Page 2 Villa Franca Substation							
SUB-TOTAL-VILLA FRANCA SUBSTATION-IP- CCTV &ACCESS							

# CATEGORY/LOT 5: INSTALLATION OF ELECTRIC FENCES &INTRUSION SYSTEM FOR KEY SUBSTATIONS:

#### ELDORET DEPOT IP- CCTV &ACCESS CONTROL

		l l'ounter of	Rate in	Amount	Part				
No	Item Description	Unit	QTY	origin	KES(Vat Exc)	KES(Vat Exc)	Numbers		
A.	5 MPX, WDR Fixed Dome Camera	No.	52						
В.	64-Channel NVR and storage Server up to 40TB	No.	1						
C.	Genetec Video License (per Camera).	No.	52						
D.	IP Access Control System  TYPE B at Entry (Fingerprint Reader) and Exit (Proximity Reader) complete with Licenses, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	4						
Е.	40 Inch 1080P LED Monitor C/W mount accessories	No.	1						
F.	32 Inch 1080P LED Monitor C/W mount accessories	No.	1						
G.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2						
	Total Carried to Collection Eldoret Depot Cctv page 1								

	Bill of Quantities Eldoret Depot Cctv Page 2									
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbe rs			
н.	Allow for cabling, ducting and necessary accessories		1							
I.	Network Devices accessories&cabinets-5 Edge switches ,1 core switch	LOT	1							
J.	6 Kva true online UPS	NO	1							
K.	3 Kva true online UPS	NO	2							
L.	1.5 Kva true online UPS	NO	2							
M.	Allow for integration of the system to existing GENETEC server	LOT	1							
N.	Client Work station	LOT	1							
0.	Installation, Testing and Commissioning to client satisfaction	LOT	1							
	Total Carried to Collection									

SUMMARY PAGE ELDORET DEPOT IP- CCTV &ACCESS CO. QUANTITIES	SUMMARY PAGE ELDORET DEPOT IP- CCTV &ACCESS CONTROL CCTV BILL OF QUANTITIES					
Total Carried to collection Page 1 Eldoret Depot Cctv						
Total Carried to collection Page 2 Eldoret Depot Cctv						
SUB-TOTAL- ELDORET DEPOT -IP- CCTV &ACCESS						

# CATEGORY/LOT 5: INSTALLATION OF ELECTRIC FENCES &INTRUSION SYSTEM FOR KEY SUBSTATIONS:

#### KIPEVU SUBSTATION CCTV

	Bill of Quantities Kipevu Substation Page 1									
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers			
В	5 MPX, WDR Fixed Dome Camera	No.	12							
	16-Channel NVR and storage Server up to 12TB	No.	1							
Е	Genetec Video License (per Camera).	No.	12							
F	TYPE A at Entry (Proximity Reader) and Exit (Proximity Reader) and Exit (Proximity Reader) complete with Licenses, IP readers with inbuilt controller module, Door Maglock, Door Closure and all necessary accessories to complete their installation and which must be compatible and shall be linked to existing GENETEC network (per door).	No.	3							
	32 Inch 1080P LED Monitor C/W mount accessories	No.	1							
Н	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 30km Range industrial type	No.	2							
	Total Carried to Collection l									

	Bill of Quantities Kipevu Substation s Page 2										
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES (Vat Exc)	Part Numbe rs				
J	Allow for cabling, ducting and necessary accessories	LOT	1								
K	Network Devices accessories&cabinets-1-Edge switches.	LOT	1								
M	3 Kva true online UPS	NO	1								
	1.5 Kva true online UPS	NO	1								
P	Allow for integration of the system to existing GENETEC server	LOT	1								
R	Client Work station	LOT	1								
S	Installation, Testing and Commissioning to client satisfaction	LOT	1								
Т	Biometric Access Control cards	No.	200								
	Total Carried to Colle										

SUMMARY PAGE WESTLANDS SUBSTATION-IP- CCTV & BILL OF QUANTITIES	ACCESS CONTROL CCTV
Total Carried to collection Page 1 Kipevu Substation	
Total Carried to collection Page 2 Kipevu Substation	
SUB-TOTAL- KIPEVU SUBSTATION -IP- CCTV &ACCESS	

# CATEGORY/LOT 5: INSTALLATION OF ELECTRIC FENCES &INTRUSION SYSTEM FOR KEY SUBSTATIONS

TECHNICAL TRAINING

	Bill of Quan	echnical Train	ning Page 1				
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
A	Manufacturers Training: Factor costs as follows:						
i)	Manufacturers Training at the manufacturers for 3no technical persons (Factor only the cost of training i.e venue ,trainers, transport to and from the training venue and certification)	LOT	1				
ii)	Travelling and accommodation for 3no technical persons	LOT	1		3,500,00.00	3,500,00.00	
	Total Car CATEGORY/L						

# SUMMARY PAGE CATEGORY/LOT 5 BILL OF QUANTITIES: INSTALLATION OF ELECTRIC FENCES &INTRUSION SYSTEM FOR KEY SUBSTATIONS

1.	Sub-Total Kiboko Substation Electric Fence	
	Sub-Total Kipevu Substation Electric Fence	
	Sub-Total Makuyu Substation Electric Fence	
	Sub-Total Mamlaka Substation CCTV & Access	
	Sub-Total Thika industrial Substation CCTV &	
	Access	
	Sub-Total Sarmach Substation CCTV & Access	
	Sub-Total Villa Franka Substation CCTV &	
	Access	
	Sub-Total Eldoret depot CCTV	
	Sub-Total Westlands Substation CCTV & Access	
	Sub-Total Kipevu Substation CCTV & Access	
	Sub-total Total Carried to collection Bill of	
	Quantities CATEGORY/LOT 5-Technical	
	Training Page 1	
	SUB-TOTAL- SECURITY SYSTEMS FOR	
	FACILITIES AND INFRASTRUCTURE	
	Add 16% Vat	
	GRAND TOTAL- CATEGORY/LOT 5:	
	INSTALLATION OF ELECTRIC FENCES &	
	INTRUSION SYSTEM FOR KEY	
	SUBSTATIONS	
	SUBSTATIONS	l '

## SCHEDULE OF MAINTENANCE CATEGORY/LOT 5: INSTALLATION OF ELECTRIC FENCES &INTRUSION SYSTEM FOR KEY SUBSTATIONS:

Item	Description	Unit of measure	Quantity	Unit Price VAT Exclusive ( Ksh)	Total Price VAT Exclusive ( Ksh)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		

#### CATEGORY/LOT 5-RECOMMENDED SCHEDULE OF SPARE PARTS

Item	Description	Qty	<b>Unit Price VAT</b>	Total Price	Total Price VAT
			Excl (Ksh)	VAT Excl (	Incl (Ksh)
				Ksh)	
		(1)	(2)	(3)	(4)
	'	1	1	L	

NB: The cost of spare parts shall be budgeted for and consumed in subsequent repair &
Maintenance budget after the warranty period on as-and- when needed-basis.

Name of Tenderer	Signature & Official Stamp
Name of Tenderer	Signature & Official Stamp

#### SECTION VI (A6) – PRICE SCHEDULE /BILLS OF QUANTITIES

(See specifications in a separate section)

# CATEGORY/LOT 6: INSTALLATION OF INTRUDER ALARMS/INTRUSION DETECTION SYSTEMS COMMERCIAL OFFICES

# ELDORET DEPOT STORES/OFFICE ALARMS BILL OF QUANTITIES ELDORET DEPOT STORES/OFFICE ALARMS BILL OF QUANTITIES PAGE 1

ITEM	DESCRIPTION	UNI T	QT Y	RATE	KSHS
	CONTROL PANEL WITH SOFTWARE AND				
A	PROGRAMMING				
	16-zones input expandable to more than 40 zones and with				
	Keypad zones LCD Keypad with infrared receiver and				
	battery as <b>Pro - Sys 128</b> or equal and approved.				
	At least more than 4-zones partitioning				
	Accommodate more than 50 user codes				
	4 or more PGM (programmable output)				
	Allow for IP Module and GSM connection to interface with				
	computers, printer and other computer networks.				
	GSM connectivity to allow events communication via mobile	NO	1		
В	MOTION DETECTORS (PIR)				
	Indoor Dual element sensor.				
	12m (40ft), 110 view angle.				
	False alarms reduction facilities.				
	Interlock sensor geometry.				
	Automatic temperature compensation.				
	Sensitivity adjustment.	NO	8		
C	Protection from UV rays.  POWER SUPPLY UNIT(P.S.U.)	NO	0		
	Complete with back-up battery (12v, 7AH).				
	Output current 3A.				
	Output voltage 13.6-14vdc on mains power.				
	Load regulation 5%				
	Battery recharges 13 hours.	NO	2		
D	4-Channel LONG RANGE ALARM REMOTE RECEIVER	1,0			
	KIT				
	Operating voltage 12vdc.				
	Operating range more than 200m radius.				
	Dip-switch coding facility	NO	1		
	Momentary/latching relay contacts				
	Complete with two remote buttons.				
$\mathbf{E}$	Extra Remotes Buttons	NO	2		
	SIREN				
	Complete unit with built-in strobe				
F	Operating voltage 10-14.5vdc with reverse polarity				
	protection.				
	current(hold-off) siren-230mA(typical)				
	Siren output-11dBA@1M,standby 108dBA@1M.				
	Strobe flash rate-120/min,standby 30/min.	NO	1		
	Total Carried to collection Page 1 Eldoret Depot Alarms				

### ELDORET DEPOT STORES/OFFICE ALARMS BILL OF QUANTITIES PAGE 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS
A	Extra Keypad	NO	1		
E	Cabling, cabinets and associated accessories	Lot	1		
G	PANIC BUTTONS	No.	4		
	Strong mechanical composition.				
Н	ADVANCED GSM/GPRS MODULE Central station events reporting Via Voice/sms/E-mail To transmit zone activations and other alarm events such as specific alarm activation zones, arm/disarm users plus time of arm/disarm, loss of power on the system, system failure/restore and others. Support both prepaid and post-paid SIM Cards. Support remote upload and download.	No.	1		
J	Installation, Training testing and commissioning	Lot	1		
L	Guard Monitoring unit Complete with 10 Clocking Points as per the Specifications	Lot	1		
M	HD Magnetic Contacts	No	2		
	Total Carried to collection Page 2 Eldoret Depot Alarms				

#### SUMMARY PAGE ELDORET DEPOT STORES/OFFICE ALARMS

No	Item Description	Amount
140	item Description	KES
A	Total Carried to collection Page 1 Eldoret Depot Alarms	
В	Total Carried to collection Page 2 Eldoret Depot Alarms	
С	Sub-total-2 Eldoret Depot Alarms	
	TOTAL CARRIED TO COLLECTION ELDORET DEPOT STORES/OFFICE ALARMS	

NAIVASHA BANKING HALL ALARMS BILL OF QUANTITIES

#### NAIVASHA BANKING HALL ALARMS BILL OF QUANTITIES PAGE 1

ITE	DESCRIPTION	UNIT	QTY	RATE	KSHS
M	DESCRIPTION	UNII	QII	KAIL	KSHS
171	CONTROL PANEL WITH SOFTWARE AND				
A	PROGRAMMING				
	16-zones input expandable to more than 40 zones and with				
	Keypad zones LCD Keypad with infrared receiver and battery				
	as <b>Pro - Sys 128</b> or equal and approved.				
	At least more than 4-zones partitioning				
	Accommodate more than 50 user codes				
	4 or more PGM (programmable output)				
	Allow for IP Module and GSM connection to interface with				
	computers, printer and other computer networks.				
	GSM connectivity to allow events communication via mobile	NO	1		
В	MOTION DETECTORS (PIR)				
	Indoor Dual element sensor.				
	12m (40ft), 110 view angle.				
	False alarms reduction facilities.				
	Interlock sensor geometry.				
	Automatic temperature compensation.				
	Sensitivity adjustment.				
	Protection from UV rays.	NO	8		
C	POWER SUPPLY UNIT(P.S.U.)				
	Complete with back-up battery (12v, 7AH).				
	Output current 3A.				
	Output voltage 13.6-14vdc on mains power.				
	Load regulation 5%				
	Battery recharges 13 hours.	NO	1		
D	<b>4-Channel</b> LONG RANGE ALARM REMOTE RECEIVER				
	KIT				
	Operating voltage 12vdc.				
	Operating range more than 200m radius.				
	Dip-switch coding facility	NO	1		
	Momentary/latching relay contacts				
	Complete with two remote buttons.				
	SIREN				
100	Complete unit with built-in strobe				
F	Operating voltage 10-14.5vdc with reverse polarity protection.				
	current(hold-off) siren-230mA(typical)				
	Siren output-11dBA@1M,standby 108dBA@1M. Strobe flash rate-120/min,standby 30/min.				
	Shore mash rate-120/min,standby 50/min.	NO	1		
	Total Carried to collection Dage 1 Naivesha Danking Hall	NU	1		
	Total Carried to collection Page 1 Naivasha Banking Hall				
	Alarms				

### NAIVASHA BANKING HALL ALARMS BILL OF QUANTITIES PAGE 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS
A	Extra Keypad	NO	1		
E	Cabling, cabinets and associated accessories	Lot	1		
G	PANIC BUTTONS	No.	11		
	Strong mechanical composition.				
Н	ADVANCED GSM/GPRS MODULE Central station events reporting Via Voice/sms/E-mail To transmit zone activations and other alarm events such as specific alarm activation zones, arm/disarm users plus time of arm/disarm, loss of power on the system, system failure/restore and others. Support both prepaid and post-paid SIM Cards. Support remote upload and download.	No.	1		
J	Installation, Training testing and commissioning	Lot	1		
L	Guard Monitoring unit Complete with 10 Clocking Points as per the Specifications	Lot	1		
M	HD Magnetic Contacts	No	2		
	Total Carried to collection Page 2 Naivasha Banking Hall Alarms				

#### SUMMARY PAGE NAIVASHA BANKING HALL ALARMS

No	Item Description	Amount
140	item Description	KES
A	Total Carried to collection Page 1 Naivasha Banking Hall Alarms	
В	Total Carried to collection Page 2 Naivasha Banking Hall Alarms	
С	Sub-total-2 Naivasha Banking Hall Alarms	
	TOTAL CARRIED TO COLLECTION NAIVASHA BANKING HALL ALARMS	

UKUNDA STORES ALARMS BILL OF QUANTITIES UKUNDA STORES ALARMS BILL OF QUANTITIES PAGE 1

ITE	DESCRIPTION	UNIT	QTY	RATE	KSHS
M	DESCRIPTION	ONII	QII	KAIL	KSHS
171	CONTROL PANEL WITH SOFTWARE AND				
A	PROGRAMMING				
	16-zones input expandable to more than 40 zones and with				
	Keypad zones LCD Keypad with infrared receiver and battery				
	as <b>Pro - Sys 128</b> or equal and approved.				
	At least more than 4-zones partitioning				
	Accommodate more than 50 user codes				
	4 or more PGM (programmable output)				
	Allow for IP Module and GSM connection to interface with				
	computers, printer and other computer networks.				
	GSM connectivity to allow events communication via mobile	NO	1		
В	MOTION DETECTORS (PIR)				
	Indoor Dual element sensor.				
	12m (40ft), 110 view angle.				
	False alarms reduction facilities.				
	Interlock sensor geometry.				
	Automatic temperature compensation.				
	Sensitivity adjustment.				
	Protection from UV rays.	NO	6		
C	POWER SUPPLY UNIT(P.S.U.)				
	Complete with back-up battery (12v, 7AH).				
	Output current 3A.				
	Output voltage 13.6-14vdc on mains power.				
	Load regulation 5%				
	Battery recharges 13 hours.	NO	1		
D	<b>4-Channel</b> LONG RANGE ALARM REMOTE RECEIVER				
	KIT				
	Operating voltage 12vdc.				
	Operating range more than 200m radius.				
	Dip-switch coding facility	NO	1		
	Momentary/latching relay contacts				
	Complete with two remote buttons.				
<u>E</u>	Extra Remotes Buttons	NO	1		
	SIREN				
_	Complete unit with built-in strobe				
F	Operating voltage 10-14.5vdc with reverse polarity protection.				
	current(hold-off) siren-230mA(typical)				
	Siren output-11dBA@1M,standby 108dBA@1M.				
	Strobe flash rate-120/min,standby 30/min.	NO			
		NO	1		
	Total Carried to collection Page 1 Ukunda Stores Alarms				

UKUNDA STORES ALARMS BILL OF QUANTITIES PAGE 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS
E	Cabling, cabinets and associated accessories	Lot	1		
G	PANIC BUTTONS Strong mechanical composition.	No.	4		
Н	ADVANCED GSM/GPRS MODULE Central station events reporting Via Voice/sms/E-mail To transmit zone activations and other alarm events such as specific alarm activation zones, arm/disarm users plus time of arm/disarm, loss of power on the system, system failure/restore and others. Support both prepaid and post-paid SIM Cards. Support remote upload and download.	No.	1		
J	Installation, Training testing and commissioning	Lot	1		
L	Guard Monitoring unit Complete with 10 Clocking Points as per the Specifications	Lot	1		
M	HD Magnetic Contacts	No	2		
	Total Carried to collection Page 2 Ukunda Stores Alarms				

#### SUMMARY PAGE UKUNDA STORES ALARMS

Na	Item Description	Amount
No		KES
A	Total Carried to collection Page 1 Ukunda Stores Alarms	
В	Total Carried to collection Page 2 Ukunda Stores Alarms	
С	Sub-total-2 Ukunda Stores Alarms	
	TOTAL CARRIED TO COLLECTION UKUNDA STORES ALARMS	

NAIROBI SOUTH STORES ALARMS BILL OF QUANTITIES PAGE 1

IT EM	DESCRIPTION	UNIT	QTY	RATE	KSHS
	CONTROL PANEL WITH SOFTWARE AND				
A	PROGRAMMING				
	16-zones input expandable to more than 40 zones and with				
	Keypad zones LCD Keypad with infrared receiver and battery as Pro				
	- Sys 128 or equal and approved.				
	At least more than 4-zones partitioning				
	Accommodate more than 50 user codes				
	4 or more PGM (programmable output)				
	Allow for IP Module and GSM connection to interface with				
	computers, printer and other computer networks.				
	GSM connectivity to allow events communication via mobile	NO	3		
В	MOTION DETECTORS (PIR)				
	Indoor Dual element sensor.				
	12m (40ft), 110 view angle.				
	False alarms reduction facilities.				
	Interlock sensor geometry.				
	Automatic temperature compensation.				
	Sensitivity adjustment.				
	Protection from UV rays.	NO	16		
C	POWER SUPPLY UNIT(P.S.U.)				
	Complete with back-up battery (12v, 7AH).				
	Output current 3A.				
	Output voltage 13.6-14vdc on mains power.				
	Load regulation 5%				
	Battery recharges 13 hours.	NO	4		
D	<b>4-Channel</b> LONG RANGE ALARM REMOTE RECEIVER KIT				
	Operating voltage 12vdc.				
	Operating range more than 200m radius.				
	Dip-switch coding facility				
	Momentary/latching relay contacts	NO	2		
	Complete with two remote buttons.		_		
E	Extra Remotes Buttons	NO	2		
	SIREN				
	Complete unit with built-in strobe				
F	Operating voltage 10-14.5vdc with reverse polarity protection.				
	current(hold-off) siren-230mA(typical)				
	Siren output-11dBA@1M,standby 108dBA@1M.				
	Strobe flash rate-120/min,standby 30/min.				
		NO	3		
	Total Carried to collection Page 1 Nairobi South Stores Alarms				

#### NAIROBI SOUTH STORES ALARMS BILL OF QUANTITIES PAGE 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS
Α.	A GSM Monitoring Tablet	NO	1		
В.	ZONE EXPANDER MODULE	NO	2		
	Compatible with supplied alarm control panel and				
	related modules and accessories.	-			
C.	Cabling, cabinets and associated accessories	Lot	1		
D.	CEILLING MOUNT MOTION DETECTOR		3		
	detection range 12m(40ft)				
	adjustable height(between 1.5m-5.1m)				
	Dual MW + PIR technologies				
	Microprocessor controlled				
	Patented true temperature compensation				
	Superior fluorescent interference rejection				
	Superior RFI immunity				
	LED walk test display Alternate polarity pulse count				
Ε.	PANIC BUTTONS	No.	(		
E.	Strong mechanical composition.	NO.	6		
F.	ADVANCED GSM/GPRS MODULE	No.	3		
Ι.	Central station events reporting Via Voice/sms/E-	110.	3		
	mail				
	To transmit zone activations and other alarm				
	events such as specific alarm activation zones,				
	arm/disarm users plus time of arm/disarm, loss of				
	power on the system, system failure/restore and				
	others.				
	Support both prepaid and post-paid SIM Cards.				
	Support remote upload and download.				
	Installation, Training testing and commissioning	Lot	1		
G.	Guard Monitoring unit Complete with 10 Clocking	Lot	1		
	Points as per the Specifications				
Н.	HD Magnetic Contacts	No	7		
	Total Carried to collection Page 2 Nairobi				
	South Stores Alarms				

#### SUMMARY PAGE NAIROBI SOUTH STORES ALARMS

No	Item Description	Amount
110	Item Description	KES
A	Total Carried to collection Page 1 Nairobi South Stores Alarms	
В	Total Carried to collection Page 2 Nairobi South Stores Alarms	
С	Sub-total-2 Nairobi South Stores Alarms	
	TOTAL CARRIED TO COLLECTION NAIROBI SOUTH STORES ALARMS	

KISII STORES ALARMS BILL OF QUANTITIES

#### KISII STORES ALARMS BILL OF QUANTITIES PAGE 1

IT E	DESCRIPTION	UNIT	QT Y	RATE	KSHS
M					
	CONTROL PANEL WITH SOFTWARE AND				
A	PROGRAMMING				
	16-zones input expandable to more than 40 zones and with				
	Keypad zones LCD Keypad with infrared receiver and battery as				
	Pro - Sys 128 or equal and approved.				
	At least more than 4-zones partitioning				
	Accommodate more than 50 user codes				
	4 or more PGM (programmable output)				
	Allow for IP Module and GSM connection to interface with				
	computers, printer and other computer networks.	NO	1		
В	GSM connectivity to allow events communication via mobile  MOTION DETECTORS (PIR)	NU	1		
D	Indoor Dual element sensor.				
	12m (40ft), 110 view angle.				
	False alarms reduction facilities.				
	Interlock sensor geometry.				
	Automatic temperature compensation.				
	Sensitivity adjustment.				
	Protection from UV rays.	NO	11		
С	POWER SUPPLY UNIT(P.S.U.)				
	Complete with back-up battery (12v, 7AH).				
	Output current 3A.				
	Output voltage 13.6-14vdc on mains power.				
	Load regulation 5%				
	Battery recharges 13 hours.	NO	1		
D	4-Channel LONG RANGE ALARM REMOTE RECEIVER				
	KIT				
	Operating voltage 12vdc.				
	Operating range more than 200m radius.				
	Dip-switch coding facility	NO	1		
	Momentary/latching relay contacts				
	Complete with two remote buttons.	NO	0		
E	Extra Remotes Buttons	NO	0		
	SIREN				
_	Complete unit with built-in strobe				
F	Operating voltage 10-14.5vdc with reverse polarity protection.				
	current(hold-off) siren-230mA(typical)				
	Siren output-11dBA@1M,standby 108dBA@1M. Strobe flash rate-120/min,standby 30/min.				
	Strove Hash fate-120/11111, standby 50/111111.	NO	1		
	Total Carried to collection Page 1 Kisii Stores Alarms	110	1		
	Total Carried to Conection Lage I Kish Stores Alarins				

### KISII STORES ALARMS BILL OF QUANTITIES PAGE 2

ITEM	DESCRIPTION	UNIT	QTY	RATE	KSHS
O	A GSM Monitoring Tablet	NO	1	KAIL	KSHS
0	Cabling, cabinets and associated accessories	Lot	1		
0	CEILLING MOUNT MOTION DETECTOR  detection range 12m(40ft) adjustable height(between 1.5m-5.1m) Dual MW + PIR technologies Microprocessor controlled Patented true temperature compensation Superior fluorescent interference rejection Superior RFI immunity LED walk test display		2		
0	Alternate polarity pulse count  PANIC BUTTONS  Strong mechanical composition.	No.	4		
0	ADVANCED GSM/GPRS MODULE Central station events reporting Via Voice/sms/E-mail To transmit zone activations and other alarm events such as specific alarm activation zones, arm/disarm users plus time of arm/disarm, loss of power on the system, system failure/restore and others. Support both prepaid and post-paid SIM Cards. Support remote upload and download.	No.	1		
0	Guard Monitoring unit Complete with 10 Clocking Points as per the Specifications	Lot	1		
0	HD Magnetic Contacts	No	1		
	Total Carried to collection Page 2 Kisii Stores Alarms				

#### SUMMARY PAGE KISII STORES ALARMS

No	Item Description	Amount
110	Tem Description	KES
A	Total Carried to collection Page 1 Kisii Stores Alarms	
В	Total Carried to collection Page 2 Kisii Stores Alarms	
С	Sub-total Kisii Stores Alarms	
	TOTAL CARRIED TO COLLECTION KISH DEPOT STORES ALARMS	

WESTLANDS SUBSTATION ELECTRIC FENCE BILL OF QUANTITIES

	Bill of Qua	ntities V	Vestlands	Substatio	n Page 1		
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
	ELECTRIC FENCE ABOVE MASONRY WALLING The following in electric fence to cover 224m Perimeter comprising 8 strands spaced 100mm centers above the walling and comprising necessary accessories in conformity with relevant standards and general good practice and allow for works to be installed, tested and Commissioned to client's satisfaction with the following:					ZAC)	
A	Adequate mains energizer DRUID 15 Nemtek 4.6J Output or equal and approved complete with back-up battery and Keypad as per the specifications.	No.	1				
В	GSM/IP Module as per detailed specifications	No	1				
С	Lead out under gate cable including excavating in road works with necessary ducting and making good	M	200				
	Total Carried to Collection Westland	ds Subs	station pag	ge 1			

No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount	Part Numbers
A	High tensile 1.6mm fence wire (HT)	M	2500				
В	Fence Poles Double Galvanized Electroplated, double galvanized square tube 25 x 25 x 1.5mm thick steel Hollow Square Tube for W and S insulators posts with plastic top caps. Apply Metal primer before installing and 2 finishing coats of 1st quality gloss paint "Crown" including embedding 200mm deep in the reinforced columns and walls Complete with metal lugs and approved by the client.	No.	130				
C	Siren Kit complete with box, sounder and strobe 12V,DC Security sounder and strobe with a range of 1 km as per detailed specifications.	No.	1				
D	W-Insulators High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1				
	Total Carried to Collection Westland	ds Subs	station pa	nge 2			

	Bill of Quantities Westlands Substation Page 3									
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount	Part Numbers			
A	Strain –S-insulators STF Black-High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1							
В	Earthing of the Electric fence as per the IEE regulations and to be done at intervals of 30M	Item	1							
С	Hatari signs	No	30							
D	Provide for power and Alarm cable as per IEE Standards	Item	1							
E	Supply and fix Razor wire at the top of the boundary wall conforming to the following specifications:- coil size - 450mm diameter, Blade profile - Ripper Razor Wire, Stretch factor - maximum of 10M per coil and secured with steel plates at 1M centers (Galvanized)	М	291							
	Total Carried to Collection Wo	estlands	Substat	ion page 3						

	Bill of Quantities Westlands Substation Page 4										
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers				
A	Energizer Cabinet with following specs: Energizer steel cabinet 500x500x250mm fabricated from 25x25x3mm angle line framing and 3mm thick plain sheet with lockable door including painting and mounting to Clients approval.	No.	1								
В	AVS 30A voltage guard	No.	1								
С	Allow for installation, configurations, Training, Testing and Commissioning to clients satisfaction. Installation to include all necessary civil and electrical works. Contractor to submit 3no identical handover box files will all correspondences of works and including drawings, layouts, manuals. To be done in consultation with the client for more details and format.	Item	1								
	Total Carried to Collection	Westlan	ds Subs	tation page	4						

SUMMARY PAGE WESTLANDS SUBSTATION ELECTRIC FENCE BILL OF QUANTITIES					
Total Carried to Collection Westlands					
Substation page 1					
Total Carried to Collection Westlands					
Substation page 2					
Total Carried to Collection Westlands					
Substation page 3					
Total Carried to Collection Westlands					
Substation page 4					
SUB-TOTAL- WESTLANDS SUBSTATION ELECTRIC FENCE					
SUBSTATION ELECTRIC PENCE					

NAIROBI NORTH SUBSTATION ELECTRIC FENCE

No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount KES(Vat Exc)	Part Numbers
	ELECTRIC FENCE ABOVE MASONRY WALLING The following in electric fence to cover 922m Perimeter comprising 8 strands spaced 100mm centers above the walling and comprising necessary accessories in conformity with relevant standards and general good practice and allow for works to be installed, tested and Commissioned to client's satisfaction with the following					,	
A	Adequate mains energizer DRUID Nemtek 8J Output or equal and approved complete with back-up battery and Keypad as per the specifications.	No.	2				
В	GSM/IP Module as per detailed specifications.	No	1				
С	Lead out under gate cable including excavating in road works with necessary ducting and making good No.	М	800				

Bill of Quantities Nairobi North Substation Page 2										
No	Item Description	Uni t	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount	Part Numbers			
A	High tensile 1.6mm fence wire (HT)	М	36,666							
В	Fence Poles Double Galvanized Electroplated, double galvanized square tube 25 x 25 x 1.5mm thick steel Hollow Square Tube for W and S insulators posts with plastic top caps. Apply Metal primer before installing and 2 finishing coats of 1st quality gloss paint "Crown" including embedding 200mm deep in the reinforced columns and walls Complete with metal lugs and approved by the client.	No.	430							
C	Siren Kit complete with box, sounder and strobe 12V,DC Security sounder and strobe with a range of 1 km as per detailed specifications.	No.	1							
D	W-Insulators High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Ite m	1							
	Total Carried to Collection Nairobi									

Bill of Quantities Nairobi North Substation Page 3										
No	Item Description	Unit	QTY	Count ry of origin	Rate in KES(Vat Exc)	Amount	Part Numbers			
A	Strain –S-insulators STF Black-High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1							
В	Earthing of the Electric fence as per the IEE regulations and to be done at intervals of 30M	Item	1							
С	Hatari signs	No	40							
D	Provide for power and Alarm cable as per IEE Standards	Item	1							
Е	Supply and fix Razor wire at the top of the boundary wall conforming to the following specifications:- coil size - 450mm diameter, Blade profile - Ripper Razor Wire, Stretch factor - maximum of 10M per coil and secured with steel plates at 1M centers (Galvanized)	М	430							
	Total Carried to Collection Nairobi									

	Bill of Quantities Nairobi North Substation Page 4						
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers
A	Energizer Cabinet with following specs: Energizer steel cabinet 500x500x250mm fabricated from 25x25x3mm angle line framing and 3mm thick plain sheet with lockable door including painting and mounting to Clients approval.	No.	1				
В	AVS 30A voltage guard	No.	1				
С	Allow for installation, configurations, Training, Testing and Commissioning to clients satisfaction. Installation to include all necessary civil and electrical works. Contractor to submit 3no identical handover box files will all correspondences of works and including drawings, layouts, manuals. To be done in consultation with the client for more details and format.	Item	1				
	Total Carried to Collection Na						

SUMMARY PAGE NAIROBI NORTH SUBSTATION BILL OF QUANTITIES	ELECTRIC FENCE	
Total Carried to Collection Nairobi North Substation page 1		
Total Carried to Collection Nairobi North Substation page 2		
Total Carried to Collection Nairobi North Substation page 3		
Total Carried to Collection Nairobi North Substation page 4		
SUB-TOTAL- NAIROBI NORTH SUBSTATION ELECTRIC FENCE		

## CATEGORY/LOT 6: INSTALLATION OF INTRUDER ALARMS/INTRUSION DETECTION SYSTEMS COMMERCIAL OFFICES

## WEBUYE SUBSTATION ELECTRIC FENCE BILL OF QUANTITIES

	Bill of Qua	antities	Webuye S	Substation	Page 1		
				Count	Rate in	Amount	   Part
No	Item Description	Unit	QTY	ry of origin	KES(Vat Exc)	KES(Vat Exc)	Numbers
	ELECTRIC FENCE ABOVE MASONRY WALLING The following in electric fence to cover 417m Perimeter comprising 8 strands spaced 100mm centers above the walling and comprising necessary accessories in conformity with relevant standards and general good practice and allow for works to be installed, tested and Commissioned to client's satisfaction with the following:						
A	Adequate mains energizer DRUID 15 Nemtek 4.6J Output or equal and approved complete with back-up battery and Keypad as per the specifications.	No.	1				
В	GSM/IP Module as per detailed specifications	No	1				
С	Lead out under gate cable including excavating in road works with necessary ducting and making good	M	200				

	Bill of Qua	ntities \	Webuye S	Substation	Page 2		
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount	Part Numbers
A	High tensile 1.6mm fence wire (HT)	M	7000	J			
В	Fence Poles Double Galvanized Electroplated, double galvanized square tube 25 x 25 x 1.5mm thick steel Hollow Square Tube for W and S insulators posts with plastic top caps. Apply Metal primer before installing and 2 finishing coats of 1st quality gloss paint "Crown" including embedding 200mm deep in the reinforced columns and walls Complete with metal lugs and approved by the client.	No.	181				
С	Siren Kit complete with box, sounder and strobe 12V,DC Security sounder and strobe with a range of 1 km as per detailed specifications.	No.	1				
D	W-Insulators High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1				
	Total Carried to Collection Webuye	Substat	tion page	2			

	Bill of Quantities Webuye Substation Page 3						
No	Item Description	Unit	QTY	Countr y of origin	Rate in KES(Vat Exc)	Amount	Part Numbers
A	Strain –S-insulators STF Black-High density porcelain UV stabilized plastic polythene insulators to adequately cover the installations as per IEE standards	Item	1				
В	Earthing of the Electric fence as per the IEE regulations and to be done at intervals of 30M	Item	1				
С	Hatari signs	No	45				
D	Provide for power and Alarm cable as per IEE Standards	Item	1				
Е	Supply and fix Razor wire along the free- stranding electric fence, conforming to the following specifications:- 980mm diameter coil size Double Galvanized Razor wire; Blade profile - Ripper Razor Wire; Stretch factor - maximum of 10M per coil and secured with steel plates at 1M centers and with two coatings to prevent rust.	М	417				
	Total Carried to Collection Webuye	Substati	on page 3				

	Bill of Quantities Webuye Substation Page 4						
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers
A	Energizer Cabinet with following specs: Energizer steel cabinet 500x500x250mm fabricated from 25x25x3mm angle line framing and 3mm thick plain sheet with lockable door including painting and mounting to Clients approval.	No.	1				
В	AVS 30A voltage guard	No.	1				
С	Allow for installation, configurations, Training, Testing and Commissioning to clients satisfaction. Installation to include all necessary civil and electrical works. Contractor to submit 3no identical handover box files will all correspondences of works and including drawings, layouts, manuals. To be done in consultation with the client for more details and format.	Item	1				
	Total Carried to Collection Web	ıye Subst	ation pa	nge 4			

SUMMARY PAGE WEBUYE SUBSTATION ELECTR BILL OF QUANTITIES	IC FENCE	
Total Carried to Collection Webuye Substation page 1		
Total Carried to Collection Webuye Substation page 2		
Total Carried to Collection Webuye Substation page 3		
Total Carried to Collection Webuye Substation page 4		
SUB-TOTAL- WEBUYE SUBSTATION ELECTRIC FENCE		

# CATEGORY/LOT 6: INSTALLATION OF INTRUDER ALARMS/INTRUSION DETECTION SYSTEMS COMMERCIAL OFFICES

## TECHNICAL TRAINING BILL OF QUANTITIES

	Bill of Quantities CATEGORY/LOT 6-Technical Training Page 1						
No	Item Description	Unit	QTY	Country of origin	Rate in KES(Vat Exc)	Amount	Part Numbers
A	Manufacturers Training: Factor costs as follows:						
i)	Manufacturers Training at the manufacturers for 3no technical persons (Factor only the cost of training i.e venue ,trainers, transport to and from the training venue and certification)	LOT	1				
ii)	Travelling and accommodation for 3no technical persons	LOT	1		3,500,00.00	3,500,00.00	
	Total Car CATEGORY/L						

# SUMMARY PAGE CATEGORY/LOT 6 BILL OF QUANTITIES: INSTALLATION OF INTRUDER ALARMS/INTRUSION DETECTION SYSTEMS COMMERCIAL OFFICES

Sub-Total Eldoret Depot Stores/Office Alarms		
Sub-Total Naivasha Intruder Alarms		
Sub-Total Nairobi South Stores Alarms		
Sub-Total Ukunda Banking hall-Stores Intruder Alarms		
Sub-Total Nairobi South Depot Alarms Intruder Alarms		
Sub-Total Kisii Depot Alarms Intruder Alarms		
Sub-Total Westlands Substation Electric Fence		
Sub-Total Nairobi North Substation Electric Fence		
Sub-Total Webuye Substation Electric Fence		
Sub-total Total Carried to collection Bill of Quantities CATEGORY/LOT 6-Technical Training Page 1		
SUB-TOTAL- INSTALLATION OF INTRUDER ALARMS/INTRUSION DETECTION SYSTEMS COMMERCIAL OFFICES		
Add 16% Vat		
GRAND TOTAL- CATEGORY/LOT 6: INSTALLATION OF INTRUDER ALARMS/INTRUSION DETECTION SYSTEMS COMMERCIAL OFFICES		

# SCHEDULE OF MAINTENANCE CATEGORY/LOT 6: INSTALLATION OF INTRUDER ALARMS/INTRUSION DETECTION SYSTEMS COMMERCIAL OFFICES

Item	Description	Unit of measure	Quantity	Unit Price VAT Exclusive ( Ksh)	Total Price VAT Exclusive ( Ksh)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		

## CATEGORY/LOT 6-RECOMMENDED SCHEDULE OF SPARE PARTS

Item	Description	Qty	<b>Unit Price VAT</b>		Total Price VAT
			Excl (Ksh)	VAT Excl (	Incl (Ksh)
				Ksh)	
		(1)	(2)	(3)	(4)

NB: The cost of spare parts shall be budgeted for and consumed in subsequent repair &
Maintenance budget after the warranty period on as-and- when needed-basis.

Name of Tandarar	Cionatura & Official Stamp
Name of Tenderer	Signature & Official Stamp

### **GRAND TOTAL SUMMARY**

ITEM	DESCRIPTION	TOTAL PRICE LOCAL CURRENCY (KSHS. VAT INCLUSIVE)
1	GRAND TOTAL CATEGORY/LOT 1: INSTALLATION OF CCTV MAJOR DISTRIBUTION/ TRANSMISSION SUBSTATION	
2	GRAND TOTAL CATEGORY/LOT 2 BILL OF QUANTITIES: INSTALLATION OF IP-CCTV FOR KEY OFFICES	
3	GRAND TOTAL INSTALLATION OF ACCESS CONTROL IN SUBSTATIONS & KEY OFFICES	
4	GRAND TOTAL CATEGORY/LOT 4 BILL OF QUANTITIES: SECURITY SYSTEMS FOR FACILITIES AND INFRASTRUCTURE	
5	GRAND TOTAL- CATEGORY/LOT 5: INSTALLATION OF ELECTRIC FENCES & INTRUSION SYSTEM FOR KEY SUBSTATIONS	
6	GRAND TOTAL- CATEGORY/LOT 6: INSTALLATION OF INTRUDER ALARMS/INTRUSION DETECTION SYSTEMS COMMERCIAL OFFICES	
GRAND	TOTAL CARRIED FORWARD TO FORM OF TENDER	

## SECTION VI (b) – TECHNICAL SPECIFICATIONS

## **CCTV SYSTEMS**

## CCTV CAMERAS

# 5 MEGAPIXEL ENVIRONMENTAL IP OUTDOOR/INDOOR FIXED MINI DOME IR CAMERAS WITH WDR

Feature	Technical Specification	Bidder's Response
5 MEGAPIXEL ENVIRONMENTAL IP OUTDOOR/INDOOR FIXED MINI DOME IR CAMERAS WITH WDR		
Max Resolution	2048x1536	
Image Sensor	1/3.2-inch CMOS	
Lens	3-9 mm, varifocal	
IR Illumination	Integrated Adaptive IR Illumination	
Focus /Zoom	Auto focus, remote zoom	
Day/Night	Day/Night Capability	
Wide Dynamic Range	65 dB	
Illumination	0.03 lux @ f/1.2	
Max IPS at Max Resolution	12 IPS	
Video Streams	2 configurable streams	
Audio	Bidirectional	
Analytics	Simple motion detection/ camera sabotage	
Local Storage	Up to 32 GB with microSDHC or SDXC, record video	
Power Input	PoE (IEEE 802.3af, Class 3), 24 Vac	
Warranty	3-Year Warranty and Support	
ONVIF	ONVIF Profile S Conformant	

# 5 MEGAPIXEL IP ENVIRONMENTAL BULLET OUTDOOR/INDOOR FIXED CAMERAS C/W INTEGRATED LENS AND IR WITH WDR

Feature	Technical Specification	Bidder's Response
5 MEGAPIXEL IP ENVIRONME C/W INTEGRATED LENS AND I	NTAL BULLET OUTDOOR/INDOOR FIXE R WITH WDR	
Max Resolution	Up to 5 Megapixel (MPx) 2592 x 1944 (5.0 MPx) Resolution	
Image sensor	1/3.2-inch CMOS	
Lens	3-9 mm, Varifocal	
IR Illumination	Integrated Adaptive IR Illumination	
Local Storage	Accessible Edge Storage with Micro SD Card	
Frames per second	Up to 30 Images per Second (IPS) at 1080p	
Focus	Autofocus Motorized Remote Zoom Lens	
Compression	H.264 and MJPEG Compression Capability	
Day/Night	Day/Night Capability	
Illumination	0.03 lux @ f/1.2	
РоЕ	Power over Ethernet (IEEE 802.3af) or 24 VAC	
Video Streams	Up to 2 Simultaneous Video Streams	
Video Analytics	Motion Detection and Camera Sabotage Analytics	
Warranty	3-Year Warranty and Support	
ONVIF	ONVIF Profile S Conformant	

## 12-MEGAPIXEL H.264 WDR 180° PANORAMIC DAY/NIGHT INDOOR/OUTDOOR DOME IP CAMERAS

Feature	Technical Specification	Bidder's Response
12-MEGAPIXEL H.264 WDR 180° PANORAMIC DAY/NIGHT INDOOR/OUTDOOR DOME IP CAMERAS		
Image Sensor	4 x 3MP CMOS WDR	
Optical Format	1/3.2" Progressive Scan	
Pixel Pitch	2.2µm	
Minimum Illumination	Day/Night 0.025 Lux, IR sensitive	
Full Field of View (FOV) Resolution	Per Sensor 2048 H x 1536 V; Total = 4096 H x 768 V	
Dynamic Range	Up to 100dB at Full Resolution	
Lens	M12 small size lens, true 3MP lens	
Video Frame Rates	Max 5.2fps (8192 x 1536); 16.7fps (4096 x 768)	
Compression Type	H.264 (MPEG-4, Part 10)	
Multi-Streaming	8 non-identical streams (2 per sensor)	
Electrical	Power Over Ethernet; PoE 802.3af, Class 3 Auxiliary Power; 12–48V DC and 24V AC	
Programmability	Auto adjustment between WDR and LDR modes	
	Binning Mode; Privacy mask	
	Flexible Cropping (resolution windowing down to 1x1 pixel for JPEG and 2x2 pixels for H.264)	
	+/-5° Digital Vertical Alignment to adjust images; Electronic pan, tilt, zoom (PTZ)	
	On-camera real-time motion detection with up to 1024 detection zones (per sensor)	
	Bandwidth and storage savings by running at 1/4 resolution; Bit rate and bandwidth limit control	
Compliance	Industry Standard; ONVIF Conformant	
	Listings; UL (CB)	
	FCC Compliance; 47 CFR 15 Class A	
	Environmental; RoHS, REACH, WEEE	
	Markings; (CE) EN55022 Class A, EN55024, EN61000-3-2, EN61000-3-3, EN60950-1	
echanical	Protection Ratings; IK-10 vandal-resistant	
	polycarbonate dome; IP66 water/dust protection rating	

# 20-MEGAPIXEL H.264 WDR ALL-IN ONE OMNI DIRECTIONAL USER-CONFIGURABLE MULTI-SENSOR TRUE DAY/NIGHT INDOOR/OUTDOOR DOME IP CAMERAS

Feature	Technical Specification	Bidder's
		Response
20-MEGAPIXEL H.264 WDR ALL-IN ONE OMNI DIRECTIONAL USER-CONFIGURABLE		
MULTI-SENSOR TRUE DAY/NIGHT INDOOR/OUTDOOR DOME IP CAMERAS		
Image Sensor	4 x 5MP CMOS	

Minimum Illumination	Optical Format	1/2.5"	
Color Binning -0.15 Lux   Day/Night -0.03 Lux, IR sensitive	Pixel Pitch	2.2μm	
Day/Night -0.03 Lux, IR sensitive	Minimum Illumination	Color-0.3 Lux	
Total: 10240 H x 1920 V		Color Binning -0.15 Lux	
Resolution		Day/Night -0.03 Lux, IR sensitive	
Resolution	Full Field of View (FOV)	•	
Total:5120 H x 960 V		Per Sensor:2560 H x 1920 V	
Per Senson: 1280 H x 960 V	1/4 Resolution		
Video Frame Rates   2.8-8mm, F/1.6", H-FOV =114°-43°     Video Frame Rates   5.2fps (8192 x 1536)     Power Over Ethernet   PoE 802.3af, Class 3     Gimbal			
Video Frame Rates   5.2fps (8192 x 1536)	Lens		
Power Over Ethernet   PoE 802.3af, Class 3			
Easily adjustable, 2-axis w/360° pan and 90° tilt   Up to 4 Individual Camera Gimbals can be Independently Placed in Any Orientation Around a 360° Track with Extra Positions for Looking Straight Down   Multi-streams of at least 8no non-identical streams.		<u> </u>	
Up to 4 Individual Camera Gimbals can be Independently Placed in Any Orientation Around a 560° Track with Extra Positions for Looking Straight Down  Multi-streams of at least 8no non-identical streams.  Multi-streams of at least 8no non-identical streams.  Multi-streams of at least 8no non-identical streams.  Auto switch control adjustment between WDR and LDR modes .70.1dB at Full Resolution  Network Interface  100BT-Ethernet  Network protocols  RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, IPv4, IPv6, QoS  Day/Night  True Day/Night Functionality with Mechanical IR cut filter  Binning Mode  Binning mode for strong low light performance(24fps-5120x960)  Casing  Die-cast aluminum chassis with polycarbonate dome bubble  Data  Compression Type:H.264 (MPEG-4, Part 10)/Motion JPEG 21 levels of quality  3-year Warranty and Support  Motion Detection  Motion Detection  Real-time, 1024 detection zones  Moonlighting Mode  Extended exposure and noise cancellation  Picture-in-Picture  Simultaneous delivery of full field-of-view and zoomed images  Backlight Compensation  Privacy Masking  Unlimited  Other additional programming features  Mumidity  Programmable resolution, brightness, saturation, gamma, tint simultaneous delivery of full field-of-view and zoomed images  Enceronic pan, tilt, zoom (PTZ)  Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental  Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature  40°C (-40°F) to +50°C (122°F)  Humidity  0% to 90% (non-condensing)  Stable image temperature  0°C (32°F) to +50°C (122°F)		*	
Independently Placed in Any Orientation Around a 360° Track with Extra Positions for Looking Straight Down   Multi-streams of at least 8no non-identical streams.	Ginion.		
Orientation Around a 360° Track with Extra Positions for Looking Straight Down Multi-streams of at least 8no non-identical streams.  WDR Auto switch control adjustment between WDR and LDR modes. 70.1dB at Full Resolution  Network Interface IO0BT-Ethernet Network protocols RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, IPv4, IPv6, QoS Day/Night True Day/Night Functionality with Mechanical IR cut filter Binning Mode Binning mode for strong low light performance(24fps-5120x960) Casing Die-cast aluminum chassis with polycarbonate dome bubble Data Compression Type:H.264 (MPEG-4, Part 10)/Motion JPEG 21 levels of quality Warranty 3-Year Warranty and Support Motion Detection Real-time, 1024 detection zones Moonlighting Mode Extended exposure and noise cancellation Privacy Masking Unlimited Other additional programming features Programmable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome Operating temperature  40°C (-40°F) to +50°C (122°F)  Stable image temperature  0°C (32°F) to +50°C (122°F)		1 <b>^</b>	
Multi-streams of at least 8no non-identical streams.			
Auto switch control adjustment between WDR and LDR modes. 70.1dB at Full Resolution			
LDR modes .70.1dB at Full Resolution	_		
Network Interface   100BT-Ethernet   RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, IPv4, IPv6, QoS   IPv4, IPv6, QoS   True Day/Night   True Day/Night Functionality with Mechanical IR cut filter   Binning Mode   Binning mode for strong low light performance(24fps-5120x960)	WDR	· · · · · · · · · · · · · · · · · · ·	
RTSP, RTP/TCP, RTP/UDP, HTTP, DHCP, TFTP, IPv4, IPv6, QoS	Noteriouls Intonfo -		
IPv4, IPv6, QoS   True Day/Night   Tru			
Day/Night   True Day/Night Functionality with Mechanical IR cut filter	Network protocols		
cut filter  Binning Mode Binning mode for strong low light performance(24fps-5120x960)  Casing Die-cast aluminum chassis with polycarbonate dome bubble  Compression Type:H.264 (MPEG-4, Part 10)/Motion JPEG 21 levels of quality  Warranty 3-Year Warranty and Support  Motion Detection Real-time, 1024 detection zones  Moonlighting Mode Extended exposure and noise cancellation  Picture-in-Picture Simultaneous delivery of full field-of-view and zoomed images  Backlight Compensation Privacy Masking Unlimited  Other additional programming features  Programmable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating: IK-10 impact-resistant polycarbonate dome  Operating temperature  40°C (-40°F) to +50°C (122°F)  Humidity 0% to 90% (non-condensing)  Stable image temperature  0°C (32°F) to +50°C (122°F)	Day/Night		
Die-cast aluminum chassis with polycarbonate dome bubble	Duy/1 vight		
Die-cast aluminum chassis with polycarbonate dome bubble	<b>Binning Mode</b>	Binning mode for strong low light	
dome bubble  Data Compression Type:H.264 (MPEG-4, Part 10)/Motion JPEG 21 levels of quality  Warranty 3-Year Warranty and Support  Motion Detection Real-time, 1024 detection zones  Moonlighting Mode Extended exposure and noise cancellation  Picture-in-Picture Simultaneous delivery of full field-of-view and zoomed images  Backlight Compensation Auto multi-matrix white balance  Privacy Masking Unlimited  Other additional programming features Programmable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature 40°C (-40°F) to +50°C (122°F)  Humidity 0% to 90% (non-condensing)  Stable image temperature 0°C (32°F) to +50°C (122°F)			
Data TransmissionCompression Type:H.264 (MPEG-4, Part 10)/Motion JPEG 21 levels of qualityWarranty3-Year Warranty and SupportMotion DetectionReal-time, 1024 detection zonesMonlighting ModeExtended exposure and noise cancellationPicture-in-PictureSimultaneous delivery of full field-of-view and zoomed imagesBacklight CompensationAuto multi-matrix white balancePrivacy MaskingUnlimitedOther additional programming featuresProgrammable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 HzEnvironmentalProtection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate domeOperating temperature-40°C (-40°F) to +50°C (122°F)Humidity0% to 90% (non-condensing)Stable image temperature0°C (32°F) to +50°C (122°F)	Casing		
Compression Type:H.264 (MPEG-4, Part 10)/Motion JPEG 21 levels of quality			
Transmission  10)/Motion JPEG 21 levels of quality  3-Year Warranty and Support  Real-time, 1024 detection zones  Moonlighting Mode Extended exposure and noise cancellation  Picture-in-Picture Simultaneous delivery of full field-of-view and zoomed images  Backlight Compensation  Privacy Masking Unlimited  Other additional programming features  Simultaneous delivery of full field-of-view and zoomed images  Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur selectable flicker control 50/60 Hz  Environmental  Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature  40°C (-40°F) to +50°C (122°F)  Humidity  0°C (32°F) to +50°C (122°F)	Data		
Warranty       3-Year Warranty and Support         Motion Detection       Real-time, 1024 detection zones         Moonlighting Mode       Extended exposure and noise cancellation         Picture-in-Picture       Simultaneous delivery of full field-of-view and zoomed images         Backlight Compensation       Auto multi-matrix white balance         Privacy Masking       Unlimited         Other additional programming features       Programmable resolution, brightness, saturation, gamma, tint         Simultaneous delivery of full field-of-view and zoomed images       Electronic pan, tilt, zoom (PTZ)         Auto Exposure (AE) and Gain Control (AGC) > 120dB       Programmable shutter speed to help control motion blur selectable flicker control 50/60 Hz         Environmental       Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome         Operating temperature       -40°C (-40°F) to +50°C (122°F)         Humidity       0% to 90% (non-condensing)         Stable image temperature       0°C (32°F) to +50°C (122°F)			
Moonlighting Mode       Extended exposure and noise cancellation         Picture-in-Picture       Simultaneous delivery of full field-of-view and zoomed images         Backlight Compensation       Auto multi-matrix white balance         Privacy Masking       Unlimited         Other additional programming features       Programmable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz         Environmental       Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome         Operating temperature       -40°C (-40°F) to +50°C (122°F)         Humidity       0% to 90% (non-condensing)         Stable image temperature       0°C (32°F) to +50°C (122°F)			
Picture-in-Picture Simultaneous delivery of full field-of-view and zoomed images  Backlight Compensation Auto multi-matrix white balance  Privacy Masking Unlimited  Other additional programmable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature  -40°C (-40°F) to +50°C (122°F)  Humidity O% to 90% (non-condensing)  Stable image temperature  O°C (32°F) to +50°C (122°F)	<b>Motion Detection</b>	·	
Zoomed images	Moonlighting Mode	Extended exposure and noise cancellation	
Backlight Compensation       Auto multi-matrix white balance         Privacy Masking       Unlimited         Other additional programmable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ)	Picture-in-Picture	Simultaneous delivery of full field-of-view and	
Privacy MaskingUnlimitedOther additional programming featuresProgrammable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 HzEnvironmentalProtection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate domeOperating temperature-40°C (-40°F) to +50°C (122°F)Humidity0% to 90% (non-condensing)Stable image temperature0°C (32°F) to +50°C (122°F)			
Other additional programmable resolution, brightness, saturation, gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome Operating temperature -40°C (-40°F) to +50°C (122°F) Humidity 0% to 90% (non-condensing)  Stable image temperature 0°C (32°F) to +50°C (122°F)	<b>Backlight Compensation</b>		
programming features  gamma, tint Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature -40°C (-40°F) to +50°C (122°F)  Humidity 0% to 90% (non-condensing)  Stable image temperature  0°C (32°F) to +50°C (122°F)	· ·	Unlimited	
Simultaneous delivery of full field-of-view and zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature -40°C (-40°F) to +50°C (122°F)  Humidity 0% to 90% (non-condensing)  Stable image temperature  O°C (32°F) to +50°C (122°F)			
zoomed images Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome Operating temperature -40°C (-40°F) to +50°C (122°F) Humidity 0% to 90% (non-condensing) Stable image temperature 0°C (32°F) to +50°C (122°F)	programming features	•	
Electronic pan, tilt, zoom (PTZ) Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature -40°C (-40°F) to +50°C (122°F)  Humidity 0% to 90% (non-condensing)  Stable image temperature  0°C (32°F) to +50°C (122°F)			
Auto Exposure (AE) and Gain Control (AGC) > 120dB Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome Operating temperature -40°C (-40°F) to +50°C (122°F) Humidity 0% to 90% (non-condensing) Stable image temperature 0°C (32°F) to +50°C (122°F)			
Programmable shutter speed to help control motion blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature -40°C (-40°F) to +50°C (122°F)  Humidity 0% to 90% (non-condensing)  Stable image temperature 0°C (32°F) to +50°C (122°F)			
blur Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature -40°C (-40°F) to +50°C (122°F)  Humidity 0% to 90% (non-condensing)  Stable image temperature 0°C (32°F) to +50°C (122°F)			
Selectable flicker control 50/60 Hz  Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome  Operating temperature -40°C (-40°F) to +50°C (122°F)  Humidity 0% to 90% (non-condensing)  Stable image temperature 0°C (32°F) to +50°C (122°F)			
Environmental Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome Operating temperature -40°C (-40°F) to +50°C (122°F) Humidity 0% to 90% (non-condensing) Stable image temperature 0°C (32°F) to +50°C (122°F)			
rating; IK-10 impact-resistant polycarbonate dome  Operating temperature  -40°C (-40°F) to +50°C (122°F)  Humidity  0% to 90% (non-condensing)  Stable image temperature  0°C (32°F) to +50°C (122°F)		Selectable flicker collinol 30/00 flZ	
rating; IK-10 impact-resistant polycarbonate dome  Operating temperature  -40°C (-40°F) to +50°C (122°F)  Humidity  0% to 90% (non-condensing)  Stable image temperature  0°C (32°F) to +50°C (122°F)	Environmental	Protection Ratings: IP66 water/duct protection	
Operating temperature-40°C (-40°F) to +50°C (122°F)Humidity0% to 90% (non-condensing)Stable image temperature0°C (32°F) to +50°C (122°F)	Lii (ii diiiichtai		
Humidity0% to 90% (non-condensing)Stable image temperature0°C (32°F) to +50°C (122°F)	Operating temperature		
Stable image temperature $0^{\circ}\text{C } (32^{\circ}\text{F}) \text{ to } +50^{\circ}\text{C } (122^{\circ}\text{F})$			
	Stable image temperature		
	Storage temperature		

## PTZ CAMERA SPECIFICATIONS

Feature	Technical Specification	Bidder's Response
AUTO DOME IP FULL H	D PTZ CAMERA	1 2 2 2
Image Sensor	The HD PTZ camera shall offer a 1/2.8-inch type	
	Exmor CMOS imager	
Resolution	High-resolution, full HD PTZ camera with 1080p 25/30 resolution and 720p50/60 resolution using H.264 compression ,high-performance 30x zoom lens for capturing fine details in scenes with limited or non-uniform illumination  The HD PTZ camera shall offer an effective number of pixels of 1944 x 1224 (2.38 megapixels).	
Lens	The HD PTZ camera shall have an autofocus lens with 360x zoom (30x optical/12x digital). The HD PTZ camera shall have 2.3° to 65° field of view (4.3 to 129 mm) The HD PTZ camera shall offer automatic focus and iris control with manual override.	
Zoom	The HD PTZ camera shall offer a 30x optical zoom lens (4.3 to 129 mm)	
Video Analytics	Intelligent Tracking and alarm rules engine with onboard Intelligent Video Analytics.  1. Shall be capable of processing and analyzing video within the camera itself, with no extra hardware required.  2. Shall be capable of detecting and sending alarms for abnormal events.  3. Shall be configurable to analyze up to 10 different scenes for one or more of the following events: Line Crossing, Loitering, Idle Object, Removed Object, Conditional Change, Trajectory Tracking, and Filters  4. PTZ camera shall support Bird's Eye View (BEV) people counting  5. Support scene tours that automatically reposition the camera to each scene for a specified duration.  6. shall incorporate an Alarm Rule Engine, enabling abnormal events that IVA detects to prompt the camera to take one or more actions such as:  a. Trigger a relay connected to an alarm siren and/or strobe  b. Trigger a visual alert to be displayed on the operator's screen  c. Go to a specified preset position/scene.  7. Go to a specified scene (preset position	

<b>-</b>		
Recording	Enhanced system flexibility with dual recording options (Video server/NVR and SD card-supply with 2TB) Full duplex Continuous recording of video and audio, alarm/events/schedule recording	
Defog feature.	To improve visibility on fogy and other low contrast	
Delog leature.	moments, shall offer an anti-fog image feature that	
	assists the camera in registering a usable image through	
	the heaviest fog	
Input/output alarms	Input(7):2 supervised, 5 non-supervised Programmable	
	for "normally open" or "normally closed"	
	Output (4): 1 dry contact relay, 3 open	
	collector/transistor outputs 32 VDC @ 150 ma max.	
Minimum Illumination	0.066 lux and a monochrome image, when in the night	
	mode, with a minimum illumination of 0.033 lux at 30	
	IRE	
Software control	Camera set up to be done via Web, Video management	
	client or video management system	
Power Option	Dual power source options (High Power over Ethernet	
•	(High PoE) / 24 VAC)	
	RJ-45 10/100 Base-TX Ethernet (High Power-over-	
	Ethernet (High PoE)) or PoE+ (IEEE 802.3at, class 4	
	standard)21-30 VAC, 50/60 Hz	
Ctros armin a		
Streaming	Fully configurable quad streaming with individually	
	configurable streams	
Integration	The HD PTZ camera shall conform to the ONVIF	
	standard to provide interoperability with other	
	conformant systems	
WDR	Wide Dynamic Range (WDR) / High Dynamic Range (HDR): 90 dB (720p/30 = 120 dB)	
Motion Detection and	Camera shall offer Intelligent	
tracking	Tracking to continuously track an	
or aciming	object using pan, tilt, and zoom	
	actions.	
	2. Camera shall have the ability to	
	follow an object continually when	
	passing behind a privacy mask.	
	3. Camera shall provide automatic	
	motion tracking using intelligent	
	video analytics.	
	4. Camera shall allow a user to define	
	virtual masks for a scene so certain	
	objects are not considered for flow	
	analysis and will not trigger	
	Intelligent Tracking.	
	monigone fracking.	
	5. Camera shall offer the following	
	control options for the Intelligent	
	Tracking feature:	
	a. Off – the HD PTZ camera does	
	not track moving object.	
	b. Auto – the HD PTZ camera	
	actively analyzes the video to	
	detect moving objects.	
	c. One Click – the HD PTZ camera	
	allows a user to click a moving	
	object in the live video image to	
	activate Intelligent Tracking.	
	activate intelligent fracking.	

	1 WA (-11 (1 HD DT7	
	d. IVA-triggered – the HD PTZ	
	camera continuously analyzes the	
	scene for IVA alarms or an IVA	
	rule violation. If an alarm or rule	
	violation is detected, the camera	
	activates Intelligent Tracking to	
	track the object that triggered the	
	alarm or rule violation.	
	6. The HD PTZ camera shall have the	
	ability to restart tracking if a target	
	starts moving in the same area where	
	the initial target stopped moving or if	
	the camera detects an object moving	
	along the last known trajectory.	
Network Interface	10-Base T/100 Base-TX, auto-sensing, half/full duplex,	
Network Interface	RJ45	
Network protocols	IPv4, IPv6, UDP, TCP, HTTP, HTTPS, RTP/RTCP,	
*	IGMP V2/V3, ICMP, ICMPv6, RTSP, FTP, Telnet,	
	ARP, DHCP, SNTP, SNMP (v1, MIB-II), 802.1x, DNS,	
	DNSv6, DDNS (DynDNS.org, selftHOST.de, no-	
	ip.com), SMTP, iSCSI, UPnP (SSDP), DiffServ (QoS),	
	LLDP, SOAP, Dropbox, CHAP, digest authentication	
Day/Night	True Day/Night Functionality with Mechanical IR cut	
	filter	
Casing	Die-cast aluminum chassis with polycarbonate dome	
	bubble	
Data	The HD PTZ camera shall provide direct network	
Transmission	connection using H.264 and –M-JPEG compression and	
	bandwidth throttling to efficiently manage bandwidth	
	and storage requirements while delivering outstanding	
	image quality.	
Warranty	3-Year Warranty on replacement, repair and Support	
acklight Compensation	Auto multi-matrix Sodium Vapor White Balance mode	
	that automatically compensate for light from a sodium	
	vapor lamp to restore objects to their true color	
	2000 K to 10,000 K; ATW, Indoor, Outdoor, AWB	
	Hold, Extended ATW, Manual, Outdoor	
Preset Positions	256 user defined presets, each with a 20-character title	
Privacy Masking	24 individually configurable privacy with up to 8 masks	
111vacy wasking	per scene that prohibit areas of the field of view from	
	being seen even if the camera is panned, tilted, or	
	zoomed	
Optical Fiber	8–10/125 µm SMF. Must meet or exceed fiber standard	
Compatibility, SMF/MMF	ITU-T G.652.	
Companion, SMIT/MINI	50/125 μm MMF. For 50/125 μm fiber, subtract 4 dB	
	from the specified optical budget value. Must meet or	
	exceed fiber standard ITU-T G.651.	
Other miscellaneous items	Supply with the following:	
one miscendieous items	Fiber Optic Ethernet Media Converter kit with a small	
	form-factor pluggable (SFP) module -camera shall	
	allow an optional fiber optic media converter module	
	designed to accept a wide-range of 10/100 Mbps SFP	
	modules for use with Multimode or Singlemode optical	
	fiber with LC or SC connectors.	
	Corner Mounting Plate	
	Pole Mounting Plate	
	Pipe Mount Kit	
	Pendant Roof Mounts	
	1 Oliganit 1001 Hounts	

	Optional Mounting Plates for Roof Mounts	
PTZ Features		
Sectors	Shall divide the cameras 360° rotation into 16 independent sectors with 20-character titles per sector. Any or all of the 16 sectors can be blanked from the operator's view	
Tracking	shall provide a feature that automatically rotates, or pivots, the camera to simplify tracking of a person walking directly under the camera	
Accuracy	Shall provide pan and tilt preset repeatability accurate to within $\pm 0.1$ degrees.	
Speeds and modes	Shall offer the two variable modes of speed: <b>Turbo Mode (manual control)</b> :  Pan: 0.1°/s to 400°/s  Tilt: 0.1°/s to 300°/s <b>Normal Mode:</b> Pan: 0.1°/s to 120°/s  Tilt: 0.1°/s to 120°/s <b>Preposition speed</b> Pan: 0.1°/s to 400°/s  Tilt: 0.1°/s to 300°/s	
	Electronic Shutter Speed (AES): 1/1 sec to 1/0000 sec (22 steps)	
Pre programmable modes	<ol> <li>The HD PTZ camera shall offer five         (5) pre-programmed but configurable         user modes.</li> <li>The pre-programmed modes shall be         optimized with the best settings for         the following environments:         a. Outdoor         b. Indoor         c. Low Light         d. Motion         e. Vibrant</li> <li>The HD PTZ camera shall allow users         to customize these modes for the         specific requirements of the camera         site.</li> </ol>	
/D*14 A 1		
Tilt Angle	[18° above the horizon for pendant housings.] [1° above the horizon for in-ceiling housings.]	
Touring	Two (2) types of tours: Recorded tours – two (2) Preset tour – one (1), consisting of up to 256 scenes, consecutively	
Environmental	Protection Ratings: IP66 water/duct protection rating; IK-10 impact-resistant polycarbonate dome Conform to the NEMA 4X standard for the following:  a) Access to Hazardous parts b) Ingress of solid foreign objects (falling dirt, circulating dust, settling dust)	

	c) Ingress of water	
Heating and temperatures	Operating Temperature without heater wired) 10 to +55 °C(+14 to +131 °F)(continuous operation)  Operating Temperature (with heater wired: -10 to +40 °C(+14 to +104 °F), -34 to +74 °C(-30 to +165 °F)(in accordance with NEMA TS 2-2003 (R2008), restrict = 2.1.5.1)	
	section 2.1.5.1) -40 to +55 °C(-40 to +131 °F)(continuous operation)  Storage Temperature: -40 to +60 °C(-40 to +140 °F), -40 to +60 °C(-40 to +140 °F)  Operating Humidity: 0% to 90% RH, non-condensing, 0% to 100% RH, condensing 7	

## CLIENT WORKSTATIONS SPECIFICATIONS

Feature	Technical Specification	Bidder's Response
Client Workstation Cor	nputer	1200100
<b>Storage Devices</b>	SF1/T3: 1 TB SATA drive	
Mechanical and	Power supply	
Environmental	SF1: 260W (100-240 VAC)	
	Operating temperature SF1: 41°F to 95°F (5°C to 35°C)	
	Operating humidity	
	SF1: 20 - 80% (non-condensing)	
	Dimensions (W x D x H)	
	SF1: 3.7" x 11.5" x 11.4"	
	(97mm x 292mm x 290mm)	
	Max Weight	
	SF1: 11.42 lbs (5.14 kg)	
	Certifications	
	IEC 60950-1, European Norm EN 60950-1,	
	CISPR 22/CISPR 24, EN55022/55024	
<b>Security Options</b>	Endpoint protection	
	BlackBerry Protect machine learning	
	antivirus	
	Hardened image	
	200+ security settings changed by default	
	Maintenance	
	Verified Windows updates	
	Connected services for Genetec software	
B.E. '4	and device firmware updates	
Monitor Compatibility	Connect up to 4 monitors, Connect up to 4 monitors	
Keyboard; Mouse;	Smartcard Keyboard; Multimedia Keyboard; USB	
Speakers	Optical Mouse; Laser USB 6-Button Mouse; 2.0 and	
	2.1 stereo speaker systems available; sound bar for	
	select flat-panel displays	
Warranty and Support Services	At least 3-years	
11		

## LCD MONITORS 32/40/42 INCHES

Feature	Technical Specification	Bidder's
		Response
<b>High Definition LCD</b>	Monitors	
Resolution	Minimum 1920 x 1080p full HD native resolution.	
LED Backlight	Must use energy saving LED backlighting rather than cold	
Technology	cathode fluorescent lights (CCFL)	
PIP	Must provide picture-in-picture (PIP) for any combination of 2	
	inputs.	
Energy Star certified	Must be energy Star certified, ensuring reliability in a 24/7	
	security installation environment	
Design	Must be constructed of a lightweight aluminum frame	
	composition for desktop or wall-mount installations.	

## **NETWORK MEDIA CONVERTORS**

Feature	Technical Specification	Bidder's
		Response
MEDIA CONVERTE	RS SPECIFICATIONS	
~ .		
General	Industrial Gigabit and Supports 1000Base-SX/LX with SC	
	connector, or SFP slot	
	Link Fault Pass-through (LFP)	
	• 10K jumbo frame >Redundant power input	
	• -40 to 75°C operating temperature range (T models)	
	<ul> <li>Supports Energy Efficient Ethernet (IEEE 802.3az)</li> </ul>	
Interface	RJ45 Ports: 10/100/1000BaseT(X)	
	Fiber Ports: 100/1000Base-SX/LX or 100/1000BaseSFP slot	
Physical	Metal, IP30 protection Dimensions: 30 x 125 x 79 mm (1.19 x 4.92	
Characteristics	x 3.11 in) Weight: 170 g (0.37 lb)	
Housing:		
Power Requirement	<b>Input Voltage</b> : 12 to 48 VDC, redundant inputs Input Current: 285	
	mA @ 48 VDC max. <b>Connection</b> : Removable terminal block	
	Overload Current Protection: 1.5 A	
	Reverse Polarity Protection: Present	
Warranty:	5-Years	
LED Indicators	PWR1, PWR2, G1 (copper port 10M/100M/1000M), G2 (fiber port	
	100M/1000M)	
DIP Switches	Fiber speed 100M/1000M, Link Fault Pass-through, Energy	
	Efficient Ethernet	
Optical Fiber	Multi-mode Transmission Distance: 1000BaseSX: 0 to 500 m,	
	850 nm (50/125 μm, 400 MHz*km)	
	Single-mode Transmission Distance: 1000BaseLX: 0 to 10 km,	
	1310 nm (9/125 μm, 3.5 PS/(nm*km))	

### **NETWORK VIDEO RECORDERS**

# 16 CHANNEL EMBEDDED NVR COMPLETE WITH VIDEO MANAGEMENT SOFTWARE SPECIFICATIONS

Feature	Technical Specification	Bidder's Response Yes/No
16 CHANNEL EMBER SOFTWARE	DDED NVR SPECIFICATIONS COMPLETE WITH VIDEO MANA	
Key Features	<ul> <li>Combined server and workstation in a small appliance designed to secure remote sites quickly and easily.</li> <li>Centralized video surveillance and access control to perform local monitoring and recording, with Genetec<sup>TM</sup> Security Center preloaded and can be deployed as standalone or as part of a larger, multi-site system.</li> <li>Machine learning endpoint protect</li> </ul>	
Model	Rackmount	
IP Video Input	16 video channels and upto 16 readers pre-licensed	
Video Compression	H.264 video compression	
OS	Installed on Windows 10 Enterprise LTSC	
Storage	<ul> <li>up to 4TBx3</li> <li>RAID controller</li> <li>Data RAID level RAID 6; RAID 5</li> <li>Maximum data storage</li> </ul>	
OS Drive	At least 1x 256 GB SSD	
NIC	On-board 1Gb network adapter	
Processor	• Intel® x Core i3	
Peripherals	• Up to 4x USB 3.1 2x USB 2.0	
Display	<ul><li>1x HDMI</li><li>1x DisplayPort</li></ul>	
Cybersecurity	<ul> <li>Endpoint protection</li> <li>BlackBerry Protect machine learning antivirus</li> </ul>	
Mechanical and environmental	<ul> <li>Operating temperature</li> <li>50°F to 95°F (10°C to 35°C)</li> <li>Operating humidity</li> <li>5 - 90% (non-condensing)</li> </ul>	
Integration/Compatib ility /operability with other systems	<ul> <li>ONVIV enabled to allow integration and especially with KPLC existing system(GENETIC)</li> <li>Shall allow third party systems operations.</li> </ul>	
Warranty:	3-Years warranty with 1-year advance replacement	
Memory	• 8 GB	
Cameras supported	Third-party network cameras supported	
Software	<ul> <li>Web, Video management client or video management system</li> <li>Once booted up the system shall offer immediate access to the VMS management application via a customized GUI with ability to use one central GUI for configuration and operation.</li> <li>Advanced monitoring and management options using the Intelligent Platform Management Interface (IPMI).</li> <li>Shall have the following installed:         <ul> <li>Microsoft Operating System and Video application pre-installed:</li> <li>Windows Storage Server</li> <li>Video Management System</li> <li>Video Recording Manager including Video Streaming Gateway</li> <li>Dynamic Transcoding</li> </ul> </li> </ul>	

# 32 CHANNEL EMBEDDED NVR COMPLETE WITH VIDEO MANAGEMENT SOFTWARE SPECIFICATIONS

Feature	Technical Specification	Bidder's Response Yes/No
32 CHANNEL EMBED SOFTWARE	DED NVR SPECIFICATIONS COMPLETE WITH VIDEO MA	NAGEMENT
Key Features	<ul> <li>Combined server and workstation in a small appliance designed to secure remote sites quickly and easily.</li> <li>Centralized video surveillance and access control to perform local monitoring and recording, with Genetec<sup>TM</sup> Security Center preloaded and can be deployed as standalone or as part of a larger, multi-site system.</li> <li>Machine learning endpoint protect.</li> <li>Machine learning endpoint protect</li> <li>up to 87 KiwiVision® Security Analytics streams</li> </ul>	
Model	Rackmount	
IP Video Input	32 video channels pre-licensed	
Video Compression	H.264 video compression	
OS	<ul> <li>2 x 120 GB SSD RAID-1 configuration</li> <li>Installed on Windows 10 Enterprise LTSC</li> </ul>	
Channel Capacity	<ul> <li>64 Mbps / 32 cameras (local viewing)</li> <li>200 Mbps / 100 cameras (recording</li> <li>only)</li> </ul>	
Storage	<ul> <li>up to 32 TB</li> <li>RAID controller</li> <li>Data RAID level RAID 6; RAID 5</li> <li>Maximum data storage</li> </ul>	
OS Drive	At least 1x 256 GB SSD	
NIC	• 1x 1 GbE + 1x 10GbE	
Processor	• Intel® x Core i5	
Peripherals	• 1x USB 2.0 + 2x USB 3.0	
Display	<ul> <li>1x HDMI + 1x DisplayPort</li> <li>1x USB-C 3.1 - iGFX Port</li> </ul>	
Cybersecurity	<ul><li>Endpoint protection</li><li>BlackBerry Protect machine learning antivirus</li></ul>	
Mechanical and environmental	<ul> <li>Operating temperature</li> <li>50°F to 95°F (10°C to 35°C)</li> <li>Operating humidity</li> <li>5 - 90% (non-condensing)</li> </ul>	
Integration/Compatib ility /operability with other systems	<ul> <li>ONVIV enabled to allow integration and especially with KPLC existing system(GENETIC)</li> <li>Shall allow third party systems operations.</li> </ul>	
Warranty:	3-Years warranty with 1-year advance replacement	
Memory	• 16 GB	
Cameras supported	Third-party network cameras supported	
Software	<ul> <li>Web, Video management client or video management system</li> <li>Once booted up the system shall offer immediate access to the VMS management application via a customized GUI with ability to use one central GUI for configuration and operation.</li> <li>Advanced monitoring and management options using the Intelligent Platform Management Interface (IPMI).</li> <li>Shall have the following installed:         <ul> <li>Microsoft Operating System and Video</li> </ul> </li> </ul>	

	application pre-installed:	
	Windows Storage Server	
	<ul> <li>Video Management System</li> </ul>	
	<ul> <li>Video Recording Manager including Video</li> </ul>	
	Streaming Gateway	
	Dynamic Transcoding	

# 50 CHANNEL EMBEDDED NVR COMPLETE WITH VIDEO MANAGEMENT SOFTWARE SPECIFICATIONS

Feature	<b>Technical Specification</b>	Bidder's Response Yes/No	
50 CHANNEL EMBED SOFTWARE	50 CHANNEL EMBEDDED NVR SPECIFICATIONS COMPLETE WITH VIDEO MANAGEMENT		
Key Features	<ul> <li>Combined server and workstation in a small appliance designed to secure remote sites quickly and easily.</li> <li>Centralized video surveillance and access control to perform local monitoring and recording, with Genetec<sup>TM</sup> Security Center preloaded and can be deployed as standalone or as part of a larger, multi-site system.</li> <li>Machine learning endpoint protect</li> <li>up to 87 KiwiVision® Security Analytics streams</li> </ul>		
Model	Rackmount		
IP Video Input	<ul> <li>Up to 50 cameras and 100 readers (local viewing)</li> <li>Up to 100 cameras and 100 readers (recording-only)</li> </ul>		
Video Compression	H.264 video compression		
OS	Installed on Windows 10 Enterprise LTSC		
<b>Channel Capacity</b>	<ul> <li>100 Mbps / 50 cameras (local viewing)</li> <li>200 Mbps / 100 cameras (recording only)</li> </ul>		
Storage	<ul> <li>up to 48TB</li> <li>RAID controller</li> <li>Data RAID level RAID 6; RAID 5</li> <li>Maximum data storage</li> </ul>		
OS Drive	At least 1x 256 GB SSD		
NIC	• 1x 1 GbE + 1x 10GbE		
Processor	Intel® x Core i9		
Peripherals	• 1x USB 2.0 + 2x USB 3.0		
Display	<ul> <li>1x HDMI + 1x DisplayPort</li> <li>1x USB-C 3.1 - iGFX Port</li> </ul>		
Cybersecurity	<ul><li>Endpoint protection</li><li>BlackBerry Protect machine learning antivirus</li></ul>		
Mechanical and environmental	<ul> <li>Operating temperature</li> <li>50°F to 95°F (10°C to 35°C)</li> <li>Operating humidity</li> <li>5 - 90% (non-condensing)</li> </ul>		
Integration/Compatib ility /operability with other systems Warranty:	<ul> <li>ONVIV enabled to allow integration and especially with KPLC existing system(GENETIC)</li> <li>Shall allow third party systems operations.</li> <li>3-Years warranty with 1-year advance replacement</li> </ul>		
	· · · · · · · · · · · · · · · · · · ·		
Memory	• 32 GB		
Cameras supported	Third-party network cameras supported		

Software	<ul> <li>Web, Video management client or video management system</li> <li>Once booted up the system shall offer immediate access to the VMS management application via a customized GUI with ability to use one central GUI for configuration and operation.</li> <li>Advanced monitoring and management options using the</li> </ul>
	Intelligent Platform Management Interface (IPMI).
	<ul> <li>Shall have the following installed:</li> <li>Microsoft Operating System and Video</li> </ul>
	application pre-installed:
	Windows Storage Server  Video More Servert Systems
	<ul><li>Video Management System</li><li>Video Recording Manager including Video</li></ul>
	Streaming Gateway
	<ul> <li>Dynamic Transcoding</li> </ul>

## 32+ NVR COMPLETE WITH VIDEO MANAGEMENT SOFTWARE SPECIFICATIONS

Feature	Technical Specification	Bidder's Response
NVR SPECIFICATION	NS COMPLETE WITH VIDEO MANAGEMENT SOFTWARE	_
IP Video Input	• 32+ pre-licensed and 128+ maximum	
Video Compression	H.264 video compression	
OS	<ul> <li>2 x 120 GB SSD RAID-1 configuration</li> <li>Installed on windows server</li> </ul>	
Installation	<ul> <li>Wizard-based set-up and centralized configuration.</li> <li>All components to be pre-installed and pre-licensed</li> <li>Pre-configured in a RAID 5 standard configuration with iSCSI LUNs (Logical Unit Numbers).</li> </ul>	
Resolution	<ul> <li>The built-in transcoder supports up to 4 x</li> <li>UHD resolution video streams in parallel</li> </ul>	
Integration/Compatib ility /operability with other systems	ONVIV enabled to allow integration and especially with KPLC existing system(GENETIC)	
Viewing/Monitoring  Storage	<ul> <li>Shall allow third party systems operations.</li> <li>Remote monitoring via desktop application, browser or SNMP</li> <li>View high quality HD and even UHD video despite low or limited bandwidth connections. Dynamic Transcoding technology to ensure viewing video immediately - anytime, anywhere.</li> <li>Allow use of Video Security Client for viewing video from a separate workstation or mobile device.</li> <li>Increased reliability of high-availability hardware, embedded design as well as system-wide monitoring and management ensure maximum uptime.</li> <li>Robust, secure operation - instant real time access to video</li> <li>Instantly find what you are looking for</li> <li>Pre-installed, pre-configured IP storage solution with up to 64 TB storage capacity</li> <li>need for separate NVR (Network Video Recorder) server and storage hardware</li> <li>HDD quota and group management</li> <li>Hot-swappable hard drives</li> <li>SATA-3, 7200 RPM, 64 MB, 3.5", RAID-5 configurationDIP-6183-4HD: 4 x 3 TBDIP-6183-8HD: 8 x 3 TBDIP-6184-4HD: 4 x 4 TBDIP-6184-8HD: 8 x 4 TBDIP-6186-8HD: 8 x 6 TBDIP-6188-8HD: 8 x 8 TBDIP-6180-00N: w/o HDD</li> </ul>	
Wowantzu	Disk Array 8no     Veers	
Warranty:	3-Years	
Interfaces	<ul> <li>Network: Dual Intel i210AT Gigabit LAN (teamed)1 IPMI BMC port</li> <li>RS-232, RS-485, Keyboard</li> <li>USB: Front: 2 USB 2.0 ports Rear: 2 USB 2.0 ports, 2 USB 3.0 ports</li> <li>Advanced user and alarm management</li> <li>Graphics card: AMD FirePro W4100</li> <li>4 x Mini Display Port</li> <li>Optical: DVD-RW</li> <li>SAS RAID Card: 8 ports LSI 3108 SAS3 controller</li> </ul>	

Processor Memory	<ul> <li>HDMI</li> <li>VGA</li> <li>Intel Xeon Processor E3-1275 V3 (8 MB Cache, 3.5 GHz)</li> <li>8 GB, DDR3-1666 ECC UNB (1 x 8 GB)</li> </ul>	
Cameras supported	Third-party network cameras supported	
Software	<ul> <li>Web, Video management client or video management system</li> <li>Once booted up the system shall offer immediate access to the VMS management application via a customized GUI with ability to use one central GUI for configuration and operation.</li> <li>Advanced monitoring and management options using the Intelligent Platform Management Interface (IPMI).</li> <li>Shall have the following installed:         <ul> <li>Microsoft Operating System and Video application preinstalled:</li> <li>Windows Storage Server 2012 R2, 64-bit</li> <li>Video Management System</li> <li>Video Recording Manager including Video Streaming Gateway</li> <li>Dynamic Transcoding</li> </ul> </li> </ul>	

## NETWORK ATTACHED STORAGE (NAS)

Feature	Technical Specification	Bidder's Response
NETWORK-BASED BA	CK-UP STORAGE	_
General/Physical	45- Bay ,4U network attached storage with Embedded NVR	
description	and preloaded with GENETEC software and video movement	
	application complete with licensing	
Storage Architecture	Networked Based storage system using L.A.I.D(Linear Array	
	of Idle Disks) or equivalent RAID technology and	
	S.F.S.(Sequential Disk Filing System) technology for high	
	disk reliability, extended lifetime, Long file retention and	
	simple system management.	
Power consumption	Low power consumption operating at 110-240V with automatic	
	sensing.	
	Dual Hot-swap PSU rated not more than 300WTo protect disk	
	failure due to high temperatures	
	Availability of Software-controlled temperature fans.	
Disk Management	MUST use any make, model and capacity of 3.5" SATA disk	
	drives including any mix of drives and MUST allow use of	
	high capacity disks.	
	Allow Disks to be added "on the fly" shall	
	automatically be incorporated into the Array.	
	Must allow specific identification of time spans in the	
	physical location  Shell allow disks to be extracted at any time	
	Shall allow disks to be extracted at any time.	
	Disk Status shall be displayed through the disk status LEDs indicating writing, selection,	
	fault and removal readiness etc.	
	Allow for both mirrored overlapping-pair mode,	
	As well as operate in full mirrored pair mode if desired	
Integration	Must integrate DIRECTLY and seamlessly with other Video	
integration	Management System (VMS) like GENETEC, Aricont Vision,	
	ACTI, Bosch and others.	
	Must provide a comprehensive	
	SDK for VMS manufacturers who wish	
	to develop support for the storage.	
Configurations and	simple to configure,	
Management	manage and monitor through universal site configuration tool,	
	Windows application allowing automatic device discovery,	
	configuration of settings, analysis of	
	disks and a basic level of diagnostics	
Interface	Dual Gigabit Ethernet	
Disk Capacity	98TB(14TBX7x3.5" Disk array.)with future expansion of	
•	upto 500TB Array capacity considering both mirrored	
	overlapping-pair mode and full mirroring.	
<b>Alarms input and Alarm</b>	Inputs:Atleast 4 software configurable inputs e.g. disk fail,	
relays	disk inserted, disk extracted, etc.	
	Relays: atleast 4 software configurable e.g. UPS active, power	
	down, etc.	
OS	Embedded Linux on solid state memory or equivalent	
scalability	Provide unlimited scalability with throughput of 400Mbit/sec	
Embedded NVR	The NAS shall have Embedded NVR	
	Option which shall allow continuous recording of all RTSP	
	and ONVIF Profile S compatible and open platform IP	
	Cameras while recording directly onto the hardware using	
	direct-to-storage architecture.	
	The Embebed NVR shall use a simple media player	
	application for Windows and shall be	
	fully compatible with and already installed GENETEC video	

movement software complete with all licensing. It shall also be compatible and integrate seamlessly with other third-party client applications using SDK	
to support the NVR system directly.	

#### **NETWORK SWITCHES**

#### **CORE SWITCH**

## The Cisco 3650 24 Port Gigabit PoE Switch OR Equivalent

### **Key Features**

- Integrated wireless controller capability
- 24 Port 10/100/1000Mbps data PoE+ and Cisco UPOE models with Energy-Efficient Ethernet (EEE)
- 24 Port 100Mbps/1/2.5/5/10 Gbps Cisco UPOE models with Energy-Efficient Ethernet (EEE) 12-and 24-port 1 Gigabit Ethernet SFP-based models 12- and 24-port 1/10 Gigabit Ethernet SFP+based models
- Cisco StackWise-480 technology provides scalability and resiliency with 480 Gbps of stack throughput
- Cisco Stack Power® technology provides power stacking among stack members for power redundancy
- Dual redundant, modular power supplies and three modular fans providing redundancy
- Full IEEE 802.3at (PoE+) with 30W power on all copper ports in 1 Rack Unit (RU) form factor
- Cisco UPOE with 60W power per port in 1 Rack Unit (RU) form factor
- IEEE 802.3bz (2.5/5 G/s BASE-T) to go beyond 1 Gb/s with existing Cat5e and Cat6
- IEEE 802.1ba AV Bridging (AVB) built-in to provide better AV experience for including improved time synchronization and QoS
- Software support for IPv4 and IPv6 routing, multicast routing, modular Quality of Service (QoS), Flexible NetFlow (FNF), and enhanced security features
- Single universal Cisco IOS® Software image across all license levels, providing an easy upgrade path for software features
- Enhanced Limited Lifetime Warranty (E-LLW)

Feature	Technical Specification	Bidder's Response
<b>Device Type</b>	Switch - 24 ports - L3 - managed - stackable	
<b>Enclosure Type</b>	Desktop, rack-mountable 1U	
Subtype	Gigabit Ethernet	
Ports	16 x 10/100/1000 (UPOE) + 8 x 100/1000/2.5G/5G/10G (UPOE) + 4 x 10 Gigabit SFP+ (uplink)	
Power Over Ethernet (PoE)	UPOE	
PoE Budget	820 W	
Performance	Switching capacity: 272 Gbps   Forwarding performance: 202.38 Mpps   Stacking bandwidth: 160 Gbps	
Capacity	IPv4 routes: 24000   NetFlow entries: 24000   Virtual interfaces (VLANs): 4094   Switched virtual interfaces (SVIs): 1000   IPv4 routes: 24000	
MAC Address Table Size	32000 entries	

Jumbo Frame Support	9198 bytes	
Routing Protocol	BGP-4, IS-IS, RIP-1, RIP-2, PIM-SM, static IP routing, PIM-DM, EIGRP for IPv6, OSPFv3, PIM-SSM, policy-based routing (PBR), RIPng	
Remote Management Protocol	SNMP 1, RMON 1, RMON 2, RMON 3, RMON 9, Telnet, SNMP 3, SNMP 2c, SSH, CLI	
Authentication Method	Kerberos, Secure Shell (SSH), RADIUS, TACACS+	
Features	Full duplex capability, layer 2 switching, DHCP support, auto-negotiation, ARP support, trunking, VLAN support, auto-uplink (auto MDI/MDI-X), IGMP snooping, Syslog support, IPv6 support, Spanning Tree Protocol (STP) support, Rapid Spanning Tree Protocol (RSTP) support, Multiple Spanning Tree Protocol (MSTP) support, DHCP snooping, Dynamic Trunking Protocol (DTP) support, Port Aggregation Protocol (PAgP) support, Trivial File Transfer Protocol (TFTP) support, Access Control List (ACL) support, Quality of Service (QoS), RADIUS support, Virtual Route Forwarding-Lite (VRF-Lite), MLD snooping, Dynamic ARP Inspection (DAI), Cisco StackWise Technology, Unicast Reverse Path Forwarding (URPF), Uni-Directional Link Detection (UDLD), Rapid Per-VLAN Spanning Tree Plus (PVRST+), Shaped Round Robin (SRR), LLDP support, Link Aggregation Control Protocol (LACP), MAC Address Notification, Remote Switch Port Analyzer (RSPAN), Hot Standby Router Protocol (HSRP) support, Energy Efficient Ethernet, Strict Priority Queuing (SPQ), Class of Service (CoS), Flexible NetFlow (FNF), DiffServ Code Point (DSCP) support	
Compliant Standards	IEEE 802.3, IEEE 802.3u, IEEE 802.3z, IEEE 802.1D, IEEE 802.1Q, IEEE 802.3ab, IEEE 802.1p, IEEE 802.3af, IEEE 802.3x, IEEE 802.3ad (LACP), IEEE 802.1w, IEEE 802.1x, IEEE 802.1s, IEEE 802.1ab (LLDP), IEEE 802.3at	
RAM	4 GB	
Flash Memory	4 GB	
Status Indicators	Port transmission speed, port duplex mode, system, active, status, PoE	
Expansion / Connectivity		
Interfaces	16 x 1000Base-T RJ-45 UPOE - 60 W   1 x USB Type A   1 x serial (console) RJ-45 management   1 x management (Gigabit LAN) RJ-45 management   1 x management (mini-USB) Type B management   8 x 100/1000/2.5G/5G/10GBase-T RJ-45 UPOE - 60 W   4 x 10GBase-X SFP+ uplink	
<b>Expansion Slots</b>	1 (total) / 1 (free) x Stacking Module slot	
Power		
Power Device	Internal power supply - hot-plug	
Installed Qty	1 (installed) / 2 (max)	
Power Redundancy	Optional	

Power Redundancy Scheme	1+1 (with optional power supply)		
Power Provided	1100 Watt		
Voltage Required	AC 120/230 V (50/60 Hz)		
Compliant Standards	CISPR 22 Class A, GOST, BSMI CNS 13438 Class A, CISPR 24, EN 61000-3-2, NOM, EN 61000-3-3, EN55024, EN55022 Class A, ICES-003 Class A, RoHS, UL 60950-1 Second Edition, KCC, FCC Part 15 A, ISO 7779, CSA C22.2 No. 60950-1 Second Edition, EN 60950-1 Second Edition, IEC 60950-1 Second Edition, VCCI Class A, KN24, KN22 Class A		
Software / System Requirements			
Software Included	Cisco IOS LAN Base		
Dimensions & We	Dimensions & Weight		
Min Operating Temperature	23 °F		
Max Operating Temperature	113 °F		
Humidity Range Operating	5 - 96% (non-condensing)		
Min Storage Temperature	-40 °F		
Max Storage Temperature	158 °F		

#### ADDITIONAL INFORMATION CCTV

### 1. Inspection, testing and commissioning

On completion of installation, all the equipment and installations shall be inspected jointly by the Employer and the Contractor for their correctness and completeness at the site of installation during acceptance tests.

Any other tests, as Employer may deem fit so as to confirm the performance or to establish the compliance to technical specifications of either individual hardware items or integrated operation of Access Control system shall be conducted by the Contractor at site. Should the results of these tests show any deficiency/deviation to specifications, the contractor shall do the modification/replacement/addition necessary to make the system compliant to specifications at own cost.

All Hardware and software comprising the Biometric Time and Attendance system installed at each of the stations within the scope of the tender shall be put on reliability test for 30 days before the Employer issues the certificate of successful commissioning.

#### **Taking Over**

The system shall be taken over by the Employer from the contractor after the successful completion of site test and commissioning as per the tests mentioned above. A completion certificate will then be issued.

#### **SCOPE OF WORKS**

Scope of work under this section covers:

- The provision of labour, tools, material and performance of work necessary for the design, manufacture, quality assurance, quality control, assembly, testing, delivery at site, site storage and preservation,
- ii. Installation & commissioning,
- iii. Performance & acceptance testing both at the Factory and at site,
- iv. Training of Employer's personnel both local and overseas,
- v. handing over to Employer and guarantee of the complete system, as per specification hereunder, each complete with all accessories,
- vi. Supply of spare parts and warranting trouble free safe operation of the installations,
- vii. Providing maintenance support (Including supply/replacement of spares) during the warranty period and, if desired by the Employer also during post warranty period.
- viii. Installation and commissioning of the local area network (Hardware, software and cabling) on which the system will run.
- ix. The contractor shall provide all the required equipment and services, whether explicitly mentioned in these specifications or not to fulfill the intent of the specification and to ensure the completeness, operation and maintainability of the system at no extra cost to the Employer.
- x. The Tenderer is required to submit with their offer the detailed specifications, drawings, catalogues, brochures etc. for the equipment they intend to supply.
- xi. It shall be in the scope of the tenderer to acquire any requisite authorizations or licensing from local authorities where applicable, that may be required in the course of the project
- xii. The Tenderer shall be required to present information along with their offers as follows:
  - Shortest possible delivery period of the product.
  - Information on proper representative and/or equipped local workshop for back-up service/repair and certified personnel including their names and addresses.
- i. Installation of the Server Workstations inclusive of the attendant operating software, management software and necessary peripherals such as the mouse, keyboard and connection to a power socket outlet
- ii. Installation of Client Workstations inclusive of the attendant operating software, client management software and necessary peripherals such as the mouse, keyboard and connection to a power socket outlet
- iii. Installation of Access control systems at the specified doors of the control center's which are suitable to withstand the required environment. The Access controllers will be PoE or 12VDC and be single door controllers, any loss in connection to the central database will allow each controller to act as a "stand-alone" unit.
- iv. Installation, mounting and configuration of external storage equipment

- v. Installation and termination of PoE switches inclusive of all attendant Category 6a Ethernet cables, all required media converters and ftp cables
- vi. Conduct FATs at manufacturers premises witnessed by KPLC Engineers
- vii. Conduct Site Acceptance Tests as witnessed by KPLC Engineers
- viii. Conduct comprehensive training of KPLC Engineers and Staff
- ix. Providing maintenance spares
- x. Providing maintenance tools.
- xi. Providing at least 3 Year warranty on CCTV(cameras,NVRS etc and Access control equipment and 1 year warranty on all other devices and equipment.
- xii. The contractor shall ensure that before the completion of the project, at least four copies of the relevant manuals and documentation, including as built drawings are availed to KPLC in hard copy and soft copy forms.

#### 2. PRE-BID SURVEY

Prior to submitting the bids, bidders shall visit each of the stations accompanied by KPLC staff to ascertain for themselves the requirements for each station at own cost. During this survey, a sketch for the installations shall be carried out and the transmission requirements determined. This sketch shall indicate the location of the various components and the required mounting structures and cabling. The bidder must conduct the mandatory site survey and submit the project plan and detailed design together with the bid that should include:

- (i) Site survey report and connectivity diagrams.
- (ii) Design Documents (Network servers, storage servers, IP readers and their locations as well as power supply cabling)
- (iii) A detailed Work Breakdown Structure and project plan that outlines all tasks, milestones, durations, and resources needs.

#### 3. Site Acceptance Tests

- 1.1. Satisfactory performance of the whole system, simulating all inputs, outputs and foreign device communications must be demonstrated to the satisfaction of KPLC.
- 1.2. The systems TCP/IP communication shall form a mandatory part of these tests upon which their failure shall make the whole project be revoked at the contractor's cost.

#### **IMPORTANT!**

The Contractor shall provide complete test procedure for approval and acceptance by KPLC.

The system shall be fully operable and fully tested to the satisfaction of KPLC.

The tests to be carried out by the Contractor shall include a total system test, as detailed below, verifying all inputs and outputs for correct operation, the operation of external alarms and external communications interface.

The system tests shall be carried out on the complete system.

The following headings are recommended as minimum requirement and shall be developed in detail during implementation of the test procedures.

- i. Inspection of equipment
- ii. Power Supply Variations
- iii. Functional Tests including:
  - Operating Software Control functions.
  - Failure and interaction between systems.
  - Systems Diagnostic Tests, including self-test facilities.
  - System functional and fault alarms.
  - Offline and online operation without system fail

### **Pre-Commissioning & Commissioning**

i. **Pre-commissioning** 

It shall be the responsibility of the Contractor to carry out tests / inspections necessary to prepare the installations for commissioning and site acceptance tests. Such tests and inspections shall be carried out on individual equipment and in groups where possible. KPLC reserves the right to attend such tests.

### ii. Commissioning

- It shall be the Contractor's responsibility to prepare a commissioning Specification for approval by KPLC prior to the equipment being shipped.
- The Contractor may be required to have engineers on site during the commissioning of the plant. These engineers shall be authorised to carry out any modifications or repairs as may become necessary, and shall be competent to do so.
- On completion of commissioning, the entire system will be subject to final site acceptance tests that are a repeat of the factory acceptance tests and any other tests as proposed by the purchaser that could not have been achieved during the FAT.
- The Contractor shall be responsible for updating all As-Built documentation and drawings.

#### **Documentation**

The following documentation must be supplied before installation

- i. Electrical drawing of each System in a station Approved PLAN
- ii. Cable Layout drawings for the stations Approved PLAN
- iii. Equipment modules manuals
- iv. Functional Design Specification- Approved PLAN

The following documentation must be supplied after installation and commissioning

- i. Functional Design Specification- Approved AS-BUILT
- ii. Electrical drawing of each System in a station- AS-BUILT
- iii. Cable Layout drawings for the stations AS-BUILT

#### **Training**

- i. The training shall be offered to selected staff from Engineering and Security Department.
- ii. The selected staff shall possess minimum technical qualifications / knowledge to understand systems.
- iii. The methodology of the training shall be developed on the vendor's experience in the design, construction, operation and maintenance of Surveillance systems
- iv. The methodology of training shall include the following as a minimum:
  - Two week classroom training with slide presentation and written materials
  - Field training at site
  - Furnishing the final report with comments to be followed up for the improvement of staff skills.
  - Provision of certificates to participants who attend the full training.
- 1. The basic structure of the training shall include, as a minimum:
  - Operation and maintenance of the complete CCTV and Access control system
  - The Vendor shall provide a concise training programme with the quote for approval by KPLC.
  - The Vendor shall include the training duration in the training programme.
  - Training shall be conducted in English

#### **Site Acceptance Tests**

- 1.3. Satisfactory performance of the whole system, simulating all inputs, outputs and foreign device communications must be demonstrated to the satisfaction of KPLC.
- 1.4. The systems TCP/IP communication shall form a mandatory part of these tests upon which their failure shall make the whole project be revoked at the contractor's cost.

## **IMPORTANT!**

The Contractor shall provide complete test procedure for approval and acceptance by KPLC.

The system shall be fully operable and fully tested to the satisfaction of KPLC.

The tests to be carried out by the Contractor shall include a total system test, as detailed below, verifying all inputs and outputs for correct operation, the operation of external alarms and external communications interface.

The system tests shall be carried out on the complete system.

The following headings are recommended as minimum requirement and shall be developed in detail during implementation of the test procedures.

- iv. Inspection of equipment
- v. Power Supply Variations
- vi. Functional Tests including:

Operating Software Control functions.

Failure and interaction between systems.

Systems Diagnostic Tests, including self-test facilities.

System functional and fault alarms.

Offline and online operation without system fail

# UNINTERRUPTED POWER SUPPLY SYSTEMS 1.5KVA,3KVA, 6KVA, 10KVA, DOUBLE CONVERSATION UPS SPECIFICATIONS Note that for

## 1.5KVA,3KVA, 6KVA, 10KVA, DOUBLE CONVERSATION

No.	Parameter	Requirement	<b>Bidders Compliance</b>
1.	Nominal capacity (kVA) /	10kVA	
	Power (kW) per module	6 kVA	
		3 kVA	
1.1	UPS type	On-line double conversion UPS	
1.2	Parallel operations	Parallel redundant configuration	
		maximizing the availability	
1.3	Design	Rack/Tower convertible design	
2.	Input		
2.1	Nominal voltage	230VAC 1-phase	
2.2	Voltage range	160 to 280 Vac	
2.3	Frequency and range	50 Hz, 45 to 65 Hz	
2.4	Input Power Factor	>0.99	
2.5	Current THD	< 5% (at 100% non-linear load)	
3.	Output		
3.1	Nominal voltage	230VAC ±2% with pure sine wave	
3.2	Frequency	50Hz	
3.3	Harmonic distortion	< 2% (linear load) / < 5% (non-	
		linear load)	
3.4	Crest factor	3:1	
3.5	Efficiency	ECO-mode ≥98% / Normal mode	
		≥90%	
3.6	Mode of operation	On-line double conversion	
4.	Battery		
4.1	Autonomy time internal	50% load (> 15mins)	
	battery (min.)	100% load (> 5mins)	
4.2	Additional backup time	Allow for external battery cabinet	
4.3	Charging Parameters	Built in super smart charger, shorten	

		50% of charging time	
5.	Protection	50 /0 Of Charging time	
5.1	Input / Output	Overload, Overheating, Short	
3.1	input/ Sutput	Circuit, Battery Low, Noise and	
		Spike Suppression	
5.2	Overload AC-Mode	104% continuous, 150% for 160	
		seconds, >150% transfer to bypass	
5.3	Overload Battery Mode	≤110% - 30sec / ≤125% - 1sec /	
	-	≤150% - 200msec	
5.4	Overload Bypass Mode	Input Breaker 60A	
6.	Alarms - Indication		
6.1	Audible alarm	Beeping sound for Line Failure,	
		Battery Low, Bypass - Overload	
		Status, Fault Status	
6.2	LED-Alarm	Line - Backup - Eco Mode, Bypass,	
		Battery Low/Bad/Disconnect,	
6.0	LCD D: 1	Overload, Fault	
6.3	LCD-Display	Big touchscreen display 5"	
7. 7.1	Bypass	Internal static (automatic) and	
7.1	Type	Internal static (automatic) and manual bypass / External bypass	
		optional	
7.2	Bypass voltage range	Max. Voltage: +15 % (optional	
7.2	Bypuss voltage range	+5/10/25%) / Min. voltage: -45%	
		(optional -20/30%)	
		Frequency protection range: ±10%	
8.	Standards		
8.1	Quality assurance,	Quality assurance, environment,	
	environment, health and	health and safety	
	safety		
8.2	Safety	IEC/EN 62040-1	
8.3	EMC	IEC/EN 62040-2	
8.4	Marking	CE	
8.5	Protection class	IP20	
9.	Environment	Washing to an automatic O 400C /	
9.1	Temperature	Working temperature: 0 - 40°C / Storage temperature: -25 - 55°C	
9.2	Humidity / Altitude	0-95% non-condensing / < 2000m	
9.2	Audible noise at 1m	<50dB /1m according to EN62040-2	
10.	Interface	Soub / Thi according to EN02040-2	
10.1	In the cabinet	RS232 / RS485 / 2 free slots / dry	
10.1	III die eucinet	contacts / EPO - software included	
10.2	In the module	RS232, USB, Ethernet	
10.3		SNMP-Adapter	
10.4	Ü	UPS system shall provide BackUP	
		power for four (4) hours	

## ALARM, ELECTRIC FENCE AND RADIO RESPONSE BACK UP EQUIPMENT SPECIFICATIONS

## ALARM SYSTEM SPECIFICATIONS

ITE M	DESCRIPTION	BIDDERS RESPONSE
	CONTROL PANEL WITH SOFTWARE AND PROGRAMMING	
A	16-zones input expandable to more than 40 zones and with	
	Keypad zones LCD Keypad with infrared receiver and battery as Pro - Sys 128 or	
	equal and approved.	
	At least more than 4-zones partitioning	
	Accommodate more than 50 user codes	
	4 or more PGM(programmable output)	
	Dialer compatible and GSM interactions	
	Allow for IP Module connection to interface with computers, printer and other	
	computer networks.	
	GSM connectivity to allow events communication via mobile	
В	MOTION DETECTORS (PIR)	
	Indoor Dual element sensor.	
	12m (40ft), 110 view angle.	
	False alarms reduction facilities.	
	Interlock sensor geometry.	
	Automatic temperature compensation.	
	Sensitivity adjustment.	
	Protection from UV rays.	
	PET immunity especially for areas prone to PET in stores and go-downs	
C	POWER SUPPLY UNIT(P.S.U.)	
	Complete with back-up battery (12v, 7AH).	
	Output current 3A.	
	Output voltage 13.6-14vdc on mains power.	
	Load regulation 5%	
- D	Battery recharges 13 hours.	
D	ALARM REMOTE RECEIVER KIT	
	Operating voltage 12vdc.	
	Operating range 200m. Dip-switch coding facility	
	Momentary/latching relay contacts	
	SIREN	
	Complete unit with built-in strobe	
${f F}$	Operating voltage 10-14.5vdc with reverse polarity protection.	
I.	current(hold-off) siren-230mA(typical)	
	Siren output-11dBA@1M,standby 108dBA@1M.	
	Strobe flash rate-120/min,standby 30/min.	
	Strove Hash rate-120/Hilli, standby 50/Hilli.	

## ALARM SYSTEM SPECIFICATIONS CONTINUED

ITEM	DESCRIPTION	BIDDERS RESPONSE
A	PANIC BUTTONS	
	Strong mechanical composition.	
В	HEAVY DUTY MAGNETIC CONTACTS	
	Strong Mechanical Composition robust to interferences.	
C	CEILLING MOUNT MOTION DETECTOR	
	detection range 12m(40ft)	
	adjustable height(between 1.5m-5.1m)	
	Dual MW + PIR technologies	
	Microprocessor controlled	
	Patented true temperature compensation	
	Superior fluorescent interference rejection	
	Superior RFI immunity	
	LED walk test display	
	Alternate polarity pulse count	
D	EXPANDER MODULE	
	Compatible with supplied alarm control panel and related modules and accessories.	
F	ADVANCED ALARM IP-NETWORK COMMUNICATION MODULE	
r	Secure IP communications with SSL,256Bit,AES256 encryption	
	Compatible with 10BaseT, full duplex.	
	Simultaneous multiple channel IP Communications event reporting and	
	download at the same time.	
	Report notification to E-mail addresses.	
	Supports static and dynamic IP Addressing(DHCP)	
	Project integration with 3 <sup>rd</sup> party applications using Modbus and XML	
	protocols and others.	
G	ADVANCED GSM/GPRS MODULE	
	Central station events reporting Via Voice/sms/E-mail	
	To transmit zone activations and other alarm events such as specific alarm	
	activation zones, arm/disarm users plus time of arm/disarm, loss of power on	
	the system, system failure/restore and others.	
	Support both prepaid and post-paid SIM Cards.	
TT	Support remote upload and download.	
H	SMARTPHONE  Apple or aguivalent letest iPhone feetures on A0 ship 2D Touch, ultrefeet I TE	
	Apple or equivalent latest iPhone features an A9 chip, 3D Touch, ultrafast LTE Advanced wireless, Touch ID, a 12MP iSight camera, and iOS 9. 128GB	
	5.5-inch (diagonal) LED-backlit widescreen next-generation Multi-Touch	
	display with IPS technology and Taptic Engine 1920-by-1080-pixel resolution	
	at 401 ppi	
	Fingerprint-resistant oleophobic coating	
I	GUARD PATROL UNIT	
	Multi-point Guard Monitoring unit with the following:	
	<ul> <li>Up to 15 wireless patrol points</li> </ul>	
	• Supports up to 20 guards and supervisors with Supervisor configurable	
	patrol parameters	
	<ul> <li>Wireless/Baton free operation</li> </ul>	
	<ul> <li>Real-time monitoring.</li> </ul>	
	<ul> <li>SMS message to 10 selected contacts</li> </ul>	
	<ul> <li>Reporting via GSM and / or radio (GPRS / SMS)</li> </ul>	
	<ul> <li>Configure shifts and patrol start / end times</li> </ul>	
	<ul> <li>Event buffer download via serial port</li> </ul>	
	<ul> <li>Allow for Viewing / downloading and printing event logs</li> </ul>	
	<ul> <li>Internal charger and battery backup</li> </ul>	
	<ul> <li>On-board 433 MHz remote receiver</li> </ul>	
	<ul> <li>(panic and guard assistance) with both single or four button remote</li> </ul>	
	Tamper and weather proof steel housing	

•	Programmable Features including but not limited to; Patrol configuration ie duration, intervals, route, rest time, Duration intervals, shift intervals, Lead and grace time, Point to point intervals, Loading of patrol points, Time and date setup.  Allow Reporting eg Patrol complete / fail, Patrol too fast / slow, Patrol points missed, Patrol failed to start, Guard on / off duty etc.  Several key options e.g guard/supervisor on/off duty  Remote site control and management fully integratable to Orxy Alarm Control software in remote control room at Stima and regional offices via GSM networks, Long Range Radio and Via SMS.	

## CENTRAL ALARM MANAGEMENT SOFWTARE SPECIFICATIONS

ITEM	DESCRIPTION	BIDDERS RESPONSE
	LICENSING AND UPGRADE	
A	One-off licensing with easy and user-friendly update/upgrades which can be	
	done locally by the customer without or with minimum support by the	
	manufacturer with back to back SMA with the manufacturer at no additional	
	cost.	
В	RECEIVER FORMATS	
	Shall Accommodates all existing Kplc receivers	
	Connected to and receive alarm events from all known Base Station decoding	
	equipment.	
C	DUAL MONITORING CODES	
	In conjunction with the Master Account code, the software shall incorporate two	
	independent monitoring codes, each with the facility to link to different	
	equipment decoding categories. This shall also cater for a telephone link and Radio transmitter combination on any given client's account	
D	EVENT RESPONSE SEQUENCES	
D	The software shall incorporate a unique Event Response Sequence engine. The	
	SOP shall guide operator through a step-by-step sequence for any given	
	event/alarm. Sequences shall be unlimited and are user definable, in the language	
	of your choice	
E	INDEPENDENT FAIL TO TEST	
	The software shall facilitate the monitoring of two separate reporting devices for	
	each client with periodic test function catering for independent NO TEST report	
	tracking on each device. The time scales for	
	periodic tests shall range from 5 minutes to 100 days	
	OPEN/CLOSE TIME WINDOWS	
	Shall allow multiple Open/Close schedules for each account permitting	
$\mathbf{F}$	Open/Close schedule for each section, each with its own time Frames or	
	Windows. Further, in each schedule, you can set - up multiple Open/Close	
	windows per day, e.g. Mon 08:00 to 12:30 and Mon 14:00	
	to 15:30 and so on. Each time window also has individual Early and Late time	
	threshold settings.	
G	ZONE DESCRIPTIONS	
	The system shall allow Zone descriptions to be maintained independent of the	
	equipment in use on the premises, so if a client's	
	panel is replaced, there is no need to re - enter the zone descriptions for that	
	account	
Н	DIARY FUNCTIONS	
**	The software shall incorporate a unique Diary Alarm function, which enables	
	one to set- up Casual and Recurring Diary Alarms for individual clients. It shall	
	allow one to set - up a diary alarm for a client with	
	special instructions and on the appointed date and time, the system will generate	
	an Alarm which controllers can then action accordingly	
J	RUNAWAY SIGNAL DETECTION	
•	The Software shall incorporate a unique Runaway check facility which will	
	notify immediately incase an alarm system has gone into an offline cycle or	
	runaway condition.	
K	TEMPORARY NOTEPAD	
	The system shall incorporate a temporary notepad facility where you can record	
	temporary information relating to the client, e.g. Client away on holiday till	
	07/01/95. At midnight on the appointed	
	date, the system will automatically clear the temporary message	

L	SERVICE CALLS
	The system incorporate a Service Calls menu which facilitates the logging of
	fault reports and service calls, generation of Job Cards and also Service history
	recording. Controllers can log fault reports and these can then be followed up
	and processed by your Service department or Manager
M	SMS MODULE
	The software shall accommodate alarm monitoring via GSM as well as
	automatic and manual SMS generation on user specified alarm conditions. In
	addition, it shall have a Cell Phone based Panic Signal facility that can be added
N	TECHNICIAN SMS INTERFACE
	The software shall allow Technicians to link directly to the software and receive
	all events texted directly to their Cell using the SMS Module. With the correct
	authority, Technician shall be able to place system on Test/Back in Service from
	their Cell phone.
P	REPORTING
	The software shall allow among others the following reports:
	i) Alarm Statistics-Print a summary report detailing Alarm
	Analysis categories with accumulated statistics for each category,
	Daily, monthly and Total.
	2 411.7, 110.11.11.7 41.10 1 0 11.11
	ii) History Reports-Print history reports for individual or groups of
	clients for any specified period, with or without operator ID
	Stamps
	iii) Late Alarm Response-Report of alarms received and not
	actioned within a specified time frame with Controller ID tracking
	iv) Clients Added/Deleted-Report for specified Month, reflecting
	clients/sites added or delete
	enomes sices added of defece
	v) Armed Response Vehicle-Analysis Summary of Armed
	Response vehicles reflecting number of call outs for each month
	and also minimum, maximum and average call response time.
	vi) Installation Stats-Summary report reflecting count of
	Client/sites records in numerous various useful areas.
	vii) Fail to Open/Close/Test-Reports Summary of clients/sites who
	have not Opened/Closed or have not received 24 hour Tests
Q	RMS ONLINE SUPPORT
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Shall incorporate online support mechanism that will allow:
	Online System Health Monitoring
	Automatic Program Fail Recovery
	• Email Incident Report
	• SMS notification on chosen events
	• 24 Hour telephonic support
	Online Engineering support     Seaves deily offsite Data Bealum, 1 sig storage
	<ul> <li>Secure, daily offsite Data Backup – 1 gig storage</li> <li>Company web address &amp; email – 50mb web space, 20 email accounts</li> </ul>
	• Program updates
	Easy and user friendly software upgrade.
	——————————————————————————————————————
L	

## **GUARD MONITORING SYSTEM SPECIFICATIONS**

ITEM	DESCRIPTION	BIDDERS RESPONSE
A	READING MODE RFID 125 KHz Reading distance 3cm -5cm	
В	COMMUNICATION USB(Drive-Free), 8000 record uploading/min GPRS/GSM	
С	DATA STORAGE 16Mbit flash, 15,000 pieces	
D	TAG TYPE  1. 8 bit Hexadecimal number in reader (4 byte), and 10 bit decimalism number in the software.  2. Can be expanded to 10 bit Hexadecimal number (5 byte).  Accommodate various shapes of cards and varying dimensions ie  36mm*28mm*6mm 3.8g, Φ30mm*4mm 2.8g(round), 76mm*56mm*10mm 19g, Φ6.6mm×27.7 mm 1.7g(cylindrical)	
Е	DATA STORAGE 16Mbit flash, 15,000 pieces	
F	BATTERY AND BATTERY LIFE  ≥30 days (power on, unregistered) ≥ 4 days (work 8 hours a day, read and send 500 CARDS) ≥16 hours (continuous data transmission)	
Q	IP RATING IP67	
Н	<ul> <li>MANAGEMENT SOFTWARE</li> <li>Real-Time Tracking using GPRS/3G/4G/Wi-Fi.</li> <li>Allow for guard tour /patrol management</li> <li>User-Friendly</li> <li>Allow Mobile App</li> <li>Allow Cloud /web-based application.</li> <li>Reporting: allow generation and manipulation of various types of reports with ease of exporting through PDF, Excel, and other formats</li> <li>One-off licensing with easy upgrades by customers technical team</li> <li>Ability to run locally without vendor's control, allowing for necessary upgrades and manufacturers support when needed.</li> </ul>	

## III) ELECTRIC FENCE SPECIFICATIONS

	BIDDERS			
ITEM	DESCRIPTION	RESPONSE		
A	ENERGIZER	KESI ONSE		
A	Nemtek output/Specs as existing or equal and approved			
	•Built-in alarm monitors tampering or faults on the high voltage and earth fence wires			
	•Connectable to armed response radio or GSM module			
	•Lightning and power surge protection			
	•Intelligent power saving to extend battery life			
	•Easy-to-use tag included for controlling the energizer			
	•Walk test mode for easy fence testing			
	•The LCD background color changes to easily identify the fence condition			
	•Powered by 230V mains and includes built-in battery for backup power			
	•Built-in gate alarm inputs to monitor if the gate is open or closed			
	•Optional keypad for controlling and programming the energizer. This allows the user			
	to control the energizer remotely, with up to two keypads			
В	HT GALVANIZED HT FENCE WIRE			
	High Tensile1.6mm Double galvanized			
C-	FENCE POLES			
	Electroplated, double galvanized square tube 25 x 25 x 1.5mm thick steel Hollow			
	Square Tube for W and S insulators posts with plastic top caps. Apply Metal primer			
	before installing and 2 finishing coats of 1st quality gloss paint "Crown" including			
	embedding 200mm deep in the reinforced columns and walls Complete with metal lugs			
	and approved by the client.			
D	RAZOR WIRE  (Daylele Calveried) Cail size 450mm diameter Plade modile Dimer Pager Wire			
	(Double Galvanised)Coil size - 450mm diameter, Blade profile - Ripper Razor Wire, Stretch factor -			
	coil and secured with steel plates at 1M centres			
E	SIREN KIT (BOX, SIREN AND STROBE)			
	12V,DC Security sounder and strobe with a range of 1 km			
	Galvanized box and mountain to avoid rusting/corrosion.			
	Well protected from environmental hazards like rain water leakages, hostile/extreme			
	weather conditions like temperatures, strong winds etc.			
F	EARTHING			
	Earthing of the Electric fence as per the IEE regulations and to be done at intervals of			
	30M			
G	INSULATION			
	W and S insulators - High density porcelain insulators			
	UV stabilised plastic polythene insulators for fastening the HT wire to the posts.			
Н	ENERGIZER CABINET			
	Energizer steel cabinet 500x500x250mm fabricated from 25x25x3mm angle angle line			
	framing and 3mm thick m.s plain sheet with lockable door including painting and			
	mounting to Clients approval.			

## SPEED GATE SWING TURNSTILE

			Bidder's Response	Quoted Brand
NO	FEATURE	SPECIFICATIONS		
	POWER	AC220V/110V, 50/60Hz, 24V DC		
	COMMUNICATION	Dry contact, Relay signal, RS485		
	POWER CONSUMPTION	90-100W		
	FRAMEWORK MATERIAL	304 brushed stainless steel+ High end black painting		
	ARM MATERIAL	Plexiglas-transparency		
	SYSTEMS INTEGRATION	Integrate with any access control		
	FLOW RATE	40 people per minute		
	DIMENSION	1600 * 150 * 980mm		
	NET WEIGHT	75kg/pcs (single core), 95kg/pcs (double core)		
	PASSAGE WIDTH	650mm (standard), 1100mm (handicap)		
	DIRECTION	Single directional / Bi-directional		
	MCBF	9 million		
	OPERATING TEMPERATURE	-20 °C - 75 °C		
	OPERATING HUMIDITY	0 ~ 95% (No freeze)		

## AUTOMATIC VEHICLE SPIKE BARRIER

			Bidder's Response	Quoted Brand
NO	FEATURE	SPECIFICATIONS		
	INPUT VOLTAGE	100V – 240V AC ±10% at 50Hz / 60Hz		
	DRIVE	SwiftDrive®		
	MOTOR DETAIL	Two SwiftDrive® brushless DC motors with planetary gearbox		
	GEARBOX	Planetary		
	DUTY CYCLE	100% - rated for continuous non-stop operation		
	OPENING SPEED	2.8 seconds		
	CABINET WEIGHT	80kg		
	POWER SUPPLY	27.6 V DC, 4.5A, 120W		
	COLLISION DETECTION	Motor embedded hall sensors		
	DUTY CYCLE	100% duty cycle – suitable for high volume applications		
	OPERATING TEMPERATURE	-15°C to +60°C		
	FINISH	3Cr12 stainless steel with UV resistant exterior grade powder coat		
	LED	Integrated OPTIC LED light strip for maximum visibility, safety and aesthetics		

## X-RAY BAGGAGE SCANNER

			Bidder's Response	Quoted Brand
NO	FEATURE	SPECIFICATIONS		
	Tunnel Size: W x H	661(W) ×509(H)mm		
	Dimensions: (L x W x H)	1675(L)x985(W)x1380(H)		
	Wire Resolution:	Typical AWG40(top view); Typical AWG40(side view)		
	Spatial Resolution:	Vertical:1.0mm, horizontal:1.0mm(top view)		
	Steel Penetration:	37mm(top view); 37mm(side view)		
	X-Ray Generator	160kV		
	Cooling:	Sealed oil cooling		
	Duty Cycle:	100%,no warm-up procedure required		
	Operating System:	Windows®OS (standard)		
	Display:	Single 24" LCD color, resolution: 1980 x 1080		
	Storage:	1TB SSD (standard)		
	Film Safety:	Guarantee ISO 1600 (33 DIN)		
	Net Weight:	500 kgs		
	Operating Temp:	0°C - 40°C \ 32°F - 104°F		
	Power:	Max. 500W		
	Certifications:	CE, FCC,RoHS, FDA	_	

## WALK THROUG METAL DETECTOR

			Bidder's Response	Quoted Brand
NO	FEATURE	SPECIFICATIONS		
	Passage Dimension:	2031mm x 760mm		
	Dimensions: (L x W x H)	2180×906x467mm		
	Metal Sensitivity:	Maximum Sensitivity≥10g Metal		
	Sensitivity:	200 adjustable sensitivity levels for metal objects		
	Alarm Mode:	Supports multiple alarm tone selection mode		
	Zone Detection:	33 zones covering full height of walk through passage		
	Display:	LCD digital control panel with real-time statistics & alarm counts		
	Detection Level:	Uniform from top to bottom		
	Calibration:	Automatic		
	Password Protection:	Supported		
	Speed:	Ultra-fast detection with a throughput rate of up to 40 person per minute		
	Working Temperature:	-20°C ~ +65°C		
	Power:	AC90V~240V 50/60Hz, <12W		
	Construction Material:	High density ABS coated panel		
	Weight:	40 kg		

## AUTOMATIC SLIDING GATE

		AUTOMATIC SLIDING GATE	Bidder's Response	Quoted Brand
NO	FEATURE	SPECIFICATIONS		
	INPUT VOLTAGE	90V – 240V AC +/-10% @ 50Hz		
	CURRENT (Mains)	250mA		
	MAXIMUM OPERATIONS	Up to 750 Operations per day		
	DRIVE PINION	17T Module 4		
	DUTY CYCLE	45%		
	OPENING SPEED	Up to 26m/min (Varies with load)		
	WEIGHT	13kg		
	POWER SUPPLY	24 VDC, Battery Driven (2 x 12V 7.2Ah)		
	COLLISION SENSING	Electronic		
	GATE MASS (MAX)	1000kgs		
	OPERATING TEMPERATURE	-15°C to +50°C		
	DEGREE OF PROTECTION	IP54		

## ACCESS CONTROL SPECIFICATIONS

Supply and Configuration of Biometric Access Systems Control and Card

## BIOMETRIC ACCESS CONTROL CARDS

No	ITEMS	SPECIFICATIONS	Bidder's	Quoted
	NAME		Response	Brand
A	Biometric Access control Cards	The Biometric Access Control card should Support Secure Identity Object <sup>TM</sup> (SIO) – Multi-layered security beyond the card technology, providing added protection to identity data.  Trusted Identity Platform <sup>TM</sup> (TIP) enabled – Provides trusted identity within a secure ecosystem of interoperable products. Supports future growth 13.56 MHz read/write contactless smart card technology securely separated files enables multiple applications for future growth. Flexible configurations including magnetic stripe, external card numbering, vertical slot punch, custom artwork, and contact smart chip module.		

## PROXIMITY/CARD READER TYPE A

		PROXIMITY/CARD READER TYPE A	Bidder's Respon se	Quoted Brand
No	Feature	Technical Specification Must share brochure with Technical Bid & MAF		
1.	Fully Integrated Proximity card reader access control system	The reader must be compatible and shall be integrated to; GENETEC Access Control Software		
2	Management	Embedded Web Management software		
	User Interface	Red. Greed and Yellow LED to indicated denied or accepted entry		
4	Onboard Card reading	Support onboard card reading technologies for 125KHZ proximity and 13.56MHZ Mifare, iclass(16K and 32K bits), DESFire and dual technology(ie Proximity and Mifare.		
5	Modes of Identification	Allow the following identification methods  • Card Only		
6	Communications	RS-485,USB Onboard RS 485 for communication between external access control module and terminal Allow direct communication with Host server without a controller. Allow other support to external technology using Wiegand connections.		
10	Offline Operating Mode	The reader must contain an up-to-date information offline. Finger prints and card holder templates must be stored from the control computer and frequent updates downloaded on to the reader.		
11	Configurations	Allow configuration through the Control computer.		
12	Input/Output	At least four inputs to monitor alarms and two changeovers relay outputs to activate door or other equipment.		
13	Scan parameters	Offer high resolution scanning detecting conductivity of living tussues beneath the skin.		
14	Housing	Rating IP65 Flame retardant polycarbonate with fully encapsulated electronics. Must be small and light and approved by client.(attach bronchure)		

## **BIOMETRIC/CARD READER TYPE B**

		BIOMETRIC/CARD READER TYPE B	Bidder's Response	Quoted Brand
No	Feature	Technical Specification Must share brochure with Technical Bid & MAF		
1.	Fully Integrated Biometric and card reader access control system	The reader must serve as a controller, biometric reader, card reader as a single module in one device. The reader must be compatible and shall be integrated to; GENETEC Access Control Software		
2	Management	Embedded Web Management software		
3	User Capacity	The Reader should be able to host at least 50,000 registered users, with a capacity of at least 50,000 finger prints		
4	Onboard Card reading	Support onboard card reading technologies for 125KHZ proximity and 13.56MHZ Mifare, iclass(16K and 32K bits), DESFire and dual technology(ie Proximity and Mifare).		
5	Modes of Identification	Allow the following identification methods <ul> <li>Fingerprint</li> <li>Proximity Reader</li> <li>Password</li> </ul> <li>The reader must be able to allow the following access configurations         <ul> <li>Card Only,</li> <li>Card and finger print</li> <li>Card and Password</li> </ul> </li>		
6	Communications	TCP/IP, RS-485,USB Onboard 10/100mps Ethernet using CAT5/6 cable. Onboard RS 485 for communication between external access control module and terminal Allow direct communication with Host server without a controller. Allow other support to external technology using Wiegand connections.		
7	Enrollment	Allow fast finger print enrollment using TCP/IP. Enroll fingerprint and cardholder at the same time without the need for separate finger print/card holder enroller. This shall be done directly through the access control system.		
8	Support Messages	The reader Must have Large graphical LCD screen to allow users messages to be legible eg access denied, card expired etc.  The messages must be editable into local language from the control software.		
9	Data base	Structured database to Support at least 30,000 card holders and support at least 8,000 transactions in offline operations.  Must have internal rechargeable Lithium back up battery.		
10	Offline Operating Mode	The reader must contain an up-to-date information offline. Finger prints and card holder templates must be stored from the control computer and frequent updates downloaded on to the reader.		
11	Configurations	Allow configuration through the Control computer and also via the keypad on the reader.		
12	Input/Output	At least four inputs to monitor alarms and two		

		changeovers relay outputs to activate door or other	
		equipment.	
13	Scan parameters	Offer high resolution scanning detecting conductivity	
		of living tussues beneath the skin.	
14	Housing	Rating IP65	
	-	Flame retardant polycarbonate with fully encapsulated	
		electronics.	
		Must be small and light and approved by client.(attach	
		bronchure)	

## BIOMETRIC/CARD READER TYPE C

		BIOMETRIC/CARD READER TYPE C	Bidders Response	Quoted Brand
No	Feature	Technical Specification Must share brochure with Technical Bid & MAF		
1	Fully Integrated Biometric and card reader access control system	The reader must serve as a controller, biometric reader, card reader as a single module in one device.  The reader must be compatible and shall be integrated to;  GENETEC Access Control Software		
2	Management	Embedded Web Management software		
3	User Capacity	The Reader should be able to host at least 50,000 registered users, with a capacity of at least 50,000 finger prints and at least 10,000		
4	Onboard Card reading	Support onboard card reading technologies for 125KHZ proximity and 13.56MHZ Mifare, iclass(16K and 32K bits), DESFire and dual technology(ie Proximity and Mifare.		
5	Modes of Identification	Allow the following identification methods  • Fingerprint  • Proximity Reader  • Password  • Facial Recognition  The reader must be able to allow the following access configurations  • Card Only,  • Card and finger print  • Card and Password  • Card and Facial Recognition		
6	Communications	TCP/IP, RS-485,USB Onboard 10/100mps Ethernet using CAT5/6 cable. Onboard RS 485 for communication between external access control module and terminal Allow direct communication with Host server without a controller. Allow other support to external technology using Wiegand connections.		
7	Enrollment	Allow fast finger print enrollment using TCP/IP. Enroll fingerprint and cardholder at the same time without the need for separate finger print/card holder enroller. This shall be done directly through the access control system.		
8	Support Messages	The reader Must have Large graphical LCD screen to allow users messages to be legible eg access denied, card expired etc.  The messages must be editable into local language from the control software.		

9	Data base	Structured database to Support at least 30,000 cardholders and support at least 8,000 transactions in offline operations.  Must have internal rechargeable Lithium back up battery.	
10	Offline Operating Mode	The reader must contain an up-to-date information offline. Finger prints and card holder templates must be stored from the control computer and frequent updates downloaded on to the reader.	
11	Configurations	Allow configuration through the Control computer and also via the keypad on the reader.	
12	Input/Output	At least four inputs to monitor alarms and two changeovers relay outputs to activate door or other equipment.	
13	Scan parameters	Offer high resolution scanning detecting conductivity of living tussues beneath the skin.	
14	Housing	Rating IP65 Flame retardant polycarbonate with fully encapsulated electronics. Must be small and light and approved by client.(attach bronchure)	

## ACCESS CONTROL DOOR CONTROLLER

		ACCESS CONTROL DOOR CONTROLLER	Bidders Response	Quoted Brand
No	Feature	Technical Specification Must share brochure with Technical Bid & MAF	•	
	Fully Integrated Biometric and card reader access control system	The door controller must be compatible and shall be integrated to; Access Control Door Controller GENETEC Access Control Software. Must be able to seamlessly work with BIOMETRIC/CARD READER TYPE A and BIOMETRIC/CARD READER TYPE B as specified in the document.		
	Management	Embedded Web Management software		
	Door	The Controller must be able to control up to 4 doors directly or using an expandable module.		
	User Capacity	The Reader should be able to host at least 50,000 registered users, with a capacity of at least 50,000 records		
	Communications	TCP/IP, RS-485, USB. Onboard 10/100mps Ethernet. At least 4 Wiegand inputs for biometric reader		
	Support Messages	The reader Must have Large graphical LCD screen to allow users messages to be legible. The messages must be editable into local language from the control software.		
	Offline Operating Mode	The reader must contain an up-to-date information offline. Finger prints and card holder templates must be stored from the control computer and frequent updates downloaded on to the controller.		
	Configurations	Allow configuration through the Control computer and also via the keypad on the reader.		
	Input/Output	At least four inputs to monitor alarms and two changeovers relay outputs to activate door or other equipment.		
	Housing	Rating IP65 Flame retardant polycarbonate with fully encapsulated electronics. Must be small and light and approved by client.(attach bronchure)		

## ACCESS CONTROL MANAGEMENT/APPLICATION SOFTWARE

No	Feature	Technical Specification	Bidders	Quoted
10	Teature	Must share brochure with Technical Bid & MAF	Response	Brand
	Integrated	System must be able to monitor a condition for one integrated		
	Command and	subsystem while triggering an action for another.eg camera pop up		
	control	upon perimeter break in or access violation.		
	WEB-Based	Must be WEB based platform that offers easy to use browser		
		based applications that can be		
		Accessed from any networked location via a PC, tablet or smart		
		phone. Allow Users to respond to alarms		
		online, configure the access control system remotely, as well as import personnel data and view WEB security		
		dashboard reports, without the requirement of installing any		
		software		
	Real time central	Allow a real time view of all cardholder(s) movements in a		
	Event/alarm	selected zone/area providing information on who is present on		
	monitoring	site, as well as a counter of the total people in a zone/area and		
	momtoring	other real time events management.		
		Provide a complete graphical and textual representation of the		
		status of the entire access control system and integrated sub		
		systems. The system must respond to alarm situations in real time		
		providing a dynamic on-screen interface to systems with advanced		
		graphical maps, live video pop-up and remote door broadcasting.		
	Transactions	Allow split screen view of real-time transaction		
	Display	outcomes and alarms. When a card is swiped at a reader, the		
		cardholder's stored image and associated personnel details are		
		displayed to allow cross check that the right person is using the		
	<u> </u>	card.		
	Visitor	The system Must allow Visitor management both locally and		
	Management	remotely via WEB to enable users request and manage temporary		
		cardholders (visitors) from any location via a standard web		
		browser, using an easy to use. Front-end web application. Such management shall include; add visitor details, photos, sponsor		
		details, reason for visit,		
		visit duration and access level required		
		Must be compatible and integrate to Genetec.		
	Integration with	The software MUST be Fully integratable to GENETIC Security		
	other systems	Management software.		
		It must seamlessly integrate with other third party systems like		
		Intruder alarms, CCTV, Fire alarm systems, Perimeter detection		
		systems etc.		
	Database	Must allow multiple partitions for multi-site operations.		
	Partitioning	Partitioned system administrators shall have the ability to add		
		personnel cardholders, produce ID badges and manage alarms on		
		their own site, but are prevented from seeing the data of other		
	D 4	partitioned databases that reside on the same access control server.		
	Reports	Must be able to avail Local and WEB-Based reports such as		
		presence/absence reports, access control reports, Event reports,		
		System function ability reports, time and attendance, among others.		
	Perimeter			
	Monitoring	The software must integrate with other perimeter monitoring systems like CCTV, Intrusion systems, perimeter fencing systems		
	wiomtoring	and provide pop ups and other alerts on breach of perimeter		
		conditions.		

#### TRAINING SPECIFICATIONS

The bidder shall factor the following:

- (i) Submission of detailed training schedule and course outline in respective category/Lot biding for ,outlining the objective, training grade, qualifications or experience attained in various modules, pre-training registration requirement, and post training follow up courses.
- (ii) Training shall include Pre-installation, on-installation and Post-installation phases.
- (iii) Local Pre-installation training shall prepare the client on necessary preparation for the environment under which the systems will operate, outlining all necessary requirement for client's preparation
- (iv) Oversee training shall include all necessary cost of hiring the facility, trainers, movement to and from training ground, meals and refreshment during the training period
- (v) Provision of all necessary training materials including manuals/notes both hardcopy and softcopy on Flash-disk, files, writing materials etc.
- (vi) Training certifications
- (vii) Any necessary registration and access to manufacturer portals

(viii)

- (ix) The cost for travelling and accommodation shall be processed upon guidance and approval by Kplc as per approved rates by the company.
- (x) A training report shall be submitted at the end of every training.
- (xi) The bidder shall take care of transport logistic to and from the place of accommodation and training venue.

#### VISITOR MANAGEMENT SYSTEMS SPECIFICATIONS

No Feature	Technical Specification Must share brochure with Technical Bid & MAF	Bidders Response	Quoted Brand
1. General Functions			
(i) Key Features	<ul> <li>System must be accessed locally or remotely view a web based application. Enrolment, configuration and reporting shall be all managed through a web interface. The system should able to manage permanent or temporary access control and provides seamless visitor to physical access control processing.</li> <li>Hosting - System should support both Cloud hosting via internet or can be set up locally. This will be done On-premise, Private-Cloud or Standard Cloud-Based Servers</li> <li>System shall have hardware Device Manager with ability to monitor Online/Offline Status.</li> <li>Authentication - Recognition Access Control Credentials Supported such as facial, biometric, One-Time-Pin, RFID, LPR and QR Code</li> <li>Full System Event, User &amp; Credential Reports.</li> <li>Logbook for Access Denied &amp; Authorized Entries.</li> <li>The system shall support Pre-Registered or Walk-In Visitor Registration.</li> <li>System automatically sends invites via Email, SMS or Whatsapp or can be shared on Web Browser Interface or via Smartphone</li> <li>Encrypted Communication Between All Components</li> <li>Enrollment of permanent or temporary</li> </ul>		

	T		
		<ul> <li>Issuing of temporary access permits and</li> </ul>	
		invitations to visitors	
		Generate reports (Access Control logs) in PDF	
		or Excel	
(ii)	Interface	Interface directly to IP Hardware such as	
		Type A, B or C access control readers	
		Badge Printing with Photo & QR Code (Visitor)	
		and Personnel).	
		The system should be able to be seamlessly	
		1	
		interface with Genetec Security Centre Access control software.	
		Handheld Scanning, Self-Service Visitor Kiosk	
(111)		or Web Operator Registration.	
(iii)	User configurable	System shall allow configuration of the following	
		profiles Administrator, Super User, Security operator,	
		Guard	
(iv)	Registration	Visitor Registration via Self-Service Kiosk, Handheld	
		Device (Mobile app) or Web Browser Interface.	
(v)	Transactions Display	This should include;	
		• phot	
		o of the visitor,	
		• visit	
		or's company,	
		• visit	
		reason,	
		• mobi	
		le Phone number	
		•	
		ID/Passport number.	
(vi)	Management	Web Interface for Setup, Configuration &	
(1)	Wianagement	Management	
(vii)	Database Partitioning	Separate Personnel, Visitor & User Databases.	
(viii)	Reports	The system shall be able to generate the following	
		reports;	
		Visitor dashboard, an access/control logbook	
		and various exportable pdf and/or CSV	
		reports.	
		System event reports, time/attendance reports	
		and system credential reports.	
		Graphical visitor analytics showing visitor	
		metrics for the date period selected, as well as	
		the total number of visitors.	
2.	visitor management	(i) Key Features	
	kiosk	<ul> <li>Self Service Automated Visitor Kiosk with</li> </ul>	
		Access Control Integration	
		• Kiosk Display - Hi-Resolution Touchscreen	
		QR Code Reading for Pre-Registered Visitors	
		Visitor Face Capture	
		Host Approval & Host Notification via Email	
		or SMS.	
		Shall allow Manual Data Entry	
		QR Code Visitor Badge Printing	
		• ID/Passport Card Scanner with photo	
		Cropping	
		(ii) Data Capturing- Shall allow the following fields	
		Host Name Selection	
		Visit Reason	
1		<ul> <li>Contacts - Mobile or Telephone</li> </ul>	
		Number, Email Address, Physical /	

		Postal Address  ID/Passport Number  Company  Assigned Card No.  Other Custom Fields as required	
3.	visitor management smartphone with app	Shall support the following Android and Apple mobile OS Shall manage the following; send visitor invites, Mange digital QR, Access control management, approval management, scanning identification document.	
4.	visitor management badging stations	Shall consist of badging printer with the following features;  • Build in embedded design software with Editor for advanced label design using PC  • Prints on die cut labels and rolls 12-62mm wide up to 1m  • Prints in both Black and Red  • Shall have a minimum printing speed of 93 labels/min  • 58.93mm Max print height  • Shall have Automatic cutter  • Shall support Various image types and barcodes	
5.	Hand Held visitor scanner	Shall consist of hand held hardware and software device with the following features;  • Shall be able to pre-register or register walk in visitors  • scan Identification documents Capture Visitors photo  • Print visitor's cards.	

## NETWORK DEVICES AND ACCESSORIES SPECIFICATIONS

This shall include all network devices namely, network switches, Media converters and all associated cabling, ducting and accessories like Patch panels, patch codes, connectors, patress/patress boxes, network extenders, cabinets, phase plates, surge protectors and any other necessary accessories required for functioning of all network devices

The number of Network switches (Core and Edge Switches) per site shall be as described in the bill of quantiles

PART III - CONDITIONS OF CONTRACT AND CONTRACT FORMS

#### SECTION VIII - GENERAL CONDITIONS OF CONTRACT

These General Conditions of Contract (GCC), read in conjunction with the Special Conditions of Contract (SCC) and other documents listed therein, should be a complete document expressing fairly the rights and obligations of both parties.

These General Conditions of Contract have been developed on the basis of considerable international experience in the drafting and management of contracts, bearing in mind a trend in the construction industry towards simpler, more straightforward language.

The GCC can be used for both smaller admeasurement contracts and lump sum contracts.

#### **General Conditions of Contract**

#### A. General

#### 1. Definitions

- 1.1 Bold face type is used to identify defined terms.
  - a) **The Accepted Contract** Amount means the amount accepted in the Letter of Acceptance for the execution and completion of the Works and the remedying of any defects.
  - b) **The Activity Schedule** is a schedule of the activities comprising the construction, installation, testing, and commissioning of the Works in a lump sum contract. It includes a lump sum price for each activity, which is used for valuations and for assessing the effects of Variations and Compensation Events.
  - c) **The Adjudicator** is the person appointed jointly by Kenya Power and the Contractor to resolve disputes in the first instance, as provided for in GCC 23.
  - d) **Bill of Quantities** means the priced and completed Bill of Quantities forming part of the Bid.
  - e) **Compensation Events** are those defined in GCC Clause 42 hereunder.
  - f) **The Completion Date** is the date of completion of the Works as certified by the Project Manager, in accordance with GCC Sub-Clause 53.1.
  - g) **The Contract** is the Contract between Kenya Power and the Contractor to execute, complete, and maintain the Works. It consists of the documents listed in GCC Sub-Clause 2.3 below.
  - h) **The Contractor** is the party whose Bid to carry out the Works has been accepted by Kenya Power.
  - i) **The Contractor's Bid** is the completed bidding document submitted by the Contractor to Kenya Power.
  - j) **The Contract Price** is the Accepted Contract Amount stated in the Letter of Acceptance and thereafter as adjusted in accordance with the Contract.
  - k) **Days** are calendar days; months are calendar months.
  - 1) **Day work**s are varied work inputs subject to payment on a time basis for the Contractor's employees and Equipment, in addition to payments for associated Materials and Plant.
  - m) **A Defect** is any part of the Works not completed in accordance with the Contract.
  - n) **The Defects** Liability Certificate is the certificate issued by Project Manager upon correction of defects by the Contractor.
  - o) **The Defects Liability Period** is the period **named in the SCC** pursuant to Sub-Clause 34.1 and calculated from the Completion Date.
  - p) **Drawings** means the drawings of the Works, as included in the Contract, and any additional and modified drawings issued by (or on behalf of) Kenya Power in accordance with the Contract, include calculations and other information provided or approved by the Project Manager for the execution of the Contract.
  - q) **Kenya Power is** the party who employs the Contractor to carry out the Works, **as specified in the SCC,** who is also Kenya Power.
  - r) **Equipment** is the Contractor's machinery and vehicles brought temporarily to the Site to construct the Works.

- s) "In writing" or "written" means hand-written, type-written, printed or electronically made, and resulting in a permanent record;
- t) The Initial Contract Price is the Contract Price listed in Kenya Power's Letter of Acceptance.
- u) **The Intended Completion Date** is the date on which it is intended that the Contractor shall complete the Works. The Intended Completion Date is **specified in the SCC**. The Intended Completion Date may be revised only by the Project Manager by issuing an extension of time or an acceleration order.
- v) **Materials** are all supplies, including consumables, used by the Contractor for incorporation in the Works.
- w) **Plant i**s any integral part of the Works that shall have a mechanical, electrical, chemical, or biological function.
- x) The Project Manager is the person named in the SCC (or any other competent person appointed by Kenya Power and notified to the Contractor, to act in replacement of the Project Manager) who is responsible for supervising the execution of the Works and administering the Contract.
- y) SCC means Special Conditions of Contract.
- z) The Site is the area of the works as defined as such in the SCC.
- aa) **Site Investigation Reports** are those that were included in the bidding document and are factual and interpretative reports about the surface and subsurface conditions at the Site.
- bb) **Specification** means the Specification of the Works included in the Contract and any modification or addition made or approved by the Project Manager.
- cc) **The Start Date** is **given in the SCC**. It is the latest date when the Contractor shall commence execution of the Works. It does not necessarily coincide with any of the Site Possession Dates.
- dd) **A Subcontractor** is a person or corporate body who has a Contract with the Contractor to carry out a part of the work in the Contract, which includes work on the Site.
- ee) **Temporary Works** are works designed, constructed, installed, and removed by the Contractor that are needed for construction or installation of the Works.
- ff) **A Variation** is an instruction given by the Project Manager which varies the Works.
- gg) **The Works** are what the Contract requires the Contractor to construct, install, and turn over to Kenya Power, **as defined in the SCC**.

#### 2. Interpretation

- 21 In interpreting these GCC, words indicating one gender include all genders. Words indicating the singular also include the plural and words indicating the plural also include the singular. Headings have no significance. Words have their normal meaning under the language of the Contract unless specifically defined. The Project Manager shall provide instructions clarifying queries about these GCC.
- 22 If sectional completion is specified in the SCC, references in the GCC to the Works, the Completion Date, and the Intended Completion Date apply to any Section of the Works (other than references to the Completion Date and Intended Completion Date for the whole of the Works).
- 23 The documents forming the Contract shall be interpreted in the following order of priority:
  - a) Agreement,
  - b) Letter of Acceptance,
  - c) Contractor's Bid,
  - d) Special Conditions of Contract,
  - e) General Conditions of Contract, including Appendices,
  - f) Specifications,
  - g) Drawings,
  - h) Bill of Quantities<sup>6</sup>, and
  - i) Any other document **listed in the SCC** as forming part of the Contract.

#### 3. Language and Law

- 3.1 The language of the Contract is English Language and the law governing the Contract are the Laws of Kenya.
- 32 Throughout the execution of the Contract, the Contractor shall comply with the import of goods and services prohibitions in Kenya Power 's Country when
- a) As a matter of law or official regulations, Kenya prohibits commercial relations with that country; or
- b) By an act of compliance with a decision of the United Nations Security Council taken under Chapter VII of the Charter of the United Nations, Kenya prohibits any import of goods from that country or any payments to any country, person, or entity in that country.

## 4. Project Manager's Decisions

4.1 Except where otherwise specifically stated, the Project Manager shall decide contractual matters between Kenya Power and the Contractor in the role representing Kenya Power.

## 5. Delegation

5.1 Otherwise **specified in the SCC**, the Project Manager may delegate any of his duties and responsibilities to other people, except to the Adjudicator, after notifying the Contractor, and may revoke any delegation after notifying the Contractor.

#### **6.** Communications

61 Communications between parties that are referred to in the Conditions shall be effective only when in writing. A notice shall be effective only when it is delivered.

## 7. Subcontracting

7.1 The Contractor may subcontract with the approval of the Project Manager, but may not assign the Contract without the approval of Kenya Power in writing. Subcontracting shall not alter the Contractor's obligations.

## 8. Other Contractors

81 The Contractor shall cooperate and share the Site with other contractors, public authorities, utilities, and Kenya Power between the dates given in the Schedule of Other Contractors, as **referred to in the SCC.** The Contractor shall also provide facilities and services for them as described in the Schedule. Kenya Power may modify the Schedule of Other Contractors, and shall notify the Contractor of any such modification.

## 9. Personnel and Equipment

- 9.1 The Contractor shall employ the key personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project Manager shall approve any proposed replacement of key personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.
- 92 If the Project Manager asks the Contractor to remove a person who is a member of the Contractor's staff or work force, stating the reasons, the Contractor shall ensure that the person leaves the Site within seven days and has no further connection with the work in the Contract.
- 93 If Kenya Power, Project Manager or Contractor determines, that any employee of the Contractor be determined to have engaged in Fraud and Corruption during the execution of the Works, then that employee shall be removed in accordance with Clause 9.2 above.

#### 10. Procuring Entity's and Contractor's Risks

10.1 Kenya Power carries the risks which this Contract states are Procuring Entity's risks, and the Contractor

carries the risks which this Contract states are Contractor's risks.

#### 11. Procuring Entity's Risks

- 11.1 From the Start Date until the Defects Liability Certificate has been issued, the following are Procuring Entity's risks:
- a) The risk of personal injury, death, or loss of or damage to property (excluding the Works, Plant, Materials, and Equipment), which are due to
- i) use or occupation of the Site by the Works or for the purpose of the Works, which is the unavoidable result of the Works or
- ii) Negligence, breach of statutory duty, or interference with any legal right by Kenya Power or by any person employed by or contracted to him except the Contractor.
- b) The risk of damage to the Works, Plant, Materials, and Equipment to the extent that it is due to a fault of Kenya Power or in Kenya Power 's design, or due to war or radioactive contamination directly affecting the country where the Works are to be executed.
- 112 From the Completion Date until the Defects Liability Certificate has been issued, the risk of loss of or damage to the Works, Plant, and Materials is a Procuring Entity's risk except loss or damage due to
  - a) A Defect which existed on the Completion Date,
  - b) An event occurring before the Completion Date, which was not itself a Procuring Entity's risk, or
  - c) The activities of the Contractor on the Site after the Completion Date.

#### 12. Contractor's Risks

121 From the Starting Date until the Defects Liability Certificate has been issued, the risks of personal injury, death, and loss of or damage to property (including, without limitation, the Works, Plant, Materials, and Equipment) which are not Procuring Entity's risks are Contractor's risks.

#### 13. Insurance

- 13.1 The Contractor shall provide, in the joint names of Kenya Power and the Contractor, insurance cover from the Start Date to the end of the Defects Liability Period, in the amounts and deductibles **stated in the SCC** for the following events which are due to the Contractor's risks:
- a) Loss of or damage to the Works, Plant, and Materials;
- b) Loss of or damage to Equipment;
- c) Loss of or damage to property (except the Works, Plant, Materials, and Equipment) in connection with the Contract; and
- d) personal injury or death.
- 132 Policies and certificates for insurance shall be delivered by the Contractor to the Project Manager for the Project Manager's approval before the Start Date. All such insurance shall provide for compensation to be payable in the types and proportions of currencies required to rectify the loss or damage incurred.
- 133 If the Contractor does not provide any of the policies and certificates required, Kenya Power may affect the insurance which the Contractor should have provided and recover the premiums Kenya Power has paid from payments otherwise due to the Contractor or, if no payment is due, the payment of the premiums shall be a debt due.
- 13.4 Alterations to the terms of an insurance shall not be made without the approval of the Project Manager.
- 135 Both parties shall comply with any conditions of the insurance policies.

#### 14. Site Data

14.1 The Contractor shall be deemed to have examined any Site Data **referred to in the SCC**, supplemented by any information available to the Contractor.

#### 15. Contractor to Construct the Works

- 15.1 The Contractor shall construct and install the Works in accordance with the Specifications and Drawings.
- 16. The Works to Be Completed by the Intended Completion Date
- 161 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the Program submitted by the Contractor, as updated with the approval of the Project Manager, and complete them by the Intended Completion Date.
- 17. Approval by the Project Manager
- 17.1 The Contractor shall submit Specifications and Drawings showing the proposed Temporary Works to the Project Manager, for his approval.
- 172 The Contractor shall be responsible for design of Temporary Works.
- 173 The Project Manager's approval shall not alter the Contractor's responsibility for design of the Temporary Works.
- 174 The Contractor shall obtain approval of third parties to the design of the Temporary Works, where required.
- 175 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Project Manager before this use.
- 18. Safety
- 18.1 The Contractor shall be responsible for the safety of all activities on the Site.
- **19.** Discoveries
- 19.1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site shall be the property of Kenya Power. The Contractor shall notify the Project Manager of such discoveries and carry out the Project Manager's instructions for dealing with them.
- 20. Possession of the Site
- 20.1 Kenya Power shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date **stated in the SCC**, Kenya Power shall be deemed to have delayed the start of the relevant activities, and this shall be a Compensation Event.
- 21. Access to the Site
- 21.1 The Contractor shall allow the Project Manager and any person authorized by the Project Manager access to the Site and to any place where work in connection with the Contract is being carried out or is intended to be carried out.
- 22. Instructions, Inspections and Audits
- 221 The Contractor shall carry out all instructions of the Project Manager which comply with the applicable laws where the Site is located.
- 222 The Contractor shall keep, and shall make all reasonable efforts to cause its Subcontractors and subconsultants to keep, accurate and systematic accounts and records in respect of the Works in such form and details as will clearly identify relevant time changes and costs.
- 223 The Contractor shall permit and shall cause its subcontractors and sub-consultants to permit, Kenya Power and/or persons appointed by the Public Procurement Regulatory Authority to inspect the Site and/or the accounts and records relating to the procurement process, selection and/or contract execution, and to have such accounts and records audited by auditors appointed by the Public Procurement Regulatory Authority. The Contractor's and its Subcontractors' and sub-consultants' attention is drawn to Sub-Clause 25.1 (Fraud and Corruption) which provides, inter alia, that acts intended to materially impede the exercise of the Public Procurement Regulatory Authority's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to

a determination of ineligibility pursuant to the Public Procurement Regulatory Authority's prevailing sanctions procedures).

## 23. Appointment of the Adjudicator

- 23.1 The Adjudicator shall be appointed jointly by Kenya Power and the Contractor, at the time of Kenya Power's issuance of the Letter of Acceptance. If, in the Letter of Acceptance, Kenya Power does not agree on the appointment of the Adjudicator, Kenya Power will request the Appointing Authority designated in the SCC, to appoint the Adjudicator within 14 days of receipt of such request.
- 232 Should the Adjudicator resign or die, or should Kenya Power and the Contractor agree that the Adjudicator is not functioning in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by Kenya Power and the Contractor. In case of disagreement between Kenya Power and the Contractor, within 30 days, the Adjudicator shall be designated by the Appointing Authority designated in the SCC at the request of either party, within 14 days of receipt of such request.

## 24. Settlement of Claims and Disputes

#### 241 Contractor's Claims

- 24.1.1 If the Contractor considers itself to be entitled to any extension of the Time for Completion and/or any additional payment, under any Clause of these Conditions or otherwise in connection with the Contract, the Contractor shall give Notice to the Project Manager, describing the event or circumstance giving rise to the claim. The notice shall be given as soon as practicable, and not later than 30 days after the Contractor became aware, or should have become aware, of the event or circumstance.
- 24.1.2 If the Contractor fails to give notice of a claim within such period of 30 days, the Time for Completion shall not be extended, the Contractor shall not be entitled to additional payment, and Kenya Power shall be discharged from all liability in connection with the claim. Otherwise, the following provisions of this Sub- Clause shall apply.
- 24.1.3 The Contractor shall also submit any other notices which are required by the Contract, and supporting particulars for the claim, all as relevant to such event or circumstance.
- 24.1.4 The Contractor shall keep such contemporary records as may be necessary to substantiate any claim, either on the Site or at another location acceptable to the Project Manager. Without admitting Kenya Power's liability, the Project Manager may, after receiving any notice under this Sub-Clause, monitor the record- keeping and/or instruct the Contractor to keep further contemporary records. The Contractor shall permit the Project Manager to inspect all these records, and shall (if instructed) submit copies to the Project Manager.
- 24.1.5 Within 42 days after the Contractor became aware (or should have become aware) of the event or circumstance giving rise to the claim, or within such other period as may be proposed by the Contractor and approved by the Project Manager, the Contractor shall send to the Project Manager a fully detailed claim which includes full supporting particulars of the basis of the claim and of the extension of time and/or additional payment claimed. If the event or circumstance giving rise to the claim has a continuing effect:
  - a) This fully detailed claim shall be considered as interim;
  - b) The Contractor shall send further interim claims at monthly intervals, giving the accumulated delay and/or amount claimed, and such further particulars as the Project Manager may reasonably require; and
  - c) The Contractor shall send a final claim within 30 days after the end of the effects resulting from the event or circumstance, or within such other period as may be proposed by the Contractor and approved by the Project Manager.
- 24.1.6 Within 42 days after receiving a Notice of a claim or any further particulars supporting a previous claim, or within such other period as may be proposed by the Project Manager and approved by the Contractor, the Project Manager shall respond with approval, or with disapproval and detailed comments. He may also request any necessary further particulars, but shall nevertheless give his response on the principles of the claim within the above defined time period.
- 24.1.7 Within the above defined period of 42 days, the Project Manager shall proceed in accordance with Sub-Clause

- 24.1.8 [Determinations] to agree or determine (i) the extension (if any) of the Time for Completion (before or after its expiry) in accordance with Sub-Clause 8.4 [Extension of Time for Completion], and/or (ii) the additional payment (if any) to which the Contractor is entitled under the Contract.
- 24.1.9 Each Payment Certificate shall include such additional payment for any claim as has been reasonably substantiated as due under the relevant provision of the Contract. Unless and until the particulars supplied are sufficient to substantiate the whole of the claim, the Contractor shall only be entitled to payment for such part of the claim as he has been able to substantiate.
- 24.1.10 If the Project Manager does not respond within the timeframe defined in this Clause, either Party may consider that the claim is rejected by the Project Manager and any of the Parties may refer to Arbitration in accordance with Sub-Clause 24.4 [Arbitration].
- 24.1.11 The requirements of this Sub-Clause are in addition to those of any other Sub-Clause which may apply to a claim. If the Contractor fails to comply with this or another Sub-Clause in relation to any claim, any extension of time and/or additional payment shall take account of the extent (if any) to which the failure has prevented or prejudiced proper investigation of the claim, unless the claim is excluded under the second paragraph of this Sub-Clause 24.3.

#### 242 Amicable Settlement

24.2.1 Where a notice of a claim has been given, both Parties shall attempt to settle the dispute amicably before the commencement of arbitration. However, unless both Parties agree otherwise, the Party giving a notice of a claim in accordance with Sub-Clause 24.1 above should move to commence arbitration after the fifty-sixth day from the day on which a notice of a claim was given, even if no attempt at an amicable settlement has been made.

#### 243 Matters that may be referred to arbitration

- 24.3.1 Notwithstanding anything stated herein the following matters may be referred to arbitration before the practical completion of the Works or abandonment of the Works or termination of the Contract by either party:
- a) The appointment of a replacement Project Manager upon the said person ceasing to act.
- b) Whether or not the issue of an instruction by the Project Manager is empowered by these Conditions.
- c) Whether or not a certificate has been improperly withheld or is not in accordance with these Conditions.
- e) Any dispute arising in respect of war risks or war damage.
- f) All other matters shall only be referred to arbitration after the completion or alleged completion of the Works or termination or alleged termination of the Contract, unless Kenya Power and the Contractor agree otherwise in writing.

#### 244 Arbitration

- 24.4.1 Any claim or dispute between the Parties arising out of or in connection with the Contract not settled amicably in accordance with Sub-Clause 24.3 shall be finally settled by arbitration.
- 24.4.2 No arbitration proceedings shall be commenced on any claim or dispute where notice of a claim or dispute has not been given by the applying party within ninety days of the occurrence or discovery of the matter or issue giving rise to the dispute.
- 24.4.3 Notwithstanding the issue of a notice as stated above, the arbitration of such a claim or dispute shall not commence unless an attempt has in the first instance been made by the parties to settle such claim or dispute amicably with or without the assistance of third parties. Proof of such attempt shall be required.
- 24.4.4 The Arbitrator shall, without prejudice to the generality of his powers, have powers to direct such measurements, computations, tests or valuations as may in his opinion be desirable in order to determine the rights of the parties and assess and award any sums which ought to have been the subject of or included in any certificate.
- 24.4.5 The Arbitrator shall, without prejudice to the generality of his powers, have powers to open up, review and revise any certificate, opinion, decision, requirement or notice and to determine all matters in dispute which shall be submitted to him in the same manner as if no such certificate, opinion, decision requirement or notice had been given.
- 24.4.6 The arbitrators shall have full power to open up, review and revise any certificate, determination, instruction, opinion or valuation of the Project Manager, relevant to the dispute. Nothing shall disqualify representatives of the Parties and the Project Manager from being called as a witness and giving evidence before the arbitrators on any matter whatsoever relevant to the dispute.

- 24.4.7 Neither Party shall be limited in the proceedings before the arbitrators to the evidence, or to the reasons for dissatisfaction given in its Notice of Dissatisfaction.
- 24.4.8 Arbitration may be commenced prior to or after completion of the Works. The obligations of the Parties, and the Project Manager shall not be altered by reason of any arbitration being conducted during the progress of the Works.
- 24.4.9 The terms of the remuneration of each or all the members of Arbitration shall be mutually agreed upon by the Parties when agreeing the terms of appointment. Each Party shall be responsible for paying one-half of this remuneration.

#### 245 Arbitration with National Contractors

- 24.5.1 If the Contract is with national contractors, arbitration proceedings will be conducted in accordance with the Arbitration Laws of Kenya. In case of any claim or dispute, such claim or dispute shall be notified in writing by either party to the other with a request to submit it to arbitration and to concur in the appointment of an Arbitrator within thirty days of the notice. The dispute shall be referred to the arbitration and final decision of a person to be agreed between the parties. Failing agreement to concur in the appointment of an Arbitrator, the Arbitrator shall be appointed, on the request of the applying party, by the Chairman or Vice Chairman of any of the following professional institutions;
  - i) Architectural Association of Kenya
  - ii) Institute of Quantity Surveyors of Kenya
  - iii) Association of Consulting Engineers of Kenya
  - iv) Chartered Institute of Arbitrators (Kenya Branch)
  - v) Institution of Engineers of Kenya
- 24.5.2 The institution written to first by the aggrieved party shall take precedence over all other institutions.

#### 246 Alternative Arbitration Proceedings

24.6.1 Alternatively, the Parties may refer the matter to the Nairobi Centre for International Arbitration (NCIA) which offers a neutral venue for the conduct of national and international arbitration with commitment to providing institutional support to the arbitral process.

#### 247 Failure to Comply with Arbitrator's Decision

- 24.7.1 The award of such Arbitrator shall be final and binding upon the parties.
- 24.7.2 In the event that a Party fails to comply with a final and binding Arbitrator's decision, then the other Party may, without prejudice to any other rights it may have, refer the matter to a competent court of law.

## 248 Contract operations to continue

- 24.8.1 Notwithstanding any reference to arbitration herein,
- a) the parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
- b) Kenya Power shall pay the Contractor any monies due the Contractor.

## 25. Fraud and Corruption

- 25.1 The Government requires compliance with the country's Anti-Corruption laws and its prevailing sanctions policies and procedures as set forth in the Constitution of Kenya and its Statutes.
- 252 Kenya Power requires the Contractor to disclose any commissions or fees that may have been paid or are to be paid to agents or any other party with respect to the bidding process or execution of the Contract. The information disclosed must include at least the name and address of the agent or other party, the amount and currency, and the purpose of the commission, gratuity or fee.

#### **B.** Time Control

#### **26.** Program

261 Within the time stated in the SCC, after the date of the Letter of Acceptance, the Contractor shall submit to the Project Manager for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works. In the case of a lump sum contract, the activities in the Program shall be consistent with those in the Activity Schedule.

- 262 An update of the Program shall be a program showing the actual progress achieved on each activity and the effect of the progress achieved on the timing of the remaining work, including any changes to the sequence of the activities.
- 263 The Contractor shall submit to the Project Manager for approval an updated Program at intervals no longer than the period stated in the SCC. If the Contractor does not submit an updated Program within this period, the Project Manager may withhold the amount stated in the SCC from the next payment certificate and continue to withhold this amount until the next payment after the date on which the overdue Program has been submitted. In the case of a lump sum contract, the Contractor shall provide an updated Activity Schedule within 14 days of being instructed to by the Project Manager.
- 264 The Project Manager's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Project Manager again at any time. A revised Program shall show the effect of Variations and Compensation Events.
- 27. Extension of the Intended Completion Date
- 27.1 The Project Manager shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date without the Contractor taking steps to accelerate the remaining work, which would cause the Contractor to incur additional cost.
- 272 The Project Manager shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Project Manager for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information. If the Contractor has failed to give early warning of a delay or has failed to cooperate in dealing with a delay, the delay by this failure shall not be considered in assessing the new Intended Completion Date.

#### 28. Acceleration

- 281 When Kenya Power wants the Contractor to finish before the Intended Completion Date, the Project Manager shall obtain priced proposals for achieving the necessary acceleration from the Contractor. If Kenya Power accepts these proposals, the Intended Completion Date shall be adjusted accordingly and confirmed by both Kenya Power and the Contractor.
- 282 If the Contractor's priced proposals for an acceleration are accepted by Kenya Power, they are incorporated in the Contract Price and treated as a Variation.
- **29.** Delays Ordered by the Project Manager
- 29.1 The Project Manager may instruct the Contractor to delay the start or progress of any activity within the Works.

#### **30.** Management Meetings

- 301 Either the Project Manager or the Contractor may require the other to attend a management meeting. The business of a management meeting shall be to review the plans for remaining work and to deal with matters raised in accordance with the early warning procedure.
- 302 The Project Manager shall record the business of management meetings and provide copies of the record to those attending the meeting and to Kenya Power. The responsibility of the parties for actions to be taken shall be decided by the Project Manager either at the management meeting or after the management meeting and stated in writing to all who attended the meeting.

#### 31. Early Warning

- 31.1 The Contractor shall warn the Project Manager at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price, or delay the execution of the Works. The Project Manager may require the Contractor to provide an estimate of the expected effect of the future event or circumstance on the Contract Price and Completion Date. The estimate shall be provided by the Contractor as soon as reasonably possible.
- 312 The Contractor shall cooperate with the Project Manager in making and considering proposals for how the effect of such an event or circumstance can be avoided or reduced by anyone involved in the work and in carrying out any resulting instruction of the Project Manager.

#### C. Quality Control

#### 32. Identifying Defects

321 The Project Manager shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Project Manager may instruct the Contractor to search for a Defect and to uncover and test any work that the Project Manager considers may have a Defect.

#### 33. Tests

33.1 If the Project Manager instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect, the test shall be a Compensation Event.

#### **34.** Correction of Defects

- 34.1 The Project Manager shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion, and is defined in the SCC. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.
- 342 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Project Manager's notice.

#### **35.** Uncorrected Defects

35.1 If the Contractor has not corrected a Defect within the time specified in the Project Manager's notice, the Project Manager shall assess the cost of having the Defect corrected, and the Contractor shall pay this amount.

#### **D. Cost Control**

## **36.** Contract Price <sup>7</sup>

361 The Bill of Quantities shall contain priced items for the Works to be performed by the Contractor. The Bill of Quantities is used to calculate the Contract Price. The Contractor will be paid for the quantity of the work accomplished at the rate in the Bill of Quantities for each item.

## 37. Changes in the Contract Price 8

- 37.1 If the final quantity of the work done differs from the quantity in the Bill of Quantities for the particular item by more than 25 percent, provided the change exceeds 1 percent of the Initial Contract Price, the Project Manager shall adjust the rate to allow for the change. The Project Manager shall not adjust rates from changes in quantities if thereby the Initial Contract Price is exceeded by more than 15 percent, except with the prior approval of Kenya Power.
- 372 If requested by the Project Manager, the Contractor shall provide the Project Manager with a detailed cost breakdown of any rate in the Bill of Quantities.

#### 38. Variations

- 38.1 All Variations shall be included in updated Programs9 produced by the Contractor.
- 382 The Contractor shall provide the Project Manager with a quotation for carrying out the Variation when requested to do so by the Project Manager. The Project Manager shall assess the quotation, which shall be given within seven (7) days of the request or within any longer period stated by the Project Manager and before the Variation is ordered.
- 383 If the Contractor's quotation is unreasonable, the Project Manager may order the Variation and make a change to the Contract Price, which shall be based on the Project Manager's own forecast of the effects of the Variation on the Contractor's costs.
- 384 If the Project Manager decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be

- treated as a Compensation Event.
- <sup>7</sup>In lump sum contracts, replace GCC Sub-Clauses 36.1 as follows:
- 36.1 The Contractor shall provide updated Activity Schedules within 14 days of being instructed to by the Project Manager. The Activity Schedule shall contain the priced activities for the Works to be performed by the Contractor. The Activity Schedule is used to monitor and control the performance of activities on which basis the Contractor will be paid. If payment for materials on site shall be made separately, the Contractor shall show delivery of Materials to the Site separately on the Activity Schedule.

8 In lump sum contracts, replace entire GCC Clause 37 with new GCC Sub-Clause 37.1, as follows:

- The Activity Schedule shall be amended by the Contractor to accommodate changes of Program or method of working made at the Contractor's own discretion. Prices in the Activity Schedule shall not be altered when the Contractor makes such changes to the Activity Schedule.
- <sup>9</sup>In lump sum contracts, add "and Activity Schedules" after "Programs." <sup>10</sup>In lump sum contracts, delete this paragraph.
- 385 The Contractor shall not be entitled to additional payment for costs that could have been avoided by giving early warning
- 386 If the work in the Variation corresponds to an item description in the Bill of Quantities and if, in the opinion of the Project Manager, the quantity of work above the limit stated in Sub-Clause 39.1 or the timing of its execution do not cause the cost per unit of quantity to change, the rate in the Bill of Quantities shall be used to calculate the value of the Variation. If the cost per unit of quantity changes, or if the nature or timing of the work in the Variation does not correspond with items in the Bill of Quantities, the quotation by the Contractor shall be in the form of new rates for the relevant items of work
- 387 Value Engineering: The Contractor may prepare, at its own cost, a value engineering proposal at any time during the performance of the contract. The value engineering proposal shall, at a minimum, include the following;
- a) The proposed change(s), and a description of the difference to the existing contract requirements;
- b) A full cost/benefit analysis of the proposed change(s) including a description and estimate of costs (including life cycle costs) Kenya Power may incur in implementing the value engineering proposal; and
- c) A description of any effect(s) of the change on performance/functionality.
- 388 Kenya Power may accept the value engineering proposal if the proposal demonstrates benefits that:
- a) Accelerate the contract completion period; or
- b) Reduce the Contract Price or the life cycle costs to Kenya Power; or
- c) Improve the quality, efficiency, safety or sustainability of the Facilities; or
- d) Yield any other benefits to Kenya Power, without compromising the functionality of the Works.
- 389 If the value engineering proposal is approved by Kenya Power and results in:
- a) A reduction of the Contract Price; the amount to be paid to the Contractor shall be the **percentage specified in the SCC** of the reduction in the Contract Price; or
- b) An increase in the Contract Price; but results in a reduction in life cycle costs due to any benefit described in
- (a) To (d) above, the amount to be paid to the Contractor shall be the full increase in the Contract Price.
- **39.** Cash FlowForecasts
- 39.1 When the Program <sup>11</sup>, is updated, the Contractor shall provide the Project Manager with an updated cash flow forecast. The cash flow forecast shall include different currencies, as defined in the Contract, converted as necessary using the Contract exchange rates.
- 40. Payment Certificates
- 401 The Contractor shall submit to the Project Manager monthly statements of the estimated value of the work executed less the cumulative amount certified previously.
- 402 The Project Manager shall check the Contractor's monthly statement and certify the amount to be paid

to the Contractor.

- 403 The value of work executed shall be determined by the Project Manager.
- 404 The value of work executed shall comprise the value of the quantities of work in the Bill of Quantities that have been completed<sup>12</sup>.
- 405 The value of work executed shall include the valuation of Variations and Compensation Events.
- 406 The Project Manager may exclude any item certified in a previous certificate or reduce the proportion of any item previously certified in any certificate in the light of later information.
- 407 Where the contract price is different from the corrected tender price, in order to ensure the contractor is not paid less or more relative to the contract price (which would be the tender price), payment valuation certificates and variation orders on omissions and additions valued based on rates in the Bill of Quantities or schedule of rates in the Tender, will be adjusted by a plus or minus percentage. The percentage already worked out during tender evaluation is worked out as follows: (corrected tender price tender price)/tender price X 100.

#### **41.** Payments

- 41.1 Payments shall be adjusted for deductions for advance payments and retention. Kenya Power shall pay the Contractor the amounts certified by the Project Manager within 30 days of the date of each certificate. If Kenya Power makes a late payment, the Contractor shall be paid interest on the late payment in the next payment. Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at the prevailing rate of interest for commercial borrowing for each of the currencies in which payments are made.
- 412 If an amount certified is increased in a later certificate or as a result of an award by the Adjudicator or an Arbitrator, the Contractor shall be paid interest upon the delayed payment as set out in this clause. Interest shall be calculated from the date upon which the increased amount would have been certified in the absence of dispute.
- 413 Unless otherwise stated, all payments and deductions shall be paid or charged in the proportions of currencies comprising the Contract Price.
- 414 Items of the Works for which no rate or price has been entered in shall not be paid for by Kenya Power and shall be deemed covered by other rates and prices in the Contract.

#### **42.** Compensation Events

- 42.1 The following shall be Compensation Events:
- d) Kenya Power does not give access to a part of the Site by the Site Possession Date pursuant to GCC Sub-Clause 20.1.
- e) Kenya Power modifies the Schedule of Other Contractors in a way that affects the work of the Contractor under the Contract.
- f) The Project Manager orders a delay or does not issue Drawings, Specifications, or instructions required for execution of the Works on time.
- g) The Project Manager instructs the Contractor to uncover or to carry out additional tests upon work, which is then found to have no Defects.
- h) The Project Manager unreasonably does not approve a subcontract to be let.
- i) Ground conditions are substantially more adverse than could reasonably have been assumed before issuance of the Letter of Acceptance from the information issued to bidders (including the Site Investigation Reports), from information available publicly and from a visual inspection of the Site.
- j) The Project Manager gives an instruction for dealing with an unforeseen condition, caused by Kenya Power, or additional work required for safety or other reasons.
- k) Other contractors, public authorities, utilities, or Kenya Power does not work within the dates and other constraints stated in the Contract, and they cause delay or extra cost to the Contractor.
- 1) The advance payment is delayed.
- m) The effects on the Contractor of any of Kenya Power's Risks.
- n) The Project Manager unreasonably delays issuing a Certificate of Completion.

- 422 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date shall be extended. The Project Manager shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.
- 423 As soon as information demonstrating the effect of each Compensation Event upon the Contractor's forecast cost has been provided by the Contractor, it shall be assessed by the Project Manager, and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Project Manager shall adjust the Contract Price based on the Project Manager's own forecast. The Project Manager shall assume that the Contractor shall react competently and promptly to the event.

424 The Contractor shall not be entitled to compensation to the extent that Kenya Power's interests are adversely affected by the Contractor's not having given early warning or not having cooperated with the Project Manager.

#### **43.** Tax

43.1 The Project Manager shall adjust the Contract Price if taxes, duties, and other levies are changed between the date 30 days before the submission of bids for the Contract and the date of the last Completion certificate. The adjustment shall be the change in the amount of tax payable by the Contractor, provided such changes are not already reflected in the Contract Price or are a result of GCC Clause 44.

#### **44.** Currency y of Payment

44.1 All payments under the contract shall be made in Kenya Shillings

#### 45. Price Adjustment

45.1 Prices shall be adjusted for fluctuations in the cost of inputs only if **provided for in the SCC.** If so provided, the amounts certified in each payment certificate, before deducting for Advance Payment, shall be adjusted by applying the respective price adjustment factor to the payment amounts due in each currency. A separate formula of the type specified below applies:

#### P = A + B Im/Io

where: Pis the adjustment factor for the portion of the Contract Price payable.

A and B are coefficients <sup>13</sup> **specified in the SCC**, representing the non-adjustable and adjustable portions, respectively, of the Contract Price payable and Im is the index prevailing at the end of the month being invoiced and IOC is the index prevailing 30 days before Bid opening for inputs payable.

452 If the value of the index is changed after it has been used in a calculation, the calculation shall be corrected and an adjustment made in the next payment certificate. The index value shall be deemed to take account of all changes in cost due to fluctuations in costs.

#### 46. Retention

- 461 Kenya Power shall retain from each payment due to the Contractor the proportion stated in the SCC until Completion of the whole of the Works.
- 462 Upon the issue of a Certificate of Completion of the Works by the Project Manager, in accordance with GCC 53.1, half the total amount retained shall be repaid to the Contractor and half when the Defects Liability Period has passed and the Project Manager has certified that all Defects notified by the Project Manager to the Contractor before the end of this period have been corrected. The Contractor may substitute retention money with an "on demand" Bank guarantee.

#### **47.** Liquidated Damages

47.1 The Contractor shall pay liquidated damages to Kenya Power at the rate per day stated in the SCC for each day that the Completion Date is later than the Intended Completion Date. The total amount of

<sup>&</sup>lt;sup>11</sup>In lump sum contracts, add "or Activity Schedule" after "Program."

<sup>&</sup>lt;sup>12</sup>In lump sum contracts, replace this paragraph with the following: "The value of work executed shall comprise the value of completed activities in the Activity Schedule."

liquidated damages shall not exceed the amount defined in the SCC. Kenya Power may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages shall not affect the Contractor's liabilities.

472 If the Intended Completion Date is extended after liquidated damages have been paid, the Project Manager shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment certificate. The Contractor shall be paid interest on the overpayment, calculated from the date of payment to the date of repayment, at the rates specified in GCC Sub-Clause 41.1.

### 48. Bonus

48.1 The Contractor shall be paid a Bonus calculated at the rate per calendar day **stated in the SCC** for each day (less any days for which the Contractor is paid for acceleration) that the Completion is earlier than the Intended Completion Date. The Project Manager shall certify that the Works are complete, although they may not be due to be complete.

### **49.** Advance Payment

- 49.1 Kenya Power shall make advance payment to the Contractor of the amounts stated in the SCC by the date stated in the SCC, against provision by the Contractor of an Unconditional Bank Guarantee in a form and by a bank acceptable to Kenya Power in amounts and currencies equal to the advance payment. The Guarantee shall remain effective until the advance payment has been repaid, but the amount of the Guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest shall not be charged on the advance payment.
- 492 The Contractor is to use the advance payment only to pay for Equipment, Plant, Materials, and mobilization expenses required specifically for execution of the Contract. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Project Manager.
- 493 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuations of work done, Variations, price adjustments, Compensation Events, Bonuses, or Liquidated Damages.

# **50.** Securities

50.1 The Performance Security shall be provided to Kenya Power no later than the date specified in the Letter of Acceptance and shall be issued in an amount **specified in the SCC**, by a bank or surety acceptable to Kenya Power, and denominated in the types and proportions of the currencies in which the Contract Price is payable. The Performance Security shall be valid until a date 28 day from the date of issue of the Certificate of Completion in the case of a Bank Guarantee, and until one year from the date of issue of the Completion Certificate in the case of a Performance Bond.

# **51.** Day works

- 51.1 If applicable, the Day works rates in the Contractor's Bid shall be used only when the Project Manager has given written instructions in advance for additional work to be paid for in that way.
- 512 All work to be paid for as Day works shall be recorded by the Contractor on forms approved by the Project Manager. Each completed form shall be verified and signed by the Project Manager within two days of the work being done.
- 513 The Contractor shall be paid for Day works subject to obtaining signed Day works forms.

### **52.** Cost of Repairs

521 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

### E. Finishing the Contract

### **53.** Completion

53.1 The Contractor shall request the Project Manager to issue a Certificate of Completion of the Works, and the Project Manager shall do so upon deciding that the whole of the Works is completed.

# **54.** Taking Over

54.1 Kenya Power shall take over the Site and the Works within seven days of the Project Manager's issuing a certificate of Completion.

### 55. Final Account

55.1 The Contractor shall supply the Project Manager with a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Project Manager shall issue a Defects Liability Certificate and certify any final payment that is due to the Contractor within 56 days of receiving the Contractor's account if it is correct and complete. If it is not, the Project Manager shall issue within 56 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Project Manager shall decide on the amount payable to the Contractor and issue a payment certificate.

# $^{13}$ The sum of the two coefficients A and B should be 1 (one) in the formula for each currency.

Normally, both coefficients shall be the same in the formulae for all currencies, since coefficient A, for the non-adjustable portion of the payments, is a very approximate figure (usually 0.15) to take account of fixed cost elements or other non-adjustable components. The sum of the adjustments for each currency are added to the Contract Price.

# 56. Operating and Maintenance Manuals

- 561 If "as built" Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the SCC.
- 562 If the Contractor does not supply the Drawings and/or manuals by the dates stated in the SCC pursuant to GCC Sub-Clause 56.1, or they do not receive the Project Manager's approval, the Project Manager shall withhold the amount **stated in the SCC** from payments due to the Contractor.

### **57.** Termination

- 57.1 Kenya Power or the Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract.
- 572 Fundamental breaches of Contract shall include, but shall not be limited to, the following:
- a) The Contractor stops work for 30 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Project Manager;
- b) The Project Manager instructs the Contractor to delay the progress of the Works, and the instruction is not withdrawn within 30 days;
- c) Kenya Power or the Contractor is made bankrupt or goes into liquidation other than for a reconstruction oramalgamation;
- d) A payment certified by the Project Manager is not paid by Kenya Power to the Contractor within 84 days of the date of the Project Manager's certificate;
- e) The Project Manager gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Project Manager;
- f) The Contractor does not maintain a Security, which is required;
- g) The Contractor has delayed the completion of the Works by the number of days for which the maximum amount of liquidated damages can be paid, as **defined in the SCC**; or
- h) If the Contractor, in the judgment of Kenya Power has engaged in Fraud and Corruption, as defined in paragraph 2.2 a of the Appendix A to the GCC, in competing for or in executing the Contract, then Kenya Power may, after giving fourteen (14) days written notice to the Contractor, terminate the Contract and expel him from the Site.
- 573 Notwithstanding the above, Kenya Power may terminate the Contract for convenience.
- 574 If the Contract is terminated, the Contractor shall stop work immediately, make the Site safe and secure, and leave the Site as soon as reasonably possible.
- 575 When either party to the Contract gives notice of a breach of Contract to the Project Manager for a cause other than those listed under GCC Sub-Clause 56.2 above, the Project Manager shall decide whether the breach is fundamental or not.

# **58.** Payment upon Termination

- 581 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Project Manager shall issue a certificate for the value of the work done and Materials ordered less advance payments received up to the date of the issue of the certificate and less the percentage to apply to the value of the work not completed, as specified in the SCC. Additional Liquidated Damages shall not apply. If the total amount due to Kenya Power exceeds any payment due to the Contractor, the difference shall be a debt payable to Kenya Power.
- 582 If the Contract is terminated for Kenya Power's convenience or because of a fundamental breach of Contract by Kenya Power, the Project Manager shall issue a certificate for the value of the work done, Materials ordered, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works, and less advance payments received up to the date of the certificate.

# **59.** Property

59.1 All Materials on the Site, Plant, Equipment, Temporary Works, and Works shall be deemed to be the property of Kenya Power if the Contract is terminated because of the Contractor's default.

### **60.** Release from Performance

601 If the Contract is frustrated by the outbreak of war or by any other event entirely outside the control of either Kenya Power or the Contractor, the Project Manager shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which a commitment was made.

# SECTION VII - SPECIAL CONDITIONS OF CONTRACT

Except where otherwise specified, all Special Conditions of Contract should be filled in by Kenya Power prior to issuance of the bidding document. Schedules and reports to be provided by Kenya Power should be annexed.

Special conditions of contract with reference to the general conditions of contract.

Number of	Amendments of, and Supplements to, Clauses in the General Conditions of		
GC Clause	Contract		
A. General			
GCC 1.1 (q)	The Employer or the Procuring Entity is:		
	The MD		
	The Kenya Power & Lighting Company Plc, Stima Plaza, 7th Floor, Kolobot		
	Road,		
	P.O. Box 30099 – 00100 Nairobi, Kenya.		
GCC 1.1 (u)	The Intended Completion Date for the whole of the Works shall be: <i>as per accepted tender</i>		
GCC 1.1 (x)	The Project Manager is:		
	The Manager – Security Services ,		
	The Kenya Power & Lighting Company Plc, Kolobot Road,		
	P.O. Box 30099 – 00100 Nairobi, Kenya.		
GCC 1.1 (z)	The Sites are located within the various KPLC's substations, offices, Depots& Stores in Nairobi and North eastern Regions of Parklands, Rironi, Kikuyu, Lower Kabete, Limuru, JKUAT, Kimunyu and Nairobi South Substation: specific site location details are as detailed in the Preliminary Bill of the Bills of quantities in which the works occurs		
GCC 1.1 (cc)	The Start Date shall be: after site possession by the contractor.		
GCC 1.1 (gg)	The Works consist of: excavations, ballasting of substations, paving works, cable trench and covers, rehabilitation works, reinforced concrete works, Masonry works, Roofing works, Finishes, openings, and minor electrical installations and internal plumbing, drainage and Fencing works. Specific work descriptions and details are as detailed in the Preliminary Bill of the Bills of quantities in which the works occurs.  There shall be inspection and acceptance of the works & installations and a certificate		
	issued by KPLC's inspection and acceptance committee before payment.		
GCC 2.2	Sectional Completions are: N/A		
GCC 5.1	The Project manager <b>may</b> delegate any of his duties and responsibilities.		
GCC 8.1	Schedule of other contractors: As per accepted tender i.e Tenderer's domestic specialist subcontractors for electrical installations and internal; plumbing and drainage works shall be as per accepted tender. KPLC has not nominated any subcontractor(s) for any works either in whole or part		
GCC 9.1	<b>Key Personnel</b> GCC 9.1 is replaced with the following:		
	9.1 Key Personnel are the Contractor's personnel named in this GCC 9.1 of the Special Conditions of Contract. The Contractor shall employ the Key Personnel and use the equipment identified in its Bid, to carry out the Works or other personnel and equipment approved by the Project Manager. The Project		

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract	
	Manager shall approve any proposed replacement of Key Personnel and equipment only if their relevant qualifications or characteristics are substantially equal to or better than those proposed in the Bid.	
	[insert the name/s of each Key Personnel agreed by Kenya Power prior to Contract signature.	
GCC 13.1	The minimum insurance amounts and deductibles shall be:	
	(a) For loss or damage to the Works, Plant and Materials: [Ksh. 500,000.00].	
	(b) For loss or damage to Equipment: [Ksh. 500,000.00].	
	(c) For loss or damage to property (except the Works, Plant, Materials, and Equipment) in connection with Contract [Ksh. 2,000,000.00]	
	(d) For personal injury or death:	
	(i) of the Contractor's employees: [Ksh. 1,000,000.00].	
	(ii) of other people: [Ksh. 1,000,000.00].	
GCC 14.1	Site Data are:	
	The sites are within KPLC's Nairobi and North Eastern Regions	
	The site data provided in the Preliminary Bill part of the Bill of Quantities under site location and distances is for guidance only and without any warranty. The tenderer is advised to acquaint himself with more data from the Kenya Meteorological Department.	
GCC 20.1	The Site Possession Date(s) shall be: at KPLC substations as detailed in this tender document after submission of a valid performance bond, signing of the contract by both parties and issuance of the LPO.	
GCC 23.1 &	Appointing Authority for the Adjudicator: [both parties].	
GCC 23.2	Hourly rate and types of reimbursable expenses to be paid to the Adjudicator: [to be agreed by both parties].	
B. Time Contro		
GCC 26.1	The Contractor shall submit for approval a Program for the Works within 14 days from the date of the Letter of Acceptance.	
GCC 26.3	The period between Program updates is 14 days.	
	The amount to be withheld for late submission of an updated Program is Ksh. 20,000.00.	
C. Quality Cont	trol	
GCC 34.1	The Defects Liability Period is: <b>180 days.</b>	
D. Cost Control	İ	
GCC 38.9	If the value engineering proposal is approved by Kenya Power the amount to be paid to the Contractor shall be <b>N/A</b> of the reduction in the Contract Price.	
GCC 44.1	The currency of Kenya Power's Country is: Kenya Shillings.	
GCC 45	The Contract ["is not"] subject to price adjustment in accordance with GCC Clause	

Number of GC Clause Amendments of, and Supplements to, Clauses in the General Conditions of Contract	
	46.
GCC 46.1 &	The percentage of certified value retained is: 10%
46.2	The Limit of retention is: 5% repaid only once when the defects Liability period has passed and the Project Manager has certified that all defects have been rectified
GCC 47.1	The liquidated damages for the whole of the Works are [0.05% of final Contract Price] per day. The maximum amount of liquidated damages for the whole of the Works is [10%] of the final Contract Price.
GCC 49.1	The Advance Payments shall be: [N/A]
GCC 50.1	The Performance Security amount is: 10% of the accepted tenderer's contract sum
	(a) Performance Security – Bank Guarantee: in the amount(s) of <b>10</b> percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount.
	(b) Performance Security – Performance Bond: in the amount(s) of <b>10</b> percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount.
GCC53.1	The contract Construction period:
	Lot 1: Twenty-six weeks (26) from the date of site possession.
	Lot 2: Twenty-six weeks (26) from the date of site possession.
	Lot3: Twenty-six weeks (26) from the date of site possession.
E. Finishing the	e Contract
GCC 56.1	The date by which operating and maintenance manuals are required is: <b>At Take Over date.</b>
	The date by which "as built" drawings are required is: 30 days after practical completion.
GCC 56.2	The amount to be withheld for failing to produce "as built" drawings and/or operating and maintenance manuals by the date required in GCC 57 is: <b>1.0% of the contract sum.</b>

# **SECTION X: CONTRACT FORMS**

# FORM No 1: NOTIFICATION OF INTENTION TO AWARD

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

### **FORMAT**

- 1. For the attention of Tenderer's Authorized Representative
  - *i)* Name: [insert Authorized Representative's name]
  - *ii)* Address: [insert Authorized Representative's Address]
  - *iii)* Telephone: [insert Authorized Representative's telephone/fax numbers]
  - *iv)* Email Address: [insert Authorized Representative's email address]

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

2. <u>Date of transmission</u>: [email] on [date] (local time)

This Notification is sent by (Name and designation)

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

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

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

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

- a) The successful tenderer
  - i) Name of successful Tender
  - ii) Address of the successful Tender
- b) Other Tenderers

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

S/No	Name of Tender	Tender Price as read out	Tender's evaluated price (Note a)	One Reason Why not Evaluated
1				
2				
3				
4				
5				

# 5. <u>How to request a debriefing</u>

- a) DEADLINE: The deadline to request a debriefing expires at midnight on [insert date] (local time).
- b) You may request a debriefing in relation to the results of the evaluation of your Tender. If you decide to request a debriefing your written request must be made within three (5) Business Days of receipt of this Notification of Intention to Award.
- c) Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:
  - i) Attention: [insert full name of person, if applicable]
  - ii) Title/position: [insert title/position]
  - ii) Agency: [insert Kenya Power]
  - iii) Email address: [insert email address]
- d) If your request for a debriefing is received within the 3 Days deadline, we will provide the debriefing within five (3) Business Days of receipt of your request. If we are unable to provide the debriefing within this period, the Standstill Period shall be extended by five (3) Days after the date that the debriefing is provided. If this happens, we will notify you and confirm the date that the extended Standstill Period will end.
- e) The debriefing may be in writing, by phone, video conference call or in person. We shall promptly advise you in writing how the debriefing will take place and confirm the date and time.
- f) If the deadline to request a debriefing has expired, you may still request a debriefing. In this case, we will provide the debriefing as soon as practicable, and normally no later than fifteen (15) Days from the date of publication of the Contract Award Notice.

# 6. How to make a complaint?

- a) Period: Procurement-related Complaint challenging the decision to award shall be submitted by midnight, [insert date] (local time).
- b) Provide the contract name, reference number, name of the Tenderer, contact details; and address the Procurement-related Complaint as follows:
  - i) Attention: [insert full name of person, if applicable]
  - ii) Title/position: [insert title/position]
  - iii) Agency: [insert Kenya Power]
  - iv) Email address: [insert email address]
- c) At this point in the procurement process, you may submit a Procurement-related Complaint challenging the decision to award the contract. You do not need to have requested, or received, a debriefing before making this complaint. Your complaint must be submitted within the Standstill Period and received by us before the Standstill Period ends.
- d) Further information: For more information, refer to the Public Procurement and Disposals Act 2015 and its Regulations available from the Website <a href="mailto:info@ppra.go.ke">info@ppra.go.ke</a> or <a href="mailto:complaints@ppra.go.ke">complaints@ppra.go.ke</a>.
  - You should read these documents before preparing and submitting your complaint.
- e) There are four essential requirements:
  - i) You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this tendering process, and is the recipient of a Notification of Intention to Award.
  - ii) The complaint can only challenge the decision to award the contract.
  - iii) You must submit the complaint within the period stated above.
  - iv) You must include, in your complaint, all of the information required to support your complaint.

# 7. Standstill Period

- i) DEADLINE: The Standstill Period is due to end at midnight on [insert date] (local time).
- ii) The Standstill Period lasts ten (14) Days after the date of transmission of this Notification of Intention to Award.
- iii) The Standstill Period may be extended as stated in paragraph Section 5 (d) above.

If you have any questions regarding this Notification please do not hesitate to contact us. On behalf of Kenya Power:

Signature:		
Name:		
Title/position:		
Telephone:		
Email·		

# FORM NO. 2 - REQUEST FOR REVIEW

**Board Secretary** 

# FORM FOR REVIEW (r.203(1))

# PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD APPLICATION NO...... OF......20....... **BETWEEN** ...... APPLICANT **AND** ......RESPONDENT (Procuring Entity) .....(Tender description). REQUEST FOR REVIEW I/We...., the above named Applicant(s), of address: Physical Public Procurement Administrative Review Board to review the whole/part of the above mentioned decision on the following grounds, namely: 1. 2. By this memorandum, the Applicant requests the Board for an order/orders that: 1. 2. FOR OFFICIAL USE ONLY Lodged with the Secretary Public Procurement Administrative Review Board on......day of ......20...... **SIGNED**

# FORM NO 3: LETTER OF AWARD

[letter head paper of Kenya Power] [date]

To: [name and address of the Contractor]

You are requested to furnish the Performance Security within 30 days in accordance with the Conditions of Contract, using, for that purpose, one of the Performance Security Forms included in Section VIII, Contract Forms, of the Tender Document.

Authorized Signature:
Name and Title of Signatory:
Kenya Power
Attachment: Contract Agreement

# FORM NO 4: CONTRACT AGREEMENT

THIS	S AG	REEMENT made the	day of	,
20			, between	
		of	(hereinafter	
Entit	ty"),	uring of the one part, and of or"), of the other part:		
WHI	ERE	AS Kenya Power desires that the Works	known as	
shou	ld b	e executed by the Contractor, and has acc	cepted a Tender by the Contractor for	the
exec	ution	and completion of these Works and the reme	edying of any defects therein,	
Keny	ya Po	ower and the Contractor agree as follows:		
1.		his Agreement words and expressions shall igned to them in the Contract documents refe		ely
2.		e following documents shall be deemed to for reement. This Agreement shall prevail over a		his
	a)	The Letter of Acceptance		
	b)	The Letter of Tender		
	c)	The addenda Nos(if any)		
	d)	The Special Conditions of Contract		
	e)	The General Conditions of Contract;		
	f)	The Specifications		
	g)	The Drawings; and		
	h)	The completed Schedules and any other doc	cuments forming part of the contract.	
3.	in Wo	consideration of the payments to be made by this Agreement, the Contractor hereby coorks and to remedy defects therein in conformatract.	venants with Kenya Power to execute	the
4.	cor oth	nya Power hereby covenants to pay the Continpletion of the Works and the remedying of er sum as may become payable under the pronner prescribed by the Contract.	f defects therein, the Contract Price or su	ıch
		ESS whereof the parties hereto have caused be with the Laws of Kenya on the day, month		
Sign Powe		d sealed by	(for Kenya	
Sign Cont		d sealed by or).	(for the	

# FORM NO. 5 - PERFORMANCE SECURITY

# [Option 1 - Unconditional Demand Bank Guarantee]

[Gu	arantor letterhead]
Ben	eficiary:[insert name and Address of Procuring
Enti	ity] Date:[Insert date of issue]
Gua	arantor: [Insert name and address of place of issue, unless indicated in the letterhead]
1.	We have been informed that
	(hereinafter called "the Contract").
2.	Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.
3.	At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of
4.	This guarantee shall expire, no later than the Day of, 2 <sup>2</sup> , and any demand for payment under it must be received by us at the office indicated above on or before that date.
5.	The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee."
	[Name of Authorized Official, signature(s) and seals/stamps].
	<b>Note:</b> All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

<sup>&</sup>lt;sup>1</sup>The Guarantor shall insert an amount representing the percentage of the Accepted Contract Amount specified in the Letter of Acceptance, less provisional sums, if any, and denominated either in the currency of the Contract or a freely convertible currency acceptable to the Beneficiary.

<sup>&</sup>lt;sup>2</sup>Insert the date twenty-eight days after the expected completion date as described in GC Clause 11.9. Kenya Power should note that in the event of an extension of this date for completion of the Contract, Kenya Power would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

# [Option 2– Performance Bond]

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

_		ry:[insert name and Address of Procuring Entity]
Da	ıte:	[Insert date of issue].
PE	RFOR	MANCE BONDNo.:
		or: [Insert name and address of place of issue, unless indicated in the letterhead]
1.	By Cont Suret as Ol the p	this Bondas Principal (hereinafter called "the ractor") and as principal (hereinafter called "the ractor") and as ty (hereinafter called "the Surety"), are held and firmly bound unto bligee (hereinafter called "Kenya Power") in the amount of for ayment of which sum well and truly to be made in the types and proportions of currencies in which contract Price is payable, the Contractor and the Surety bind themselves, their heirs, executors, nistrators, successors and assigns, jointly and severally, firmly by these presents.
2.	doc	IEREAS the Contractor has entered into a written Agreement with Kenya Power dated the day of, 20, for in accordance with the uments, plans, specifications, and amendments thereto, which to the extent herein provided for, by reference made part hereof and are hereinafter referred to as the Contract.
3.	and sha sha per	W, THEREFORE, the Condition of this Obligation is such that, if the Contractor shall promptly faithfully perform the said Contract (including any amendments thereto), then this obligation ll be null and void; otherwise, it shall remain in full force and effect. Whenever the Contractor ll be, and declared by Kenya Power to be, in default under the Contract, Kenya Power having formed Kenya Power 's obligations thereunder, the Surety may promptly remedy the default, or ll promptly:
	1)	Complete the Contract in accordance with its terms and conditions; or
	2)	Obtain a tender or tenders from qualified tenderers for submission to Kenya Power for completing the Contract in accordance with its terms and conditions, and upon determination by Kenya Power and the Surety of the lowest responsive Tenderers, arrange for a Contract between such Tenderer, and Procuring Entity and make available as work progresses (even though there should be a default or a succession of defaults under the Contract or Contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the Balance of the Contract Price; but not exceeding, including other costs and damages for which the Surety may be liable hereunder, the amount set forth in the first paragraph hereof. The term "Balance of the Contract Price," as used in this paragraph, shall mean the total amount payable by Procuring Entity to Contractor under the Contract, less the amount properly paid by Procuring Entity to Contractor; or
	3)	Pay Kenya Power the amount required by Procuring Entity to complete the Contract in accordance with its terms and conditions up to a total not exceeding the amount of this Bond.
4.	The	Surety shall not be liable for a greater sum than the specified penalty of this Bond.
5.	issu any	v suit under this Bond must be instituted before the expiration of one year from the date of the ting of the Taking-Over Certificate. No right of action shall accrue on this Bond to or for the use of person or corporation other than Kenya Power named herein or the heirs, executors, ninistrators, successors, and assigns of Kenya Power.
6.	has	estimony whereof, the Contractor has hereunto set his hand and affixed his seal, and the Surety caused these presents to be sealed with his corporate seal duly attested by the signature of his all representative, this day of 20.

SIGNED ON	on behalf of By	
	in the capacity of in the presence of	
SIGNED ON	on behalf of By	
	in the capacity of In the presence of	

# FORM NO. 7 - ADVANCE PAYMENT SECURITY

# [Demand Bank Guarantee]

[Gu	arantor letterhead]
Ben Date	[Insert name and Address of Procuring Entity]  [Insert date of issue]
num	WANCE PAYMENT GUARANIFENo.:
2.	Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum(in words) is to be made against an advance payment guarantee.
3.	At the request of the Contractor, we as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of(in words)^I upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:  a) Has used the advance payment for purposes other than the costs of mobilization in respect of the Works; or  b) Has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.
4.	A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Contractor on its account numberat
5.	The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the day of
6.	The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee.  [Name of Authorized Official, signature(s) and seals/stamps]  Note: All italicized text (including footnotes) is for use in preparing this form and shall be deleted from the final product.

<sup>1,</sup> 

 $<sup>^2</sup>$ Insert the expected expiration date of the Time for Completion. Kenya Power should note that in the event of an extension of the time for completion of the Contract, Kenya Power would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

### FORM NO. 8 - RETENTION MONEY SECURITY

[Demand Bank Guarantee] [Guarantor letterhead] [Insert name and Address of Procuring Entity] **Beneficiary:** [Insert date of issue] Date: Advance payment guarantee no. [Insert guarantee reference number] **Guarantor:** [Insert name and address of place of issue, unless indicated in the letterhead] We have been informed that \_\_\_\_\_\_ [insert name of Contractor, which in the case of a joint venture shall be the name of the joint venture] (hereinafter called "the Contractor") has entered into Contract No. \_\_[insert reference number of the contract] dated\_\_\_\_\_with the 2. Furthermore, we understand that, according to the conditions of the Contract, the Beneficiary retains moneys up to the limit set forth in the Contract ("the Retention Money"), and that when the Taking-Over Certificate has been issued under the Contract and the first half of the Retention Money has been certified for payment, and payment of /insert the second half of the Retention Money] is to be made against a Retention Money guarantee. At the request of the Contractor, we, as Guarantor, hereby irrevocably undertake to pay the 3. Beneficiary any sum or sums not exceeding in total an amount of [insert amount in figures] ([insert amount in words\_\_\_\_\_]) upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Contractor is in breach of its obligation(s) under the Contract, without your needing to prove or show grounds for your demand or the sum specified therein. 4. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the second half of the Retention Money as referred to above has been credited to the Contractor on its account number at [insert name and address of Applicant's bank]. 2.....<sup>2</sup>, and any demand for payment under it must be received by us at the office indicated above on or before that date. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee. [Name of Authorized Official, signature(s) and seals/stamps] Note: All italicized text (including footnotes) is for use in preparing this form and shall be

deleted from the final product.

1 The Guarantor shall insert an amount representing the amount of the second half of the Retention Money.

<sup>&</sup>lt;sup>2</sup>Insert a date that is twenty-eight days after the expiry of retention period after the actual completion date of the contract. Kenya Power should note that in the event of an extension of this date for completion of the Contract, Kenya Power would need to request an extension of this guarantee from the Guarantor. Such request must be in writing and must be made prior to the expiration date established in the guarantee.

### FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM

### INSTRUCTIONS TO TENDERERS: DELETE THIS BOX ONCE YOU HAVE COMPLETED THE FORM

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful tenderer. In case of joint venture, the tenderer must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Tenderer is any natural person who ultimately owns or controls the Tenderer by meeting one or more of the following conditions:

- *Directly or indirectly holding 25% or more of the shares.*
- Directly or in directly holding 25% or more of the voting rights.
- Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer.

Tender Reference No.:	[insert
identification no] Name of the Assignment:	_[insert
name of the assignment] to:[insert complete Kenya Power]	
In response to your notification of award dated	

I) We here by provide the following beneficial ownership information.

# Details of beneficial ownership

Identity of Beneficial Owner	Directly or indirectly holding 25% or more of the shares (Yes / No)	Directly or indirectly holding 25 % or more of the Voting Rights (Yes / No)	Directly or indirectly having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer (Yes / No)
[include full name (last, middle, first), nationality, country of residence]			

OR

ii) We declare that there is no Beneficial Owner meeting one or more of the following conditions: directly or indirectly holding 25% or more of the shares. Directly or indirectly holding 25% or more of the voting rights. Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer.

OR

We declare that we are unable to identify any Beneficial Owner meeting one or more of the following conditions. [If this option is selected, the Tenderer shall provide explanation on why it is unable to identify any Beneficial Owner]

Directly or indirectly holding 25% or more of the shares. Directly or indirectly holding 25% or more of the voting rights.

Directly or indirectly having the right to appoint a majority of the board of directors or equivalent

governing body of the Tenderer]"

Name of the Tenderer:*[insert complete name of the Tenderer]
Name of the person duly authorized to sign the Tender on behalf of the Tenderer: ** [insert complete nar of person duly authorized to sign the Tender]
Title of the person signing the Tender:[insert complete title of the person signing the Tender]
Signature of the person named above: [insert signature of person whose name and capaci are shown above]
Date signed



# SITE VISIT/PRE-BID MEETING FORM

# PRE-BID SITE VISIT FOR RE- TENDER FOR PROPOSED DESIGN, SUPPLY, INSTALLATION AND COMMISSIONING OF ELECTRONIC SECURITY SYSTEMS IN SELECTED SUBSTATIONS, COMMERCIAL OFFICES & DEPOTS COMPANYWIDE:

# TENDER NO. KP1/9A.2/OT/045/SS/23-24

SITE NAME
CONFIRMATION OF PRE-BID MEETING /SITE VISIT
Name of Tenderer
Date of Visit
Name, position and signature of the Tenderer's staff visiting the site.
Name:
Position
Signature Tenderer's Official Stamp
Site Visit conducted by Employer's Authorized Officer's
Name
Signature