RFX No:1000003027



## TENDER NO. KP1/9A.2/OT/012/SS/25-26.

# PROPOSED SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF CCTV AND ACCESS CONTROL IN MAJOR STORES & OFFICES & INTEGRATED SECURITY SYSTEMS.

#### December 2025

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

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

THE KENYA POWER & LIGHTING COMPANY PLC CENTRAL OFFICE, STIMA PLAZA, KOLOBOT ROAD, PARKLANDS, P.O. BOX 30099-00100, NAIROBI, KENYA.

Telephones: +254-020-3201000; 3644000 Pilot Lines

Telephones: +254-720-600070/1-5/; -711-031398/33; -733-755001/2-3Cellular

Website: www.kplc.co.ke

Email 1. Procurement@kplc.co.ke

2. SKKariuki@kplc.co.ke

3. JMuigai@kplc.co.ke

4. JMutai@kplc.co.ke

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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.
- *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.*
- l) 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: 23<sup>rd</sup> December 2025

**Tender No: TENDER NO. KP1/9A.2/OT/012/SS/25-26.** 

Tender Name: PROPOSED SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF CCTV AND ACCESS CONTROL IN MAJOR STORES & OFFICES & INTEGRATED SECURITY SYSTEMS.

#### 1.1 Introduction

The Kenya Power & Lighting Company Plc (KPLC) invites bids from eligible Tenderers for Proposed Proposed Supply, Installation, Testing and Commissioning of CCTV and Access Control in Major Stores & Offices & Integrated Security Systems.

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. 1000003027
  - 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 5<sup>th</sup> January 2025 at Stima Plaza Auditorium, Kolobot Road, Nairobi, from 9:00 am to10:00am. Attendance will be mandatory.

#### **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 <u>collusive</u> <u>practices</u> 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
- j) 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.
- 3.10 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. <u>Contents of Tender Documents</u>

## 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

#### **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.

- 10.2 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

- 16.1 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.
- 16.6 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.
- 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.
- 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.
- 22.4 In case the Tenderer is a JV, the Tender shall be signed by an authorized representative of the JV on behalf of the JV, and 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

- 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.
- 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.
- 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.
- 27.6 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.
- 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.
- 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 accept</u> or <u>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.
- 42.2 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 21 days 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.
- 50.2 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

51.1 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 <b>Proposed Supply, Installation, Testing and Commissioning</b> of CCTV and Access Control in Major Stores & Offices & Integrated Security Systems. The reference number of the Tender is KP1/9A.2/OT/012/SS/25-26.  Identified lots	
	SUMMARY OF LOTS	
	LOT STATION/DESCRIPTION	
	LOT 1 Installation Of CCTV Major Stores & Offices: Nairobi Region	
	LOT 2 Installation Of CCTV Major Stores & Offices: Mt. Kenya & Northeastern Region	
	LOT 3 Installation Of CCTV Major Stores & Offices: Central Rift & North Rift Region & Western Kenya Region	
	LOT 4 Installation Of CCTV Major Stores & Offices: Coast Region	
	LOT 5 Installation of Integrated Security Systems (ISS) Lanet Depot	
ITT 2.3	There is no information on competing firms.	
ITT 2.4	The firms that provided consulting services for the contract being tendered for are: <b>None</b>	
ITT 3.1	Maximum number of members in a Joint Venture (JV) are three (3).  Adopt definition of 'relative' as provided for under <b>section 59 (2)(b)</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 mandatory</b> site visits to be conducted on sites which shall be discussed during the pre-bid site meeting	
	A site visit form shall be duly filled and signed by the representatives of the firms present.	
В	Contents of Tender Document	
ITT 8.1	There shall be a mandatory pre-bid meeting on 5th January 2026 Stima Plaza Auditorium, Kolobot Road, Nairobi, from 9:00 am to 10:00am.  Note: Prepare four (4) teams for site visit after pre-bid meeting for Nairobi Region.	
ITT 8.2	Any questions in writing shall reach KPLC not later than Seven (7) days prior to the 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 <a href="https://www.kplc.co.ke">www.kplc.co.ke</a> 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 <u>Tender purposes</u> 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 to JMutai@kplc.co.ke, JMuigai@kplc.co.ke	

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
С	Preparation of Tenders
ITT 13.1(h)	The tenderer shall submit the following additional documents in its tender: as per the qualification criteria with and including the documents listed in the Check List
ITT 15.1	Alternative tenders <i>shall not be</i> considered.
ITT 15.2	Alternative times for completion shall be as specified in Section III (Evaluation and Qualification Criteria).
ITT 15.3	Alternative technical solutions shall not be permitted
ITT 16.7	Price quoted shall be inclusive of a 0.03% Public Procurement Capacity Building
	Levy Order, 2023 of the contract value exclusive of VAT. The Levy shall be
	deducted from the suppliers payment during contract implementation and remitted to
	PPRA as stipulated in the Public Procurement Capacity Building Levy order 2023 effective for all tenders published after 1 <sup>st</sup> September 2024.
	• A Withholding Tax (WHT) of 0.5% shall be deducted from the supplier's payment for
	resident companies in compliance with the Tax Laws Amendment Act, 2024.
	• A Withholding Tax (WHT) of 5% shall be deducted from the supplier's payment for
ITT 20.2	non-resident companies in compliance with the Tax Laws Amendment Act, 2024.
ITT 20.3 ITT 21.2	Price variation on the basis of extending tender validity period is Not applicable  The Tender validity period shall be <i>One Hundred and Eighty (180)</i> days. A Tender valid
TETE 0.1.1	for a shorter period shall be rejected.
ITT 21.1	A Tender Security valid for <b>210 days</b> shall be required in form of bank guarantee or a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya only. The amount and currency of the Tender Security shall be as follows:
	Tender Security in Kenya Shillings worth
	Lot 1: - Ksh. 1,300,000.00: One Million Three Hundred Thousand Kenya Shillings only
	Lot 2: - Ksh. 1,300,000.00: One Million Three Hundred Thousand Kenya Shillings only
	Lot 3: - Ksh. 1,300,000.00: One Million Three Hundred Thousand Kenya Shillings only
	Lot 4: - Ksh. 1,300,000.00: One Million Three Hundred Thousand Kenya Shillings only
	Lot 5: - Ksh. 2,000,000.00: Two Million Kenya Shillings only.
	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 <b>3rd Floor</b> Supply Chain at Stima Plaza, Kolobot Road, <b>before</b> the tender opening time.
	Tender Security issued by an Insurance Company not acceptable.
	a. Bidders should <b>clearly indicate</b> the Lot of interest on the tender security
ITT 21.2 (d)	The other tender security shall be as specified in ITT 21.1 above.
D	Submission and Opening of Tenders
ITT 24.1	All tenders shall be submitted through the KPLC SAP online tendering portal in PDF format.
	(Issuing Tendering Documents, Submission of Tenders, Opening of Tenders) Proof of
	receipt will be done via the bidders Submitted Response Number for RFX1000003027
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 portal at Stima Plaza, Auditorium as specified in the KPLC Tendering Portal.
ITT 27.6	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).
E.	Evaluation and Comparison of Tenders
ITT 36.1	KPLC <i>does not intend</i> to execute certain specific parts of the Works by subcontractors selected in advance by KPLC.
ITT 36.2	Contractor's may propose subcontracting: Maximum percentage of subcontracting permitted is: 20 % of the total contract amount. Tenderers planning to subcontract more than 10% of total volume of work shall specify, in the Form of Tender, the activity(ies)

ITT Reference	PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS
	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	<ul> <li>Award of Contract: <ol> <li>No bidder shall qualify for more than 2 lots. If a tenderer emerges the lowest in more than two lots, they will be awarded the lots with highest value. Consequently, the subsequent lots will be allocated based on the lowest price and highest value basis until all the lots are allocated.</li> <li>Subject to (i) above the price of the subsequent lowest tender/s shall be within the prevailing market price.</li> <li>If there is no other qualified subsequent tenderer for the unallocated lot, the allocation shall revert to the tenderer with the lowest evaluated lot, notwithstanding (i) above.</li> <li>In case of a tie, the bidder with highest technical score shall be allocated.</li> </ol> </li> </ul>
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 of the Tenderer as hereunder.
    - ➤ Form SD1
    - Form SD2.
    - ➤ Appendix 1- fraud and corruption
  - d. Declaration and Commitment to The Code of Ethics
  - e. Tenderer's Eligibility -Confidential Business Questionnaire
  - f. From EL1 1.1 Tenderer Information Sheet
  - g. Form EL1 1.2 Party to JV Information Sheet
- 3.1.3 Submission and considering the following:
  - a) Company or Firm's Registration Certificate
  - b) PIN Certificate.
  - c) Valid Tax Compliance Certificate.
  - d) Valid Business Permit
  - e) PSRA Certificate
- 3.1.4 That the Tender is valid for the period required.
- 3.1.5 The tenderer must be registered with the National Construction Authority with a valid Practicing license NCA 1- NCA 5 (Electrical Categories- for all lots).

- 3.1.6 Submission of a Completed site visit form signed by authorized KPLC Officer
- 3.1.7 Submission of a proposed detail technical Implementation Work Plan / Program, Work Method
- 3.1.8 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.
- 3.1.9 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.
- 3.1.10 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 attached.
- 3.1.11 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).
- 3.1.12 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.
- 3.1.13 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 & related equipment- The tenderer must provide a certified copy of valid Manufacturers Authorization Letter (MAF) covering all items the tenderer has tendered from the Original Equipment Manufacturer (OEM).
    - b) Network equipment e.g Swithces
  - 3.2.1.3 Type Test reports and certificates from the relevant International or National Testing/Standards Authority or ISO/IEC accredited independent laboratory for full compliance with Tender Specifications
  - 3.2.1.4 The accreditation certificate for the testing laboratory to ISO/IEC (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 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 (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 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	Required	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 (4 marks)	20	

3.2.4.2	Capacity of bidder to handle similar assignments	Provide duly filled Form EXP 4(a) and copies of copies of 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 19.9m per contract (3 mks) per contract/ Completion Certificate  - Between ksh. 2m and 9.9m per contract (2 mk) per contract/ Completion Certificate  - Below ksh 1m per contract (1 mks)  - No contract (0 mks)	20	
3.2.4.3	Schedule of contractors' equipment and Transport	Proof of running fleet. Attached copies of logbooks of fleet of owned or leased (with leased agreements) to a maximum of 5:  - 2 mks per owned/ lease agreement logbook. For lease agreement must provide for lease agreement.	10	
		For each specific equipment up to a maximum of 5 (All categories): Provide duly filled FORM EQP per Equipment -1 mks each	5	
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	
		Relevant Manufacturers training certification for five (5) technical staff. (At least TWO staff should have certification in networks e.g CCNA/CCNP/CCIE and at least TWO should have certification on Hikcentral or Genetec security management software.  - 2mks per staff up to a maximum of 5 technical staff.	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.	20	
	TOTAL	Required a minimum Grand Total Score of 75%.	100	

Tenderers will proceed to Financial Evaluation stage only if they score a minimum of 75% 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.

- 3.3 The award shall be to the bidders with the lowest evaluated price and the following shall apply:
  - i. No bidder shall qualify for more than 2 lots. If a tenderer emerges the lowest in more than two lots, they will be awarded the lots with highest value. Consequently, the subsequent lots will be allocated based on the lowest price and highest value basis until all the lots are allocated.
  - ii. The subject to (i) above the price of the subsequent lowest tender/s shall be within the prevailing market price.
  - iii. If there is no other qualified subsequent tenderer for the unallocated lot, the allocation shall revert to the tenderer with the lowest evaluated lot, notwithstanding (i) above.
  - iv. In case of a tie, the bidder with highest technical score shall be allocated.

## **SECTION IV - TENDERING FORMS**

# 1. FORM OF TENDER

#### INSTRUCTIONS TO TENDERERS

- *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 and TENDERER'S ELIGIBILITY- CONFIDENTIAL BUSINESS QUESTIONNAIRE, CERTIFICATE OF INDEPENDENT TENDER DETERMINATION and the SELF DECLARATION OF THE TENDERER, all attached to this Form of Tender.
- (iv) The Form of Tender shall include the following Forms duly completed and signed by the Tenderer.
  - a) Tenderer's Eligibility-Confidential Business Questionnaire
  - a) Certificate of Independent Tender Determination
  - *c)* Self-Declaration of the Tenderer.

Date of this Tender submission:[insert date (as day, month and year)
of Tender submission]
Tender Name
To:
THE KENYA POWER & LIGHTING COMPANY PLC
P.O. Box 30099-00100
Nairobi

- a) **No reservations:** We have examined and have no reservations to the tendering document, including Addenda issued in accordance with ITT 9;
- b) **Eligibility**: We meet the eligibility requirements and have no conflict of interest in accordance with ITT 4;
- c) **Tender-Securing Declaration:** We have not been suspended nor declared ineligible by KPLC based on execution of a Tender-Securing Declaration or Proposal-Securing Declaration in Kenya in accordance with ITT 4.7;
- d) **Conformity:** We offer to provide the Maintenance services in conformity with the tendering document of the following: [insert a brief description of the Maintenance services];
- e) **Tender Price:** The total price of our Tender, excluding any discounts offered in item (f) below is: [Insert one of the options below as appropriate]

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

Or

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

and (b) Total price of all lots (sum of all lots) [insert the total price of all lots in words and

figures, indicating the various amounts and the respective currencies];

Category/lot no.	Tendered Amount (KSH)
LOT 1: Proposed Supply,	Total Amount in Figures: Kenya Shillings
Installation, Testing and	Amount in w words: Kenya Shillings
Commissioning of CCTV	
Major Stores & Offices:	
Nairobi Region	
LOT 2: Proposed Supply,	Total Amount in Figures: Kenya Shillings
Installation, Testing &	Amount in w words: Kenya Shillings
Commissioning of CCTV	
Major Stores & Offices: Mt.	
Kenya & Northeastern Region	
Kegivii	
LOT 3:	Total Amount in Figures: Kenya Shillings
Proposed Supply,	
Installation, Testing &	Annual Chillian
Commissioning of CCTV Major Stores & Offices:	Amount in w words: Kenya Shillings
Central & North Rift	
Region & Western Kenya	
Region	
LOTA	
LOT 4: Proposed Supply,	Total Amount in Figures: Kenya Shillings
Installation, Testing &	Amount in w words: Kenya Shillings
Commissioning of CCTV	
Major Stores & Offices:	
Coast Region	
LOT 5:	Total Amount in Figures: Kenya Shillings
Proposed Supply,	,
Installation, Testing &	Amount in w words: Kenya Shillings
Commissioning of of	
Integrated Security Systems (ISS) – Lanet Depot	
(ISS) Langt Dangt	

- f) **Discounts:** The discounts offered and the methodology for their application are:
  - i) The discounts offered are: [Specify in detail each discount offered.]
  - ii) The exact method of calculations to determine the net price after application of discounts is shown below: [Specify in detail the method that shall be used to apply the discounts];
- g) **Tender Validity Period:** Our Tender shall be valid for (.....) days the period specified in TDS 19.1 (as amended if applicable) from the date fixed for the Tender submission deadline (specified in TDS 23.1 (as amended if applicable), and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- h) **Performance Security:** If our Tender is accepted, we commit to obtain a Performance Security in accordance with the tendering document;
- i) One Tender Per Tenderer: We are not submitting any other Tender (s) as an individual Tenderer, 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 4.3, other than alternative Tenders

submitted in accordance with ITT 14;

- j) **Suspension and Debarment**: We, along with any of our subcontractors, suppliers, consultants, manufacturers, or service providers for any part of the contract, are not subject to, and not controlled by any entity or individual that is subject to, a temporary suspension or a debarment imposed by the PPRA. Further, we are not ineligible under Kenya's official regulations or pursuant to a decision of the United Nations Security Council;
- k) **State-owned enterprise or institution**: [select the appropriate option and delete the other] [We are not a state-owned enterprise or institution]/ [We are a state-owned enterprise or institution but meet the requirements of ITT 4.6];
- l) Commissions, gratuities and fees: We have paid, or will pay the following commissions, gratuities, or fees with respect to the Tendering process or execution of the Contract: [insert complete name of each Recipient, its full address, the reason for which each commission or gratuity was paid and the amount and currency of each such commission or gratuity].

Name of Recipient	Address	Reason	Amount

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

- m) [Delete if not appropriate, or amend to suit] We confirm that we understand the provisions relating to Standstill Period as described in this tendering document and the Procurement Regulations.
- n) **Binding Contract**: We understand that this Tender, together with your written acceptance thereof included in your Form of Acceptance, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- o) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Tender, the Most Advantageous Tender or any other Tender that you may receive; and
- p) **Fraud and Corruption:** 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.
- q) Collusive practices: We hereby certify and confirm that the tender is genuine, non-collusive and made with the intention of accepting the contract if awarded. To this effect we have signed the "Certificate of Independent Tender Determination" attached below.
- r) Code of Ethical Conduct: We undertake to adhere by the Code of Ethical Conduct for Suppliers, Contractors and Service Providers, copy available from (specify website) during the procurement process and the execution of any resulting contract.
- s) 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.

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.

#### 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.

#### **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 ☐ Lease	d □ Specially manufactured		
Omit the follow	ving information for equipment owned by th  Name of owner	e Tenderer.		
Owner	Address of owner			
	Telephone	Contact name and title		
	Fax	Telex		
Agreements	Details of rental / lease / manufacture agreements specific to the project			

#### 2. FORM PER-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's Representative and Key Personnel**

1.	Title of position: Contractor's Representative		
	Name of candidate:		
	<b>Duration of</b>	[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:		
	<b>Duration of</b>	[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: [	J	
	Name of candidate:		
	<b>Duration of</b>	[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.	Title of position: [	J	
	Name of candidate:		
	<b>Duration of</b>	[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.	Title of position: [insert title]		
	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-	I]		
Personnel information	Name:	Date of birth:		
momuni	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: [insert 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

Tenderer 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:
Legal and financial autonomy
Operation under commercial law
• Establishing that the Tenderer is not under the supervision of Kenya Power
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**

Tenderer's	Name:		
Date:			
JV Membe	er's Name	<del></del>	
ITT No. ar	nd title:		
Non-Perfo	rmed Contra	cts in accordance with Section III, Evaluation and Qualification Cri	iteria
□ C	ontract non-p	erformance did not occur since 1st January [insert year] specified in	Section III,
		eation Criteria, Sub-Factor 2.1.	,
□ C	ontract(s) not	performed since 1st January [insert year] specified in Section III, E	valuation and
		requirement 2.1	
	Ź		
Year	Non-	Contract Identification	Total Contract
	performed		Amount (current
	portion of		value, currency,
	contract		exchange rate and
	continue		Kenya Shilling
			equivalent)
[insert	[insert	Contract Identification: [indicate complete contract name/ number,	
vear]	F	and any other identification]	
, j		Kenya Power: [insert full name]	
	per ceruagej	Address of Procuring Entity: [insert street/city/country]	
		Reason(s) for nonperformance: [indicate main reason(s)]	
Pending Li		cordance with Section III, Evaluation and Qualification Criteria	
		gation in accordance with Section III, Evaluation and Qualification	Criteria Sub-
Factor 2.3.		5 and in accordance with section in, 12 valuation and Qualification	Circuia, Dao
. usioi 2.3.			
□ P <sub>e</sub>		on in accordance with Section III. Evaluation and Qualification Crite	ria Sub-Factor 2.3
$\square$ Peas indicate	ending litigati	on in accordance with Section III, Evaluation and Qualification Crite	ria, Sub-Factor 2.3

Year of dispute	Amount in dispute (currency)	Contract Identification:	Total Contract Amount (currency), Kenya Shilling Equivalent (exchange rate)
		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 Hi	story in accordance with	Section III, Evaluation and Qualification Criteri	a
□ No L	itigation History in accor	dance with Section III, Evaluation and Qualifica	tion Criteria, Sub-Factor
2.4.		,	,
☐ Litig	ation History in accordance	ce with Section III, Evaluation and Qualification	Criteria, Sub-Factor 2.4
as indicated b	elow.		·
Year of	Outcome as	Contract Identification	<b>Total Contract</b>
	1		

award	percentage of Net Worth		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:

Date:					
JV Member's Name					
ITT No. and title:					
4.4.1. Financial Data					
Type of Financial information in	Historic in	nformation for	r previous	years,	
(currency)	(amount i	n currency, cu	irrency, exch	ange rate*, U	SD equivalent)
	Year 1	Year 2	Year 3	Year 4	Year 5
Statement of Financial Position (l	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	ent				
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 Ten	derer and its parties shall provide copies of financial statements for			
Evaluati	on 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 c	ompany or group member).			
(b)	be independently audited or certified in accordance with local legislation.			
(c)	be complete, including all notes to the financial statements.			
(d)	correspond to accounting periods already completed and audited.			
	Attached are copies of financial statements <sup>1</sup> for theyears required above; and complying with			
the requirements				

<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.

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

Tenderer's Name:

Annual
Construction
Turnover \*

Date:			
JV Member's Na	me		
ITT No. and title:			
	Annual turnove	er data (construction only)	
Year	Amount Currency	Exchange rate	Kenya Shilling equivalent
[indicate year]	[insert amount and indicate currency]		
Average			

<sup>\*</sup> See Section III, Evaluation and Qualification Criteria, Sub-Factor 3.2.

#### 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**

Tenderer's	Name:		
Date:	1 11		
JV Membe	r's Name		
ITT No. an	d title:		
Page		ofpages	
Starting	Ending	Contract Identification	Role of
	Year		Tenderer
Year			
		Contract name:	
		Brief Description of the Works performed by the	
		Tenderer: Amount of contract:	
		Amount of contract:	
		Client/P.E :Address:	
		Contract name:	
		Brief Description of the Works performed by the	
		Tenderer:Amount of contract:	
		Client/P.E:	
		A 11	
		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:	
		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:	
			t.

# 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			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 Contract No.	Information
Description of the similarity in accordance	
with Sub-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)**

# **Construction Experience in Key Activities**

Tenderer's Name:					
Date:					
Tenderer's JV Member Name:	<del></del>				
Sub-contractor's Name <sup>2</sup> (as per ITT 34): ITT No. and title:		_			
111 1.0. and the	_				
All Sub-contractors for key activities must c Evaluation and Qualification Criteria, Sub-l		rmat	tion in this f	form as per ITT	34 and Section I
1. Key Activity No One: _					
	Information				
Contract Identification					
Award date					
Completion date					
Role in Contract	Prime Contractor □	Men JV □	nber in	Management Contractor □	Sub-contractor
Total Contract Amount				Kenya Shilling	τ
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 Participati (ii)	e	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 3					

<sup>&</sup>lt;sup>2</sup> If applicable

#### 5. FORMS OF TENDER

#### A. TENDERER'S ELIGIBILITY-CONFIDENTIAL BUSINESS QUESTIONNAIRE

#### **Instructions 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 (postal and physical addresses, email, and telephone number) of Registering Body/Agency	
8	Description of Nature of Business	
9	Maximum value of business which the Tenderer handles.	
10	State if Tenders Company is listed in stock exchange, give name and full address (postal and physical addresses, email, and telephone number) of state which stock exchange	

#### **General and Specific Details**

b) Sole Proprietor, provide the following details.
Name in full
Age
Nationality
Country of Origin
Citizenship

c) Partnership, provide the following details.

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

- **d)** Registered Company, provide the following details. 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

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		iii) Give de	tails of Directo	ors as follows.			
Ce   DISCLOSURE OF INTEREST-Interest of the Firm in Kenya Power.     i) Are there any person/persons in		Names of Director	N		Citiz	enship	% Shares owned
(e) DISCLOSURE OF INTEREST-Interest of the Firm in Kenya Power.  i) Are there any person/persons in	1	1 (diffes of Diffector		, ucronuncy	CIUZ		, o shares owned
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Names of Person   Designation in Kenya Power   Interest or Relationship with Tender	(e)	i) Are there any	person/persor	ns in	(	(Kenya Power) v	vho has/have an interest
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8 Tenderer has a close business or family relationship with a					r the		
	0	-			• •.4		
projessional statt of Kienva Power who would be involved	8			_			
in the implementation or supervision of the such Contract.							

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.

State the nominal and issued capital of the Company

(Equivalent)....

Nominal Kenya Shillings

ii)

9

#### f) Certification

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

## B. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

		rsigned, in submitting the accompanying Letter of Tender to the					
for:_	erl in 1	response to the request for tenders made by:	[Name and number of Name of				
Tend	lerer]	response to the request for tenders made by: do hereby make the following statements that I certify to be true and con	mplete in every respect:				
I cert	ify, or	behalf of[	Name of Tenderer] that:				
1.	Ihav	ve 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.		the authorized representative of the Tenderer with authority to sign thin nit the Tender on behalf of the Tenderer;	s Certificate, and to				
4.	For the purposes of this Certificate and the Tender, I understand that the word "competitor" shall include any individual or organization, other than the Tenderer, whether or not affiliated with the Tenderer, who:  a) has been requested to submit a Tender in response to this request for tenders;  b) could potentially submit a tender in response to this request for tenders, based on their qualifications, abilities or experience;						
5.	The a) b)	Tenderer discloses that [check one of the following, as applicable: The Tenderer has arrived at the Tender independently from, and w communication, agreement or arrangement with, any competitor; the Tenderer has entered into consultations, communications, agreement or more competitors regarding this request for tenders, as in the attached document(s), complete details thereof, including the and the nature of, and reasons for, such consultations, communications;	reements or arrangements nd the Tenderer discloses, e names of the competitors				
6.		articular, without limiting the generality of paragraphs (5)(a) or (5)(b) sultation, communication, agreement or arrangement with any compet prices; methods, factors or formulas used to calculate prices; the intention or decision to submit, or not to submit, a tender; or the submission of a tender which does not meet the specifications of Tenders; except as specifically disclosed pursuant to paragraph (5)(1)	itor regarding: of the request for				
7.	com	ddition, there has been no consultation, communication, agreement petitor regarding the quality, quantity, specifications or delivery pices to which this request for tenders relates, except as specifically au ority or as specifically disclosed pursuant to paragraph (5)(b) above;	articulars of the works or				
8.	indii awai	erms of the Tender have not been, and will not be, knowingly disclosed rectly, to any competitor, prior to the date and time of the official rding of the Contract, whichever comes first, unless otherwise require losed pursuant to paragraph (5)(b) above.	tender opening, or of the				
	Nan	ne	<u> </u>				
	Title	>	_				
	Date	·					
	[Nai	me, title and signature of authorized agent of Tenderer and Date].  ler's Official Stamp					

## 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.

of 	, of Post Office Box	nt
1.	THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal  Officer/Director of  (insert name of the Company) who is a Bidder in respect of Tender No.  (insert tender title/description) for  (insert name of Kenya Power) and duly authorized and competent to make his statement.	ct
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.	ΓΗΑΤ what is deponed to herein above is true to the best of my knowledge, information and belief.	
	(Titl	e)
	Bidder Official Stamp	

#### FORM SD2

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

I	of P. O. Box being a
resi	ent of
	in the Republic of
1.	THAT I am the Chief Executive/Managing Director/Principal Officer/Director of
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.
	(Title) (Signature) (Date)
	Bidder's Official Stamp

#### DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I (person) on behalf of (	Name of the Business/
Company/Firm)	I have read and fully gulations and the Code
under the Code.	nd my responsionnes
I do hereby commit to abide by the provisions of the Code of Ethics for persons partic Procurement and Asset Disposal.	ipating in Public
Name of Authorized signatory	
Position	
Office address	
Telephone	
E-mail	
Name of the Firm/Company	
Date	(Company
Seal/ Rubber Stamp where applicable)	
Witness	
Name Sign	
Date	

Bidder's Official Stamp

#### 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 who has a conflict of interest with respect to a procurement:
  - a. Shall not take part in the procurement proceedings;
  - b. Shall not, after a procurement contract has been entered into, take part in any decision relating to the procurement or contract; and
- c. Shall not be a subcontractor for the 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>&</sup>lt;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.

Sign & Bidder's Official Stamp

6.	FORM OF TENDER SECURITY- [Option 1-Demand Bank Guarantee]
Re Da	neficiary: equest for Tenders No: te: ENDER GUARANTEE No.:
Gu	arantor:
1.	We have been informed that
	"the ITT").
2.	Furthermore, we understand that, according to the Beneficiary's conditions, Tenders must be supported by a Tender guarantee.
3.	At the request of the Applicant, we, as Guarantor, hereby irrevocably undertake to pay the Beneficiary any sum of sums not exceeding in total an amount of
(a)	Has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Letter of Tender ("the Tender Validity Period"), or any extension thereto provided by the Applicant; or
b)	Having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance.
4.	This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contrac agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) thirty days after the end of the Tender Validity Period.
5.	Consequently, any demand for payment under this guarantee must be received by us at the office indicated above 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]

TEN	DER GUARANTEE No.:		
1.	[Date of submission of tend	nderer] (hereinafter called "the tenderer") has submitted its tender dater] for the	
2.	having our registered office at  Power] (hereinafter called "the Proposition of the	resents that WE	<i>nya</i> ınt)
	Sealed with the Common Seal of t	ne said Guarantor thisday of 20	
3.	NOW, THEREFORE, THE CONE	ITION OF THIS OBLIGATION is such that if the Applicant:	
		ring the period of Tender validity set forth in the Principal's Letter of Tender ("any extension thereto provided by the Principal; or	the
	Period or any extension thereto (ii) has failed to furnish the Pe of the Procuring Entity's Tenderin up to the above amount upon a Entity having to substantiate its	eptance of its Tender by the Procuring Entity during the Tender Valid provided by the Principal; (i) failed to execute the Contract agreement; formance Security, in accordance with the Instructions to tenderers ("IT g document, then the guarantee undertakes to immediately pay to the Procure eceipt of the Procuring Entity's first written demand, without the Procuring demand, provided that in its demand the Procuring Entity shall state that ece of any of the above events, specifying which event(s) has occurred.	or T") ring
4.	contract agreement signed by the the successful Tenderer, upon th	the Applicant is the successful Tenderer, upon our receipt of copies of Applicant and the Performance Security and, or (b) if the Applicant is e earlier of (i) our receipt of a copy of the Beneficiary's notification to endering process; or (ii)twenty-eight days after the end of the Tender Valid	not the
5.	Consequently, any demand for pay or before that date.	ment under this guarantee must be received by us at the office indicated above	on
		[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

[Ine.	Biaaer snaii c	сотріете	inis Form	in accoraance wii	n tne instruc	ctions inaicateaj
Tende	er No.:		[in	sert number of ter	ndering proc	Tender Submission] cess] e, the undersigned, declare that:
1.	I/We underst	and that,	according t	to your conditions,	bids must be	e supported by a Tender-Securing Declaration.
2.	Purchaser fo of our obliga tender validi Bid by the Pu	r the perion tion(s) u ty specifi archaser o	od of time of nder the bid led by us in during the p	of [insert number of d conditions, becan the Tendering Da period of bid validi	f months or use we – (a) ta Sheet; or ty, (i) fail or	ing eligible for tendering in any contract with the years] starting on [insert date], if we are in breach have withdrawn our tender during the period of (b) having been notified of the acceptance of our refuse to execute the Contract, if required, or (ii) with the instructions to tenders.
3.	the earlier of a) Our rec	: eipt of a c	copy of you	-	_	oire if we are not the successful Tenderer(s), upor
4.	Joint Venture	e that sub	mits the bi	d, and the Joint Ve	enture has no	or Securing Declaration must be in the name of the ot been legally constituted at the time of bidding are partners as named in the letter of intent.
	Signed:					
	partner	or	sole	proprietor,	etc.)	Name
			• • • • • • • • • • • • • • • • • • • •			Duly authorized to sign the bio
	for and on be	half of: [i	insert comp	olete name of Tende	erer]	
	Dated on		day o	of	[Insert d	late of signing   Seal or stamp

#### 9. MANUFACTURER'S AUTHORIZATION FORM

# (To Be Submitted on Manufacturer's Letterhead)

To:
The Kenya Power & Lighting Company Limited,
Stima Plaza, Kolobot Road, Parklands,
P.O Box 30099 – 00100,
Nairobi, Kenya.
Date:
ITT No.:
To:
WHEREAS
We, who are official manufacturers of, having factories at, do hereby authorize to submit a Tender the purpose of which
is to provide the following goods, manufactured by us, and to subsequently negotiate and sign the Contract.
We hereby extend our full guarantee and warranty in accordance with Clause 27 of the General Conditions, with respect to the goods offered by the above firm.
Signed:
Name:
Title:
Duly authorized to sign this Authorization on behalf of:
Dated onday of

#### 10. MANUFACTURER'S WARRANTY FORM

#### To Be Submitted on Manufacturer's Letterhead)

#### To:

The Kenya Power & Lighting Company Plc, Stima Plaza, Kolobot Road, Parklands, P.O Box 30099 – 00100, Nairobi, Kenya.

### 

(indicate your name or the supplier you have authorized)

#### WE HEREBY WARRANT THAT:

- a) The Goods to be supplied under the contract are new, unused, of the most recent or current specification and incorporate all recent improvements in design and materials unless provided otherwise in the Tender.
- b) The Goods in the Tenderer's bid have no defect arising from manufacture, materials or workmanship or from any act or omission of the Tenderer that may develop under normal use of the Goods under the conditions obtaining in Kenya.

The Warranty will remain valid for	after the Goods, or any portion thereof as the case may be
have been delivered and accepted to the final destination	indicated in the contract.
DATED THIS DAY OF	20
Signature of duly authorised person for and on behalf of	the Manufacturer.
Name and Capacity of duly authorised person signing on	behalf of the Manufacturer.

#### NOTES TO TENDERERS AND MANUFACTURERS

- 1. Only a competent person in the service of the Manufacturer should sign this letter of authority.
- 2. Provide full contact details including physical address, e-mail, telephone numbers and the website on the Warranty.

# 11. Appendix to Tender

### **Schedule of Currency requirements**

Summary of currencies of the Tender for [insert	t name of Section of	f the Works
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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 – SCHEDULE OF REQUREMENT

SUMMARY OF LOTS					
LOT	STATION/DESCRIPTION				
LOT 1	Installation Of CCTV Major Stores & Offices: Nairobi Region				
LOT 2	Installation Of CCTV Major Stores & Offices: Mt. Kenya & Northeastern Region				
	Installation Of CCTV Major Stores & Offices: Central & North Rift Region & Western Kenya				
LOT 3	Region				
LOT 4	Installation Of CCTV Major Stores & Offices: Coast Region				
LOT 5	Installation of Integrated Security Systems (ISS)				

# INSTALLATION OF CCTV MAJOR STORES & OFFICES LOT 1: NAIRORI REGION

LOT 1: NAIROBI REGION							
NO	Station/Description	Systems	Location				
	Nairobi Region						
1	Westlands Substation	CCTV&Access control	Westlands				
2	Loitoktok stores	CCTV&Access control	Loitoktok				
3	Ruai office	CCTV&Access control	Ruai				
4	Highridge Staff Quarters/substation/conference room	CCTV&Access control	Highridge				
5	Komarock Substation	CCTV&Access control	Komarock				
6	Kitengela stores	CCTV&Access control	Kitengela				
7	Factory Assessment and pre-installation Training	CCTV& Access control	To be determined				
8	Project Management	CCTV& Access control					
9	Contingency	CCTV& Access control					
10	Manufacturers Training-3no technical persons	CCTV& Access control					

#### LOT 2: NORTH EASTERN/MT.KENYA REGION

LOT 2: NORTH EASTERN/MIT.KENTA REGION									
LOT	LOT 2: INSTALLATION OF CCTV MAJOR STORES & OFFICES								
LOT	LOT 2: NORTH EASTERN/MT.KENYA REGION								
NO	NO Station/Description Systems Location								
	Northeastern								
1	Ruiru office	CCTV&Access control	Ruiru						
2	Kikuyu Office	CCTV&Access control	Kikuyu						
3	Githunguri Office	CCTV&Access control	Githunguri Kiambu						
4	Kabete 66	CCTV&Access control	Kabete						
5	Thika East/Industrial Substation	CCTV&Access control	Thika						
6	Kitui stores/pole yard	CCTV&Access control	Kitui						
7	Uplands SS	CCTV&Access control	Uplands-Kiambu						
	Mt. Kenya								
8	Kagumo Stores	CCTV&Access control	Kagumo						
9	Muranga substation	CCTV&Access control	Muranga						

10	Kerugoya Stores	CCTV&Access control	Kerugoya
11	Isiolo Office	CCTV&Access control	Isiolo
12	Diana House	CCTV&Access control	Nyeri
13	Karatina Substation	CCTV&Access control	Nyeri
14	Ruring'u Substation	CCTV&Access control	Nyeri
15	Factory Assessment and pre-installation Training	CCTV& Access control	To be determined
16	Project Management	CCTV& Access control	
17	Contingency	CCTV& Access control	
18	Manufacturers Training-3no technical persons	CCTV& Access control	

## LOT 3: WESTERN KENYA REGION

LUI	LOT 3: INSTALLATION OF CCTV MAJOR STORES & OFFICES						
LOT	3: WESTERN KENYA REGION						
NO	Station/Description	Systems	Location				
	Central Rift						
1	Gilgil substation	CCTV&Access control	Gilgil				
2	Magumo SS	CCTV&Access control	Magumo				
3	Narok Stores	CCTV&Access control	Narok				
4	Kabarnet Pole Yard	CCTV&Access control	Kabarnet				
	North Rift						
5	Iten SS and Stores	CCTV&Access control	Iten-Eldoret				
6	Eldoret Industrial Substation	CCTV&Access control	Eldoret				
7	Nandi substation	CCTV&Access control	Nandi				
8	Endebes substation	CCTV&Access control	Endebes				
9	Elgon view substation	CCTV&Access control	Elgon view				
	South Nyanza						
10	Migori Substation	CCTV&Access control	Kisii				
11	Homabay E plant	CCTV	Homabay				
	West Kenya						
12	Siaya store	CCTV&Access control	Siaya				
13	Sondu substation	CCTV&Access control	Sondu				
14	Maseno Substation	CCTV&Access control	Maseno				
15	Nyamlilia substation	CCTV&Access control	Nyamlilia				
16	Amalemba pole yard/ E-plant	CCTV&Access control					
17	Kisumu East S/S / E-plant	CCTV&Access control	Kisumu				
18	Bungoma stores	CCTV&Access control	Bungoma				
19	Manufacturers Training-3no technical persons	CCTV&Access control					
20	Factory Assessment and pre-installation Training	CCTV& Access control					
21	Project Management	CCTV& Access control					
22	Contingency	CCTV& Access control					
23	Manufacturers Training-3no technical persons	CCTV& Access control					

#### **LOT 4: COAST REGION**

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#### INSTALLATION OF CCTV MAJOR STORES & OFFICES **LOT 4: COAST REGION** Station/Description NO Systems Location **Coast Region** Weru substation **CCTV &Access control** Mombasa Ukunda Stores **CCTV &Access control** Mombasa Mwatate substation **CCTV &Access control** 3 Mombasa Makande substation **CCTV &Access control** Mombasa Mtondia Substation Mombasa 5 **CCTV&Access control** Bomani Substation Mombasa CCTV&Access control Jomvu Substation 7 CCTV&Access control Mombasa Factory Assessment and pre-installation Training Project Management Contingency 10

## LOT 5: INTEGRATED SECURITY SYSTEMS (ISS)

Manufacturers Training-3no technical persons

LOT	5: INTEGRATED SECURITY SYSTEMS (ISS):	LANET DEPOT	
NO	Station/Description	Systems	Location
	Coast Region		
1	Lanet Depot ISS	ISS	Nakuru
2	Factory Assessment and pre-installation Training		
3	Project Management		
4	Contingency		
5	Manufacturers Training-3no technical persons		

#### SECTION VI – SPECIFICATIONS & BILLS OF QUANTITIES

#### PRICE SCHEDULE /BILLS OF QUANTITIES

(Unit Price in all 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)

# LOT 1: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES WESTLANDS SUBSTATION IP CTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	8				
В.	16MP 180° Network Camera	No.	2				
C.	16-ch NVR	No.	1				
D.	HikCentral or Genetec Video License (per Camera).	No.	10				
E.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1				
C.	3 KVA online UPS	NO	1				
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
Е.	Client Workstation	LOT	1				
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
G.	Biometric Access Control cards	No.	100				

	SUMMARY PAGE WESTLANDS SUBSTATION IP-	CCTV &ACCESS
	CONTROL BILL OF QUANTITIES	
A.	Total Carried to collection	
	Westlands Substation Page 1	
B.	Total Carried to collection	
	Westlands Substation Page 2	
	SUB-TOTAL- WESTLANDS	
	SUBSTATION IP- CCTV &ACCESS CONTROL	
	CONTROL	

# LOT 1: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: NAIROBI REGION

## LOITOKTOK STORES IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	14				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	16				
F.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
Н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Lo						

	Bill of Quantities Loitoktok Stores Page 2							
N o	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1					
C.	3 KVA online UPS	NO	1					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
Е.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control Cards	No.	100					
	Total Carried to collection Loitoktok Stores Page 2							

	SUMMARY PAGE 7 LOITOKTOK STORES IP- CCTV &AC OF QUANTITIES	CCESS CON	TROL BILL
A.	Total Carried to collection Loitoktok Page 1		
В.	Total Carried to collection Loitoktok Page 2		
	SUB-TOTAL- LOITOKTOK IP- CCTV & ACCESS CONTROL		

# LOT 1: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: NAIROBI REGION

## RUAI OFFICE- IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	5MP Varifocal Dome/Bullet Camera	No.	18				
В.	4MP Network PTZ	No.	0				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
Е.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
H.	Gig Ethernet to Gig rack-mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection Ruai Of						

	Bill of Quantities Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
В.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1					
C.	6 KVA online UPS	NO	0					
D.	3 KVA online UPS	NO	1					
E.	2 KVA online UPS	NO	0					
F.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
G.	Client Workstation	LOT	1					
Н.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
I.	Biometric Access Control cards	No.	100					
	Total Carried to C	ollection	on Ruai	Office page	2			

	SUMMARY PAGE RUAI OFFICE IP- CCTV BILL	OF QUANTITIES
A.	Total Carried to collection Ruai Office Page 1	
B.	Total Carried to collection Ruai Office Page 2	
	SUB-TOTAL-RUAI OFFICE IP- CCTV	

# LOT 1: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: NAIROBI REGION

## HIGHRIDGE STAFF QUARTERS/SUBSTATION - CCTV

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	5MP Varifocal Dome/Bullet Camera	No.	28				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	2				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	31				
F.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
Н.	Gig Ethernet to Gig rack-mount Fiber optic Media Converter 20km Range industrial type	No.	1				
Total Carried to Collection Highridge Staff Quarters/Substation page 1							

	Bill of Quantities Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
В.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1					
C.	6 KVA online UPS	NO	0					
D.	3 KVA online UPS	NO	2					
E.	2 KVA online UPS	NO	1					
F.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
G.	Client Workstation	LOT	1					
Н.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
I.	Biometric Access Control cards	No.	100					
Tot	Total Carried to Collection Highridge Staff Quarters/Substation page 2							

	SUMMARY PAGE HIGHRIDGE STAFF QUARTERS/SUBS BILL OF QUANTITIES	STATION IP- CCTV
A.	Total Carried to collection Highridge Staff Quarters/Substation Page 1	
В.	Total Carried to collection Highridge Staff Quarters/Substation Page 2	
	SUB-TOTAL-HIGHRIDGE STAFF QUARTERS/SUBSTATION IP- CCTV	

# LOT 1: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: NAIROBI REGION KOMAROCK SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	2				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Kon						

	Bill of Quantities Komarock Substation Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1					
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1					
C.	3 KVA online UPS	NO	2					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
E.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control cards	No.	100					
	Total Carried to col							

	SUMMARY PAGE KOMAROCK SUBSTATION IP- CCT	V &ACCES	SS
	CONTROL BILL OF QUANTITIES		
A.	Total Carried to collection		
	Komarock Substation Page 1		
B.	Total Carried to collection		
	Komarock Substation Page 2		
SUB-TOT	TAL- KOMAROCK SUBSTATION IP- CCTV &ACCESS CONTROL		
		1	

# LOT 1: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: NAIROBI REGION KITENGELA STORES IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	14				
B.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	16				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
G.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Ki						

	Bill of Quantities Kitengela Stores Page 2							
N o	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1					
C.	3 KVA online UPS	NO	1					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
Е.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control Cards	No.	100					
	Total Carried to collection Kitengela Stores Page 2							

	SUMMARY PAGE KITENGELA STORES IP- CCTV &ACC	ESS CONT	ROL BILL
	OF QUANTITIES		
A.	Total Carried to collection		
	Kitengela Page 1		
B.	Total Carried to collection		
	Kitengela Page 2		
	SUB-TOTAL- KITENGELA IP- CCTV &ACCESS CONTROL		

## NAIROBI REGION: LOT 1

Item	Description	Unit	Qty	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		
	TOTAL PPCBL Incl. & VAT Ex	xcl.			
	ADD 16% VAT				
	GRAND-TOTAL PPCBL Incl. &	& VAT			

## NB:

To be done after one year warranty of servicing during period upon Approval by Kplc.

# SUMMARY PAGE BILL OF QUANTITIES LOT 1: INSTALLATION OF CCTV MAJOR STORES & OFFICES: NAIROBI REGION

## SUMMARY PAGE BILL OF QUANTITIES LOT 1: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: NAIROBI REGION **Total Price Total Price** (PPCBL (PPCBL Incl.) & VAT Incl.) & VAT Excl. (Kes Incl. (Kes Total Carried to collection Westlands Substation a) Total Carried to collection Loitoktok stores b) c) Total Carried to collection Ruai office Total Carried to collection Highridge Staff d) Quarters/substation/conference room Total Carried to collection Komarock Substation e) Total Carried to collection Kitengela stores f) Factory Assessment and pre-installation Training 3,000,000.00 g) **Project Management** h) 1,500,000.00 Manufacturers Training-3no technical persons 3,000,000.00 j) Contingency 1,000,000.00 k) **Total PPCBL Incl. & VAT Excl ADD 16% VAT** Grand-Total PPCBL Incl. & VAT Incl. (To Form of Tender)

## **RUIRU OFFICE IP- CCTV & ACCESS CONTROL**

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	5MPVarifocal Dome/Bullet Camera	No.	18				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	2				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	21				
F.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection I						

		Bill	of Quar	ntities Page 2	2		
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1				
В.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1				
C.	6 KVA online UPS	NO	0				
D.	3 KVA online UPS	NO	1				
E.	2 KVA online UPS	NO	1				
F.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
G.	Client Workstation	LOT	1				
Н.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
I.	Biometric Access Control cards	No.	100				
	Total Carried to Co	ollectio	n Ruiru	Office page	2		

	SUMMARY PAGE RUIRU OFFICE IP- CCTV BILL OF QUANTITIES									
A.	Total Carried to collection Ruiru Office Page 1									
В.	Total Carried to collection Ruiru Office Page 2									
	SUB-TOTAL-RUIRU OFFICE IP- CCTV									

## KIKUYU OFFICE IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	5MP Varifocal Dome/Bullet Camera	No.	18				
В.	4MP Network PTZ	No.	0				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
Н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection I	Kikuyu C	Office pa	nge 1			

		Bill	of Quan	ntities Page 2	2		
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1				
В.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1				
C.	6 KVA online UPS	NO	1				
D.	3 KVA online UPS	NO	1				
E.	2 KVA online UPS	NO	0				
F.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
G.	Client Workstation	LOT	1				
Н.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
I.	Biometric Access Control cards	No.	100				
	Total Carried to Co	llection	ı Kikuyu	Office pag	e 2		

	SUMMARY PAGE KIKUYU OFFICE IP- CCTV BI	LL OF QUANTITIES
A.	Total Carried to collection Kikuyu Office Page 1	
B.	Total Carried to collection Kikuyu Office Page 2	
	SUB-TOTAL-KIKUYU OFFICE IP- CCTV	

## GITHUNGURI OFFICE IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	5MP Varifocal Dome/Bullet Camera	No.	18				
В.	4MP Network PTZ	No.	0				
C.	16MP 180° Network Camera	No.	0				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	18				
F.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
Н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection	Githung	uri Offi	ce page 1			

		Bill	of Quar	ntities Page 2	2		
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1				
В.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1				
C.	6 KVA online UPS	NO	1				
D.	3 KVA online UPS	NO	1				
E.	2 KVA online UPS	NO	0				
F.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
G.	Client Workstation	LOT	1				
H.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
I.	Biometric Access Control cards	No.	100				
	Total Carried to Colle	ection (	Githung	uri Office pa	ge 2		

	SUMMARY PAGE GITHUNGURI OFFICE IP- CCTV BIL	L OF QUAN	TITIES
A.	Total Carried to collection Githunguri Office Page 1		
В.	Total Carried to collection Githunguri Office Page 2		
	SUB-TOTAL-GITHUNGURI OFFICE IP- CCTV		

## KABETE SUBSTATION IP CTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	11				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	2				
D.	16-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	14				
F.	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 HIKVISION OR GENETEC network (Per Door)  Total Carried to collection is	No.	1				

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1				
C.	3 KVA online UPS	NO	1				
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
Е.	Client Workstation	LOT	1				
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
G.	Biometric Access Control cards	No.	100				

	SUMMARY PAGE KABETE SUBSTATION IP- CCTV &	ACCESS CO	ONTROL
	BILL OF QUANTITIES	1	I
A.	Total Carried to collection Kabete Substation Page 1		
В.	Total Carried to collection Kabete Substation Page 2		
	SUB-TOTAL- KABETE SUBSTATION IP- CCTV &ACCESS CONTROL		

### THIKA EAST INDUSTRIAL SUBSTATION IP CTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	8				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	16-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	10				
F.	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 HIKVISION OR GENETEC network (Per Door)  Total Carried to collection 1	No.	1				

	Bill of Quantit	ies Thi	ka East	Industrial	Substation Pa	age 2	
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Н.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
I.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1				
J.	3 KVA online UPS	NO	1				
K.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
L.	Client Workstation	LOT	1				
M.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
N.	Biometric Access Control cards	No.	100				
	Total Carried to collect						

	SUMMARY PAGE THIKA EAST INDUSTRIAL SUBSTA	TION IP- C	CCTV
	&ACCESS CONTROL BILL OF QUANTITIES		
A.	Total Carried to collection		
	Thika East Industrial Substation		
	Page 1		
B.	Total Carried to collection		
	Thika East Industrial Substation		
	Page 2		
	SUB-TOTAL- THIKA EAST		
	INDUSTRIAL SUBSTATION IP-		
	CCTV &ACCESS CONTROL		

# ${\it LOT~2: INSTALLATION~OF~CCTV~MAJOR~STORES~\&~OFFICES~BILL~OF~QUANTITIES:~NORTH~EASTERN/MT.KENYA~REGION}$

### KITUI STORES IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	14				
B.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
Е.	HikCentral or Genetec Video License (per Camera).	No.	16				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
G.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Ki						

	Bil	l of Qu	antities	Kitui Stores	Page 2		
N o	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Н.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1				
I.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1				
J.	3 KVA online UPS	NO	1				
K.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
L.	Client Workstation	LOT	1				
M.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
N.	Biometric Access Control Cards	No.	100				
	Total Carried	age 2					

SUMMARY PAGE KITUI STORES IP- CCTV &ACCESS CONTROL BILL OF							
QUANTITIES							
Total Carried to collection Kitui							
Page 1							
Total Carried to collection Kitui							
Page 2							
SUB-TOTAL- KITUI IP- CCTV &ACCESS CONTROL							
	QUANTITIES  Total Carried to collection Kitui Page 1  Total Carried to collection Kitui Page 2  SUB-TOTAL- KITUI IP- CCTV	QUANTITIES  Total Carried to collection Kitui Page 1  Total Carried to collection Kitui Page 2  SUB-TOTAL- KITUI IP- CCTV					

### **UPLANDS SUBSTATION IP CTV &ACCESS CONTROL**

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	8				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	16-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	10				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)  Total Carried to collect	No.	1				

	Bill of Quantities Uplands Substation Page 2									
No	Item Description	Unit	ΩТΥ	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers			
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1							
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1							
C.	3 KVA online UPS	NO	1							
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1							
Е.	Client Workstation	LOT	1							
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1							
G.	Biometric Access Control cards	No.	100							
	Total Carried to coll									

	SUMMARY PAGE UPLANDS SUBSTATION IP- CC BILL OF QUANTITIES	SUMMARY PAGE UPLANDS SUBSTATION IP- CCTV &ACCESS CONTROL BILL OF QUANTITIES								
A.	Total Carried to collection Uplands Substation Page 1									
В.	Total Carried to collection Uplands Substation Page 2									
	SUB-TOTAL- UPLANDS SUBSTATION IP- CCTV &ACCESS CONTROL									

### KAGUMO STORES IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	14				
B.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	16				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
G.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Ka						

	Bill of Quantities Kagumo Stores Page 2							
N o	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1					
C.	3 KVA online UPS	NO	1					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
E.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control Cards	No.	100					
	Total Carried to collection Kagumo Stores Page 2							

	SUMMARY PAGE KAGUMO STORES IP- CCTV &ACCESS	<b>S CONTRO</b>	L BILL OF
	QUANTITIES		
A.	Total Carried to collection		
	Kagumo Page 1		
В.	Total Carried to collection		
	Kagumo Page 2		
	SUB-TOTAL- KAGUMO IP- CCTV &ACCESS CONTROL		

### MURANGA SUBSTATION IP CTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
G.	5MP Varifocal Dome/Bullet Camera	No.	8				
H.	4MP Network PTZ	No.	1				
I.	16MP 180° Network Camera	No.	1				
J.	16-ch NVR	No.	1				
K.	HikCentral or Genetec Video License (per Camera).	No.	10				
L.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)  Total Carried to collect	No.	1				

No	Item Description	Unit	QΤΥ	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Н.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
I.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1				
J.	3 KVA online UPS	NO	1				
K.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
L.	Client Workstation	LOT	1				
M.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
N.	Biometric Access Control cards	No.	100				

	SUMMARY PAGE MURANGA SUBSTATION IP-CCTV	&ACCESS CONTROL
	BILL OF QUANTITIES	
C.	Total Carried to collection	
	Muranga Substation Page 1	
D.	Total Carried to collection	
	Muranga Substation Page 2	
	SUB-TOTAL- MURANGA	
	SUBSTATION IP- CCTV &ACCESS	
	CONTROL	

### KERUGOYA STORES IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Н.	5MP Varifocal Dome/Bullet Camera	No.	14				
I.	4MP Network PTZ	No.	1				
J.	16MP 180° Network Camera	No.	1				
K.	32-ch NVR	No.	1				
L.	HikCentral or Genetec Video License (per Camera).	No.	16				
M.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
N.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Ko						

	Bill o	f Quan	itities Ke	rugoya Stor	res Page 2		
N o	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Н.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1				
I.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1				
J.	3 KVA online UPS	NO	1				
K.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
L.	Client Workstation	LOT	1				
M.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
N.	Biometric Access Control Cards	No.	100				
	Total Carried to	Page 2					

	SUMMARY PAGE KERUGOYA STORES IP- CCTV &ACC	ESS CONTI	ROL BILL
	OF QUANTITIES		
C.	Total Carried to collection		
	Kerugoya Page 1		
D.	Total Carried to collection		
	Kerugoya Page 2		
	SUB-TOTAL- KERUGOYA IP- CCTV &ACCESS CONTROL		

### ISIOLO OFFICE IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
О.	5MP Varifocal Dome/Bullet Camera	No.	14				
P.	4MP Network PTZ	No.	1				
Q.	16MP 180° Network Camera	No.	1				
R.	32-ch NVR	No.	1				
S.	HikCentral or Genetec Video License (per Camera).	No.	16				
T.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
U.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Is						

	Bil	l of Qu	antities	Isiolo Office	Page 2		
N o	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
О.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1				
P.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1				
Q.	3 KVA online UPS	NO	1				
R.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
S.	Client Workstation	LOT	1				
T.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
U.	Biometric Access Control Cards	No.	100				
	Total Carried	age 2					

	SUMMARY PAGE ISIOLO OFFICE IP- CCTV &ACCESS C	CONTROL I	BILL OF
	QUANTITIES		
E.	Total Carried to collection Isiolo		
	Office Page 1		
F.	Total Carried to collection Isiolo		
	Office Page 2		
	SUB-TOTAL- KERUGOYA IP- CCTV &ACCESS CONTROL		

### DIANA HOUSE OFFICE IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	5MP Varifocal Dome/Bullet Camera	No.	30				
В.	4MP Network PTZ	No.	0				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
Е.	HikCentral or Genetec Video License (per Camera).	No.	32				
F.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
Н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection I						

		Bill	of Quan	ntities Page 2	2		
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1				
В.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1				
C.	6 KVA online UPS	NO	1				
D.	3 KVA online UPS	NO	1				
E.	2 KVA online UPS	NO	0				
F.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
G.	Client Workstation	LOT	1				
Н.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
I.	Biometric Access Control cards	No.	100				
	Total Carried to Co						

	SUMMARY PAGE DIANA OFFICE IP- CCTV BILL OF QUANTITIES								
A.	Total Carried to collection Diana Office Page 1								
B.	Total Carried to collection Diana Office Page 2								
	SUB-TOTAL-DIANA OFFICE IP- CCTV								

### KARATINA SUBSTATION IP CTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	14				
В.	16MP 180° Network Camera	No.	1				
C.	16-ch NVR	No.	1				
D.	HikCentral or Genetec Video License (per Camera).	No.	15				
E.	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 HIKVISION OR GENETEC network (Per Door)  Total Carried to collection I	No.	1				

	Bill of Quantities Karatina Substation Page 2									
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers			
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1							
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1							
C.	3 KVA online UPS	NO	1							
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1							
E.	Client Workstation	LOT	1							
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1							
G.	Biometric Access Control cards	No.	100							
	Total Carried to coll									

	SUMMARY PAGE KARATINA SUBSTATION IP- CCTV &ACCESS CONTROL BILL OF QUANTITIES							
A.	Total Carried to collection							
	Karatina Substation Page 1							
В.	Total Carried to collection Karatina Substation Page 2							
	SUB-TOTAL- KARATINA SUBSTATION IP- CCTV &ACCESS CONTROL							

# ${\it LOT~2: INSTALLATION~OF~CCTV~MAJOR~STORES~\&~OFFICES~BILL~OF~QUANTITIES:~NORTH~EASTERN/MT.KENYA~REGION}$

### RURINGU SUBSTATION IP CTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	10				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	2				
D.	16-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	13				
F.	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 HIKVISION OR GENETEC network (Per Door)  Total Carried to collection I	No.	1				

No	Item Description	Unit	QΤΥ	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1				
C.	3 KVA online UPS	NO	1				
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
Е.	Client Workstation	LOT	1				
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
G.	Biometric Access Control cards	No.	100				

	SUMMARY PAGE RURINGU SUBSTATION IP- C	CTV &ACCESS CONTROL
	BILL OF QUANTITIES	
A.	Total Carried to collection	
	Ruringu Substation Page 1	
B.	Total Carried to collection	
	Ruringu Substation Page 2	
	SUB-TOTAL- RURINGU	
	SUBSTATION IP- CCTV &ACCESS	
	CONTROL	

### SCHEDULE OF MAINTENANCE LOT 2: INSTALLATION OF CCTV MAJOR STORES & OFFICES: NORTH EASTERN/MT.KENYA REGION

Item	Description	Unit	Qty	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		
	TOTAL PPCBL Incl. & VAT Ex	kcl.			
	ADD 16% VAT				
	GRAND-TOTAL PPCBL Incl. &	& VAT			

#### NB:

To be done after one year warranty of servicing during period upon Approval by Kplc.

### SUMMARY PAGE BILL OF QUANTITIES LOT 2: INSTALLATION OF CCTV MAJOR STORES & OFFICES

# SUMMARY PAGE BILL OF QUANTITIES LOT 2: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: MT. KENYA AND NORTHEASTERN REGION

No.	Description	Total Price (PPCBL Incl.) & VAT Excl. (Kes	Total Price (PPCBL Incl.) & VAT Incl. (Kes
a)	Total Carried to Collection Ruiru office		
b)	Total Carried to Collection Kikuyu Office		
c)	Total Carried to Collection Githunguri Office		
d)	Total Carried to Collection Kabete 66		
e)	Total Carried to Collection Thika East/Industrial Substation		
f)	Total Carried to Collection Kitui stores/pole yard		
g)	Total Carried to Collection Uplands Substation		
h)	Total Carried to Collection Kagumo Stores		
j)	Total Carried to Collection Muranga substation		
k)	Total Carried to Collection Kerugoya substation		
1)	Total Carried to Collection Isiolo Office		
m)	Total Carried to Collection Diana House		
n)	Total Carried to Collection Karatina Substation		
p)	Total Carried to Collection Ruring'u Substation		
q)	Factory Assessment and pre-installation Training	3,000,000.00	
r)	Project Management	1,500,000.00	
s)	Manufacturers Training-3no technical persons	3,000,000.00	
u)	Contingency	1,000,000.00	
	Total PPCBL Incl. & VAT Excl		
	ADD 16% VAT		
	Grand-Total PPCBL Incl. & VAT Incl. (To Form of Tender)		

### WESTERN KENYA REGION

### GILGIL SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	2				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
Total Carried to collection Gilgil Substation Page 1							

	Bill of G						
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1				
C.	3 KVA online UPS	NO	2				
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
E.	Client Workstation	LOT	1				
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
G.	Biometric Access Control cards	No.	100				
	Total Carried to						

	SUMMARY PAGE GILGIL SUBSTATION IP- CCTV &ACCESS CONTROL BILL OF QUANTITIES							
A.	Total Carried to collection Gilgil Substation Page 1							
В.	Total Carried to collection Gilgil Substation Page 2							
	SUB-TOTAL- GILGIL SUBSTATION IP- CCTV &ACCESS CONTROL							

### MAGUMO SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal/Bullet Dome Camera	No.	16				
B.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	18				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Mag						

	Bill of Quantities Magumo Substation Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1					
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1					
C.	3 KVA online UPS	NO	2					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
E.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control cards	No.	200					
	Total Carried to col	on Page 2						

	SUMMARY PAGE MAGUMO SUBSTATION IP- CO BILL OF QUANTITIES	CTV &ACCESS CONTROL
A.	Total Carried to collection  Magumo Substation Page 1	
B.	Total Carried to collection  Magumo Substation Page 2	
	SUB-TOTAL- MAGUMO SUBSTATION IP- CCTV &ACCESS CONTROL	

NAROK STORES IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MPVarifocal Dome/Bullet Camera	No.	14				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	16				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Nar						

	Bill	Bill of Quantities Narok Stores Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers		
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1						
B.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1						
C.	3 KVA online UPS	NO	1						
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1						
E.	Client Workstation	LOT	1						
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1						
G.	Biometric Access Control Cards	No.	100						
	Total Carried	Page 2							

	SUMMARY PAGE NAROK STORES IP- CCTV &ACCESS OF QUANTITIES	CONTROL	BILL OF
A.	Total Carried to collection Narok Page 1		
В.	Total Carried to collection Narok Page 2		
	SUB-TOTAL- NAROK IP- CCTV &ACCESS CONTROL		

KABARNET STORES IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
I.	5MPVarifocal Dome/Bullet Camera	No.	14				
J.	4MP Network PTZ	No.	1				
K.	16MP 180° Network Camera	No.	1				
L.	32-ch NVR	No.	1				
M.	HikCentral or Genetec Video License (per Camera).	No.	16				
N.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
O.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
P.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Kab						

	Bill of Quantities Kabarnet Stores Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
Н.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
I.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1					
J.	3 KVA online UPS	NO	1					
K.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
L.	Client Workstation	LOT	1					
M.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
N.	Biometric Access Control Cards	No.	100					
	Total Carried to collection Kabarnet Stores Page 2							

	SUMMARY PAGE KABARNET STORES IP- CCTV &ACCI	ESS CONTE	ROL BILL
	OF QUANTITIES		
C.	Total Carried to collection		
	Kabarnet Page 1		
D.	Total Carried to collection		
	Kabarnet Page 2		
	SUB-TOTAL- KABARNET IP- CCTV &ACCESS CONTROL		

ITEN STORES & SUBSTATION IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MPVarifocal Dome/Bullet Camera	No.	14				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	16				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Item						

	Bill of Quantities Iten Stores & Substation Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1					
C.	3 KVA online UPS	NO	1					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
E.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control Cards	No.	100					
	Total Carried to collection Iten Stores & Substation Page 2							

	SUMMARY PAGE ITEN STORES & SUBSTATION IP- CCT CONTROL BILL OF QUANTITIES	V &ACCE	SS
A.	Total Carried to collection Iten		
	Stores & Substation Page 1		
В.	Total Carried to collection Iten		
	Stores & Substation Page 2		
	SUB-TOTAL- ITEN STORES &		
	SUBSTATION IP- CCTV &ACCESS		
	CONTROL		

### **ELDORET INDUSTRIAL SUBSTATION IP- CCTV &ACCESS CONTROL**

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
Е.	HikCentral or Genetec Video License (per Camera).	No.	18				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
H.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Eldo						

	Bill of Quantities Eldoret Industrial Substation Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
Α.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1					
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1					
C.	3 KVA online UPS	NO	2					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
E.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control cards	No.	100					
	Total Carried to collection Eldoret Industrial Substation Page 2							

	SUMMARY PAGE ELDORET INDUSTRIAL SUBSTA	ATION IP- CCTV
	&ACCESS CONTROL BILL OF QUANTITIES	
A.	Total Carried to collection	
	Eldoret Industrial Substation Page 1	
В.	Total Carried to collection	
	Eldoret Industrial Substation Page 2	
	SUB-TOTAL- ELDORET	
	INDUSTRIAL SUBSTATION IP-	
	CCTV &ACCESS CONTROL	

### NANDI SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
I.	5MP Varifocal Dome/Bullet Camera	No.	16				
J.	4MP Network PTZ	No.	1				
K.	16MP 180° Network Camera	No.	1				
L.	32-ch NVR	No.	1				
M.	HikCentral or Genetec Video License (per Camera).	No.	18				
N.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
О.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
P.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Nar						

	Bill of Quantities Nandi Substation Page 2						
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Н.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
I.	Network Devices accessories &cabinets-3 Edge switches	LOT	1				
J.	3 KVA online UPS	NO	2				
K.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
L.	Client Workstation	LOT	1				
M.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
N.	Biometric Access Control cards	No.	100				
	Total Carried to collection Nandi Substation Page 2						

	SUMMARY PAGE NANDI SUBSTATION IP- CCTV &AG	CCESS CONT	TROL BILL
	OF QUANTITIES	1	
C.	Total Carried to collection		
	Nandi Substation Page 1		
D.	Total Carried to collection		
	Nandi Substation Page 2		
	CAND TOTAL NAME OF POST ATTACK		
	SUB-TOTAL- NANDI SUBSTATION		
	IP- CCTV &ACCESS CONTROL		

### ENTEBES SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Q.	5MP Varifocal Dome/Bullet Camera	No.	16				
R.	4MP Network PTZ	No.	1				
S.	16MP 180° Network Camera	No.	1				
T.	32-ch NVR	No.	1				
U.	HikCentral or Genetec Video License (per Camera).	No.	18				
V.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
W.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
X.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Ento						

	Bill of Quantities Entebes Substation Page 2						
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
O.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
Р.	Network Devices accessories &cabinets-3 Edge switches	LOT	1				
Q.	3 KVA online UPS	NO	2				
R.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
S.	Client Workstation	LOT	1				
T.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
U.	Biometric Access Control cards	No.	100				
	Total Carried to collection Entebes Substation Page 2						

	SUMMARY PAGE ENTEBES SUBSTATION IP- BILL OF QUANTITIES	CCTV &ACCESS CONTROL
E.	Total Carried to collection Entebes Substation Page 1	
F.	Total Carried to collection Entebes Substation Page 2	
	SUB-TOTAL- ENTEBES SUBSTATION IP- CCTV &ACCESS CONTROL	

### **ELGON VIEW SUBSTATION IP- CCTV & ACCESS CONTROL**

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
Y.	5MP Varifocal Dome/Bullet Camera	No.	16					
Z.	4MP Network PTZ	No.	1					
AA	16MP 180° Network Camera	No.	1					
BB	32-ch NVR	No.	1					
CC	HikCentral or Genetec Video License (per Camera).	No.	18					
DC	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6					
EE	43 Inch 1080P LED Monitor C/W mount accessories	No.	1					
FF.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2					
	Total Carried to collection Elgon View Substation Page 1							

	Bill of Quantities Elgon View Substation Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
V.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1					
W.	Network Devices accessories &cabinets-3 Edge switches	LOT	1					
X.	3 KVA online UPS	NO	2					
Y.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
Z.	Client Workstation	LOT	1					
AA	Installation, Testing and Commissioning to client satisfaction	LOT	1					
BB	Biometric Access Control cards	No.	100					
	Total Carried to collection Elgon View Substation Page 2							

	SUMMARY PAGE ELGON VIEW SUBSTATION I	P- CCTV &ACCESS
	CONTROL BILL OF QUANTITIES	
G.	Total Carried to collection	
	Elgon View Substation Page 1	
H.	Total Carried to collection	
	Elgon View Substation Page 2	
	SUB-TOTAL- ELGON VIEW	
	SUBSTATION IP- CCTV &ACCESS CONTROL	
	CONTROL	

### MIGORI SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
GG	5MP Varifocal Dome/Bullet Camera	No.	16				
НН	4MP Network PTZ	No.	1				
II.	16MP 180° Network Camera	No.	1				
JJ.	32-ch NVR	No.	1				
KK	HikCentral or Genetec Video License (per Camera).	No.	18				
LL	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
MN	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
NN	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Mig						

	Bill of Q	n Page 2					
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
CC	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
DE	Network Devices accessories &cabinets-3 Edge switches	LOT	1				
EE	3 KVA online UPS	NO	2				
FF.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
GG	Client Workstation	LOT	1				
НН	Installation, Testing and Commissioning to client satisfaction	LOT	1				
II.	Biometric Access Control cards	No.	100				
	Total Carried to c						

	SUMMARY PAGE MIGORI SUBSTATION IP- CC BILL OF QUANTITIES	TV &ACCESS CONTROL
I.	Total Carried to collection Migori Substation Page 1	
J.	Total Carried to collection Migori Substation Page 2	
	SUB-TOTAL- MIGORI SUBSTATION IP- CCTV &ACCESS CONTROL	

### HOMABAY E-PLANT - IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	5MP Varifocal Dome/Bullet Camera	No.	18				
В.	4MP Network PTZ	No.	0				
C.	16MP 180° Network Camera	No.	0				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	18				
F.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
G.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection I						

		Bill	of Quar	ntities Page 2	2		
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1				
В.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1				
C.	6 KVA online UPS	NO	1				
D.	3 KVA online UPS	NO	1				
E.	2 KVA online UPS	NO	0				
F.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
G.	Client Workstation	LOT	1				
H.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
I.	Biometric Access Control cards	No.	100				
	Total Carried to Colle						

	SUMMARY PAGE HOMABAY E-PLANT IP- CCTV BILL C	OF QUANTITIES
A.	Total Carried to collection Homabay E- plant Page 1	
В.	Total Carried to collection Homabay E- plant Page 2	
	SUB-TOTAL-HOMABAY E-PLANT IP- CCTV	

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

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
I.	5MP Varifocal Dome/Bullet Camera	No.	18				
J.	4MP Network PTZ	No.	0				
K.	16MP 180° Network Camera	No.	0				
L.	32-ch NVR	No.	1				
M.	HikCentral or Genetec Video License (per Camera).	No.	18				
N.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
0.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
P.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection S		_				

	Bill of Quantities Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
J.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
K.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1					
L.	6 KVA online UPS	NO	1					
M.	3 KVA online UPS	NO	1					
N.	2 KVA online UPS	NO	0					
О.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
P.	Client Workstation	LOT	1					
Q.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
R.	Biometric Access Control cards	No.	100					
	Total Carried to Co	2						

C.	SUMMARY PAGE SIAYA OFFICE IP- CCTV BILL  Total Carried to collection Siaya Office	
	Page 1	
D.	Total Carried to collection Siaya Office Page 2	
	SUB-TOTAL-SIAYA OFFICE IP- CCTV	

### SONDU SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
B.	4MP Network PTZ	No.	2				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Son						

	Bill of Quantities Sondu Substation Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1					
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1					
C.	3 KVA online UPS	NO	2					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
E.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control cards	No.	200					
	Total Carried to o	Page 2						

	SUMMARY PAGE SONDU SUBSTATION IP- CCT BILL OF QUANTITIES	TV &ACCESS CONTROL
A.	Total Carried to collection Sondu Substation Page 1	
В.	Total Carried to collection Sondu Substation Page 2	
	SUB-TOTAL- SONDU SUBSTATION IP- CCTV &ACCESS CONTROL	

### MASENO SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	5MP Varifocal Dome/Bullet Camera	No.	16					
В.	4MP Network PTZ	No.	1					
C.	16MP 180° Network Camera	No.	1					
D.	32-ch NVR	No.	1					
E.	HikCentral or Genetec Video License (per Camera).	No.	18					
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6					
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1					
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2					
	Total Carried to collection Maseno Substation Page 1							

	Bill of Quantities Maseno Substation Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1					
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1					
C.	3 KVA online UPS	NO	2					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
E.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control cards	No.	100					
	Total Carried to collection Maseno Substation Page 2							

	SUMMARY PAGE MASENO SUBSTATION IP- CCTV BILL OF QUANTITIES	&ACCESS CONTROL
A.	Total Carried to collection  Maseno Substation Page 1	
В.	Total Carried to collection Maseno Substation Page 2	
	SUB-TOTAL- MASENO SUBSTATION IP- CCTV & ACCESS CONTROL	

### NYAMLILIA SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
Е.	HikCentral or Genetec Video License (per Camera).	No.	18				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Nya						

	Bill of Qu						
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1				
C.	3 KVA online UPS	NO	2				
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
E.	Client Workstation	LOT	1				
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
G.	Biometric Access Control cards	No.	100				
	Total Carried to co						

	SUMMARY PAGE NYAMLILIA SUBSTATION IF	P- CCTV &ACCESS
	CONTROL BILL OF QUANTITIES	
A.	Total Carried to collection	
	Nyamlilia Substation Page 1	
B.	Total Carried to collection	
	Nyamlilia Substation Page 2	
	SUB-TOTAL- NYAMLILIA	
	SUBSTATION IP- CCTV &ACCESS	
	CONTROL	

### AMALEMBA POLEYARD IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Q.	5MP Varifocal Dome/Bullet Camera	No.	18				
R.	4MP Network PTZ	No.	0				
S.	16MP 180° Network Camera	No.	0				
Т.	32-ch NVR	No.	1				
U.	HikCentral or Genetec Video License (per Camera).	No.	18				
V.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
W.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
X.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection	Amalem	ba Pole	yard page 1			

	Bill of Quantities Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
S.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
T.	Network Devices accessories &cabinets- 1 Edge switch	LOT	1					
U.	6 KVA online UPS	NO	1					
V.	3 KVA online UPS	NO	1					
W.	2 KVA online UPS	NO	0					
X.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
Y.	Client Workstation	LOT	1					
Z.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
AA	Biometric Access Control cards	No.	100					
	Total Carried to Collec							

	SUMMARY PAGE AMALEMBA POLE YARD IP- 0	CCTV BILL OF QUANTITIES
E.	Total Carried to collection Amalemba Pole yard Page 1	
F.	Total Carried to collection Amalemba Pole yard Page 2	
	SUB-TOTAL AMALEMBA POLE YARD IP- CCTV	

### KISUMU SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
Е.	HikCentral or Genetec Video License (per Camera).	No.	18				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Kisu						

	Bill of Qu	on Page 2					
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1				
C.	3 KVA online UPS	NO	2				
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
E.	Client Workstation	LOT	1				
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
G.	Biometric Access Control cards	No.	100				
	Total Carried to col						

	SUMMARY PAGE KISUMU SUBSTATION IP- CCTV & BILL OF QUANTITIES	ACCESS CONTROL
A.	Total Carried to collection Kisumu Substation Page 1	
В.	Total Carried to collection Kisumu Substation Page 2	
	SUB-TOTAL- KISUMU SUBSTATION IP- CCTV &ACCESS CONTROL	

### BUNGOMA STORES- IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Y.	5MP Varifocal Dome/Bullet Camera	No.	18				
Z.	4MP Network PTZ	No.	0				
AA.	16MP 180° Network Camera	No.	0				
BB.	32-ch NVR	No.	1				
CC.	HikCentral or Genetec Video License (per Camera).	No.	18				
DD.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
EE.	32 Inch 1080P LED Monitor C/W mount accessories	No.	0				
FF.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	1				
	Total Carried to Collection I	Bungom	a Stores	s page 1			

	Bill of Quantities Page 2									
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers			
ВВ	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1							
CC	Network Devices accessories &cabinets- 1 Edge switch	LOT	1							
DE	6 KVA online UPS	NO	1							
EE	3 KVA online UPS	NO	1							
FF.	2 KVA online UPS	NO	0							
GC	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1							
HH	Client Workstation	LOT	1							
II.	Installation, Testing and Commissioning to client satisfaction	LOT	1							
JJ.	Biometric Access Control cards	No.	100							
	Total Carried to Coll	ge 2								

	SUMMARY PAGE BUNGOMA STORES IP- CCTV B	ILL OF QUANTITIES
G.	Total Carried to collection Bungoma Stores Page 1	
Н.	Total Carried to collection Bungoma Stores Page 2	
	SUB-TOTAL-BUNGOMA STORES IP- CCTV	

### SCHEDULE OF MAINTENANCE LOT 3: INSTALLATION OF CCTV MAJOR STORES & OFFICES: WESTERN KENYA REGION

Item	Description	Unit	Qty	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		
	TOTAL PPCBL Incl. & VAT Ex	kcl.			
	ADD 16% VAT				
	GRAND-TOTAL PPCBL Incl. &	& VAT	Incl.		

#### NB:

To be done after one year warranty of servicing during period upon Approval by Kplc.

### SUMMARY PAGE BILL OF QUANTITIES LOT 4: INSTALLATION OF CCTV MAJOR STORES & OFFICES

### SUMMARY PAGE BILL OF QUANTITIES LOT 3: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: WESTERN KENYA REGION

	Description	Total Price (PPCBL Incl.) & VAT Excl. (Kes	Total Price (PPCBL Incl.) & VAT Incl. (Kes
a)	Total Carried to Collection Gilgil substation		
b)	Total Carried to Collection Magumo SS		
c)	Total Carried to Collection Narok Stores		
d)	Total Carried to Collection Kabarnet Pole Yard		
e)	Total Carried to Collection Iten SS and Stores		
f)	Total Carried to Collection Eldoret Industrial Substation		
g)	Total Carried to Collection Elgon View Substation		
h)	Total Carried to Collection Migori Substation		
j)	Total Carried to Collection Homabay E-plant		
k)	Total Carried to Collection Siaya stores		
1)	Total Carried to Collection Sondu substation		
m)	Total Carried to Collection Maseno Substation		
n)	Total Carried to Collection Amalemba Pole Yard		
p)	Total Carried to Collection Nyamlilia		
q)	Total Carried to Collection Kisumu Substation		
r)	Total Carried to Collection Bungoma Stores		
s)	Factory Assessment and pre-installation Training	3,000,000.00	
t)	Project Management	1,500,000.00	
u)	Manufacturers Training-3no technical persons	3,000,000.00	
v)	Contingency	1,000,000.00	
	Total PPCBL Incl. & VAT Excl		
	ADD 16% VAT		
	Grand-Total PPCBL Incl. & VAT Incl. (To Form of Tender)		

### WERU SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	16-ch NVR	No.	1				
Е.	HikCentral or Genetec Video License (per Camera).	No.	18				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection We						

	Bill of (						
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1				
C.	3 KVA online UPS	NO	2				
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
E.	Client Workstation	LOT	1				
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
G.	Biometric Access Control cards	No.	100				
	Total Carried to						

	SUMMARY PAGE WERU SUBSTATION IP- CCT OF QUANTITIES	V &ACCESS CONTROL BILL
A.	Total Carried to collection Weru Substation Page 1	
В.	Total Carried to collection Weru Substation Page 2	
	SUB-TOTAL- WERU SUBSTATION IP- CCTV &ACCESS CONTROL	

### UKUNDA STORES IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	18				
B.	4MP Network PTZ	No.	0				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	1				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet to Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Uku						

	Bill of Quantities Ukunda Stores Page 2							
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers	
A.	Allow for cabling, ducting, poles/brackets and necessary accessories	LOT	1					
В.	Network Devices accessories & cabinets - 1 Edge switch	LOT	1					
C.	3 KVA online UPS	NO	1					
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1					
E.	Client Workstation	LOT	1					
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1					
G.	Biometric Access Control Cards	No.	200					
	Total Carried to collection Ukunda Stores Page 2							

	SUMMARY PAGE UKUNDA STORES IP- CCTV &ACCE QUANTITIES	SS CONTROL BILL OF
A.	Total Carried to collection Ukunda Page 1	
В.	Total Carried to collection Ukunda Page 2	
	SUB-TOTAL- UKUNDA IP- CCTV &ACCESS CONTROL	

### MWATATE SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	18				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
H.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Mw						

	Bill of Quantities Mwatate Substation Page 2									
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers			
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1							
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1							
C.	3 KVA online UPS	NO	2							
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1							
E.	Client Workstation	LOT	1							
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1							
G.	Biometric Access Control cards	No.	100							
	Total Carried to collection Mwatate Substation Page 2									

	SUMMARY PAGE MWATATE SUBSTATION II BILL OF QUANTITIES	P- CCTV &ACCESS CONTROL
A.	Total Carried to collection Mwatate Substation Page 1	
В.	Total Carried to collection Mwatate Substation Page 2	
	SUB-TOTAL- MWATATE SUBSTATION IP- CCTV &ACCESS CONTROL	

### MAKANDE SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	2				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
Е.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
H.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Mal						

	Bill of Quantities Makande Substation Page 2									
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers			
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1							
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1							
C.	3 KVA online UPS	NO	2							
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1							
E.	Client Workstation	LOT	1							
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1							
G.	Biometric Access Control cards	No.	100							
	Total Carried to collection Makande Substation Page 2									

	SUMMARY PAGE MAKANDE SUBSTATION IP- BILL OF QUANTITIES	- CCTV &ACCESS CONTROL
A.	Total Carried to collection Makande Substation Page 1	
В.	Total Carried to collection Makande Substation Page 2	
	SUB-TOTAL- MAKANDE SUBSTATION IP- CCTV &ACCESS CONTROL	

### MTONDIA SUBSTATION IP- CCTV & ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome Camera	No.	16				
В.	4MP Network PTZ	No.	2				
C.	16MP 180° Network Camera	No.	1				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
H.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Mto						

	Bill of Quantities Mtondia Substation Page 2									
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers			
A.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1							
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1							
C.	3 KVA online UPS	NO	1							
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1							
E.	Client Workstation	LOT	1							
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1							
G.	Biometric Access Control cards	No.	100							
	Total Carried to collection Mtondia Substation Page 2									

	SUMMARY PAGE MTONDIA SUBSTATION IP- OBILL OF QUANTITIES	CCTV &ACCESS CONTROL
A.	Total Carried to collection Mtondia Substation Page 1	
В.	Total Carried to collection Mtondia Substation Page 2	
	SUB-TOTAL- MTONDIA SUBSTATION IP- CCTV &ACCESS CONTROL	

### JOMVU SUBSTATION IP- CCTV &ACCESS CONTROL

No	Item Description	Unit	QTY	Count ry of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
A.	5MP Varifocal Dome/Bullet Camera	No.	16				
В.	4MP Network PTZ	No.	1				
C.	16MP 180° Network Camera	No.	2				
D.	32-ch NVR	No.	1				
E.	HikCentral or Genetec Video License (per Camera).	No.	19				
F.	IP Access Control System 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 HIKVISION OR GENETEC network (Per Door)	No.	6				
G.	43 Inch 1080P LED Monitor C/W mount accessories	No.	1				
Н.	Gig Ethernet To Gig rack- mount Fiber optic Media Converter 20km Range industrial type	No.	2				
	Total Carried to collection Jor						

	Bill of Q						
No	Item Description	Unit	QTY	Country of origin	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Part Numbers
Α.	Allow for cabling, ducting, brackets, poles and necessary accessories fabrications	LOT	1				
В.	Network Devices accessories &cabinets-3 Edge switches	LOT	1				
C.	3 KVA online UPS	NO	2				
D.	Allow for integration of the system to existing HIKVISION OR GENETEC software	LOT	1				
E.	Client Workstation	LOT	1				
F.	Installation, Testing and Commissioning to client satisfaction	LOT	1				
G.	Biometric Access Control cards	No.	100				
	Total Carried to c						

	SUMMARY PAGE JOMVU SUBSTATION IP- CCTV	&ACCESS CONTROL
	BILL OF QUANTITIES	
A.	Total Carried to collection	
	Jomvu Substation Page 1	
В.	Total Carried to collection	
	Jomvu Substation Page 2	
	SUB-TOTAL- JOMVU	
	SUBSTATION IP- CCTV &ACCESS	
	CONTROL	

### SCHEDULE OF MAINTENANCE LOT 4: INSTALLATION OF CCTV MAJOR STORES & OFFICES

Item	Description	Unit	Qty	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Excl. (Kes)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		
	TOTAL PPCBL Incl. & VAT Ex	xcl.			
	ADD 16% VAT				
	GRAND-TOTAL PPCBL Incl. &	& VAT	Incl.		

#### NB:

To be done after one year warranty of servicing during period upon Approval by Kplc.

## SUMMARY PAGE BILL OF QUANTITIES LOT 4: INSTALLATION OF CCTV MAJOR STORES & OFFICES

# SUMMARY PAGE BILL OF QUANTITIES LOT 4: INSTALLATION OF CCTV MAJOR STORES & OFFICES BILL OF QUANTITIES: COAST REGION

No.	Description	Total Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Incl. (Kes)
a)	Total Carried to Collection Weru substation		
b)	Total Carried to Collection Ukunda Stores		
c)	Total Carried to Collection Mwatate substation		
d)	Total Carried to Collection Makande substation		
e)	Total Carried to Collection Mtondia Substation (Coast)		
f)	Total Carried to Collection Jomvu Substation		
g)	Factory Assessment and pre-installation Training	3,000,000.00	
h)	Project Management	1,500,000.00	
j)	Manufacturers Training-3no technical persons	3,000,000.00	
k)	Contingency	1,000,000.00	
	Total PPCBL Incl. & VAT Excl		
	ADD 16% VAT		
	Grand-Total PPCBL Incl. & VAT Incl. (To Form of Tender)		

## LOT 5: INSTALLATION OF INTEGRATED SECURITY SYSTEMS BILL OF QUANTITIES

#### LANET DEPOT BILL OF QUANTITIES

	INTEGRATED SECURITY SYSTEMS(ISS) PRICE SCHEDULE							
INTE	GRATED SECURITY SYSTEMS(ISS) F	BILL OF QU	J <b>ATITI</b>					
Item No.	Description	Unit Of measure	QTY	Unit Price (PPCBL Incl.) & Vat Excl. (Kes)	Total Price (PPCBL Incl.) & Vat Excl. (Kes)			
	CCTV System							
a)	5 MP Varifocal Dome/Bullet Camera	No	55					
b)	PTZ Camera	No	6					
c)	180° 20mpx Network Camera	No	4					
d)	64-ch NVR	No	2					
e)	Video License (per Camera).	No	80					
f)	Video Analytics Licenses (per Camera).	No	80					
g)	Video Analytics server with necessary license	No	1					
h)	IP Access Control System per door and fully integrated into the ISS	No	10					
j)	Cabling, ducting, brackets, poles and necessary accessories fabrications	Item	1					
k)	Wall Mounted Camera Poles	No	10					
1)	Free standing Camera Poles	No	6					
m)	Network Devices accessories & cabinets	Item	1					
n)	1.5 KVA true online UPS	No	4					
p)	3 KVA true online UPS	No	2					
q)	6 KVA true online UPS	No	1					
r)	Client Workstation	No	2					
s)	40 Inch 1080P LED Monitor C/W mount accessories	No	1					
t)	3X3 Video wall	No	1					
u)	Integration of the system to existing Central Management software	Item	1					
v)	Re-cabling and reconfiguring existing cameras into the new ISS	Item	1					
w)	Installation, configuration, Testing & commissioning.	Item	1					
	Total Carried to collection BQ Page 1							

Item No.	Description	Unit Of measure	QTY	Unit Price (PPCBL Incl.) & Vat Excl. (Kes)	Total Price (PPCBL Incl.) & Vat Excl. (Kes)
	Gate Management system				
a)	Sliding Gate	No	2		
b)	Swing Gate	No	1		
c)	Arm barrier	No	2		
d)	Full height turnstile	No	1		
e)	Pneumatic Bollards (K-4)	No	2		
f)	manual bollards (K-4)	No	1		
g)	Red-Green traffic light	No	4		
h)	Gate Control unit	No	1		
j)	UVSS system for one lane	No	1		
k)	UVSS Management Station	No	1		
1)	Walkthrough Metal Detector	No	1		
m)	Luggage Screening System	No	1		
n)	LPR Camera Unit	No	1		
p)	LPR Controller	No	1		
q)	LPR Integration to ACS	Item	1		
r)	Intercom indoor and outdoor panel	No	1		
s)	intercom desk station	No	1		
	Trada de la				
	Total Carried to collection BQ Page 2	1			

INTEGRATED SECURITY SYSTEMS(ISS) BILL OF QUATITIES PAGE 3							
Description	Unit Of measure	QTY	Unit Price (PPCBL Incl.) & Vat Excl. (Kes)	Total Price (PPCBL Incl.) & Vat Excl. (Kes)			
SMART Fence							
Welded Mesh Fence on a ground Complete with all civil works	M	1,700					
Welded Mesh Fence on a wall Complete with all civil works	M	400					
Vibration Detection System	M	1,700					
Vibration System Field Controllers	M	4					
Vibration Fence Computer & Software	No	1					
Masonry Wall	M	1300					
8-lines Electric Fence atop the wall complete with Poles, HT wires, insulators & Earthing and painting as per IEE standards.	M	1,700					
8-10Joules Electrical Fence Energizer	No	4					
Fence Status Monitor Light	No	6					
GSM Module	No	6					
Total Carried to collection BQ Page 3							
	SMART Fence Welded Mesh Fence on a ground Complete with all civil works Welded Mesh Fence on a wall Complete with all civil works Vibration Detection System Vibration System Field Controllers Vibration Fence Computer & Software Masonry Wall 8-lines Electric Fence atop the wall complete with Poles, HT wires, insulators & Earthing and painting as per IEE standards. 8-10Joules Electrical Fence Energizer Fence Status Monitor Light GSM Module	Description  Unit Of measure  SMART Fence  Welded Mesh Fence on a ground Complete with all civil works  Welded Mesh Fence on a wall Complete with all civil works  Vibration Detection System  Vibration System Field Controllers  M  Vibration Fence Computer & Software  Masonry Wall  8-lines Electric Fence atop the wall complete with Poles, HT wires, insulators & Earthing and painting as per IEE standards.  8-10Joules Electrical Fence Energizer  No  Fence Status Monitor Light  No  GSM Module  No	Description  Unit Of measure  Welded Mesh Fence on a ground Complete with all civil works  Welded Mesh Fence on a wall Complete with all civil works  Welded Mesh Fence on a wall Complete with all civil works  Vibration Detection System  Vibration System Field Controllers  M  Vibration Fence Computer & Software  Masonry Wall  8-lines Electric Fence atop the wall complete with Poles, HT wires, insulators & Earthing and painting as per IEE standards.  8-10Joules Electrical Fence Energizer  No  Fence Status Monitor Light  No  GSM Module  No  No  No  No	Description  Unit Of measure  Unit Price (PPCBL Incl.) & Vat Excl. (Kes)  Unit Price (PPCBL Incl.) & Vat Excl. (Kes)  Unit Price (PPCBL Incl.) & Vat Excl. (Kes)  Unit Of measure  Unit Of measure  Unit Of measure  Unit Of measure  Unit Price (PPCBL Incl.) & Vat Excl. (Kes)  Unit Price (PPCBL Incl.) & Vat Excl. (Kes)  Included Mesh Fence on a ground  M 1,700  Uibration Detection System  M 1,700  Vibration Detection System  M 1,700  Vibration Fence Computer & Software  No 1  M 1300  S-lines Electric Fence atop the wall complete with Poles, HT wires, insulators & Earthing and painting as per IEE standards.  8-10Joules Electrical Fence Energizer  No 4  Fence Status Monitor Light  No 6  GSM Module  No 6			

	INTEGRATED SECURITY SYSTEMS(ISS) BILL OF QUATITIES PAGE 4						
Item No.	Description	Unit Of measure	QTY	Unit Price (PPCBL Incl.) & Vat Excl. (Kes)	Total Price (PPCBL Incl.) & Vat Excl. (Kes)		
	Intrusion Detection system						
a)	CONTROL PANEL WITH SOFTWARE AND 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	1				
b)	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	10				
c)	CEILING MOUNT MOTION DETECTORS	No	5				
d)	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	5				
e)	4-Channel LONG RANGE ALARM REMOTE RECEIVER KIT Operating voltage 12vdc. Operating range more than 200m radius. Dip-switch coding facility Momentary/latching relay contacts Complete with two remote buttons.	No	5				
f)	Extra Remotes Buttons	No	5				
f)	SIREN KIT Complete unit with built-in strobe 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	4				

g)	PANIC BUTTONS Strong mechanical composition.	No	10	
h)	ADVANCED UNIVERSAL 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)	Guard Monitoring unit Complete with 20 Clocking Points as per the Specifications Fully integrated onto central alarm management software and mission control	No	1	
k)	Cabling, cabinets and associated accessories	Item	1	
1)	Installation, Training testing and commissioning	Item	1	
	Total Carried to collection BQ Page 4			

	INTEGRATED SECURITY SYSTEMS(ISS) BILL OF QUATITIES PAGE 5								
Item No.	Description	Unit Of measure	QTY	Unit Price (PPCBL Incl.) & Vat Excl. (Kes)	Total Price (PPCBL Incl.) & Vat Excl. (Kes)				
	Establishment of Security control /Equipment room								
a)	Provisional sum for Design, Refurbishment of security Control Room inclusive of all building/civil works internally and externally and inclusive or sound proofing.	PC	1	4,000,000.00	4,000,000.00				
b)	Air-conditioning	Item	1						
c)	Electrical and Data provisions	Item	1						
d)	Furniture.	Item	1						
	Integration of all Subsystems into Central Security Management software								
e)	Installation of Central Security Management software and integrating all existing and new subsystems to it including supply of necessary server and hardware.	Item	1						
f)	Factory Assessment and pre-installation Training	Item		6,000,000.00	6,000,000.00				
g)	Project Management	PC		1,500,000.00	1,500,000.00				
h)	Manufacturers Training-3no technical persons	Item		6,000,000.00	6,000,000.00				
j)	Contingency	PC		2,000,000.00	2,000,000.00				
	Total Carried to collection BQ Page 5								

GRAND SUMMARY INTEGRATED SECURI		
OF QUATITIES PAGE 6		
Description	Total Price (PPCBL Incl.) & Vat Excl. (Kes)	Total Price (PPCBL Incl.) & Vat Incl. (Kes)
Total Carried to collection BQ Page 1		
Total Carried to collection BQ Page 2		
Total Carried to collection BQ Page 3		
Total Carried to collection BQ Page 4		
Total Carried to collection BQ Page 5		
Sub total		
TOTAL LOT 1		
	OF QUATITIES PAGE 6  Description  Total Carried to collection BQ Page 1  Total Carried to collection BQ Page 2  Total Carried to collection BQ Page 3  Total Carried to collection BQ Page 4  Total Carried to collection BQ Page 5  Sub-total  Add 16%Vat	Description  Total Price (PPCBL Incl.) & Vat Excl. (Kes)  Total Carried to collection BQ Page 1  Total Carried to collection BQ Page 2  Total Carried to collection BQ Page 3  Total Carried to collection BQ Page 4  Total Carried to collection BQ Page 5  Sub-total  Add 16%Vat

## SCHEDULE OF MAINTENANCE LOT 5: INTEGRATED SECURITY SYSTEMS(ISS)

Item	Description	Unit	Qty	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & VAT Incl. (Kes)
1	Allow maintenance for a period of 1 (one) year done quarterly as per Kplc SLA.	No	4		
	TOTAL PPCBL Incl. & VAT Ex	kcl.			
	ADD 16% VAT				
	GRAND-TOTAL PPCBL Incl. &	& VAT			

#### NB:

To be done after one year warranty of servicing during period upon Approval by Kplc.

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

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.

## 1.1 PROPOSED LIST OF SPARES FOR LOT1, LOT 2, LOT 3, LOT 4 AND 5

RECOMMENDED SCHEDULE OF SPARE PARTS						
NO.	ITEM	UOM	QT Y	Unit Price (PPCBL Incl.) & VAT Excl. (Kes)	Total Price (PPCBL Incl.) & DDP VAT Incl. (Kes)	
	CCTV REQUIREMENT (LOT1, LOT 2, LOT 3, LOT 4 & LOT 5)					
1.	NVR 16 Channel	No	1			
2.	NVR 32 Channel	No	1			
3.	NVR 50 Channel	No	1			
4.	20 MP H.264 One Omni Directional	No	1			
5.	4 MP Bullet indoor/outdoor IP camera	No	1			
6.	5 MP Bullet indoor/outdoor IP (Color Night Vision camera	No	1			
7.	5 MP Dome indoor/outdoor IP camera	No	1			
8.	2 MP PTZ indoor/outdoor IP camera	No	1			
9.	4 MP 180° indoor/outdoor Panoramic IP	No	1			
10.	8 MP 360° indoor/outdoor IP camera	No	1			
11.	20 MP H.264 One Omni Directional Indoor/Outdoor Dome IP Cameras (B type)	No	1			
12.	Video monitor 32"	No	1			
13.	Video monitor 42"	No	1			
14.	1TB Hard Disk	No	1			
15.	2TB Hard Disk	No	1			
16.	3TB Hard Disk	No	1			
17.	4TB Hard Disk	No	1			
18.	8TB Hard Disk	No	1			
19.	10 TB Hard Disk	No	1			
20.	12 TB Hard Disk	No	1			
21.	GENTEC CCTV Archiver	No	1			
22.	Client workstation	No	1			
	LICENSES, SMA AND TRAINING (LOT1, LOT 2, LOT 3, LOT 4 AND 5)	No	1			
23.	SMA for 2 years for KPLC Central Management software	No	1			
24.	SMA for 3 years for KPLC Central Management software	No	1			
25.	SMA for 5 years for KPLC Central Management software	No	1			
26.	SMA for UVSS system	No	1			
27.	CCTV Camera license per camera	No	1			

	Access Control License mon door	No	1		
28.	Access Control License per door		1		
29.	SDK License for Access control System	No	1		
30.	Access door controller License per door	No	1		
31.	500 data points license	No	1		
32.	1000 data points license	No	1		
33.	User license per user	No	1		
	Integration of a site to Advancis including any	No	1		
34.	required CAD Drawing				
	Establishment of interface between Central	No	1		
2.5	Management software one site with 8-50				
35.	Cameras  Establishment of interface between Central	No	1		
	Management software one site with 50-100	INO	1		
36.	Cameras				
	Establishment of interface between Central	No	1		
	Management software, Access control and				
37.	SAP Database				
20	Technical training for Access Control for one	No	1		
38.	person Technical training for Video Management	No	1		
39.	systems for one person	INO	1		
40.	Technical training for SMS for one person	No	1		
40.	NETWORKING REQUIREMENT(LOT1,				
	LOT 2, LOT 3 ,LOT 4 AND 5)				
41.	Core Network Switch-24port	No	1		
42.	Main Network switch 24 Port	No	1		
43.	Local switch 24 Port	No	1		
44.	Switch PoE 8 Port	No	1		
	24 Port Patch Panel with I-O Ports	No	1		
45.	Patch Cord Cable 1- Meter Cat-6	No	1		
46.	Patch Cord Cable 3- Meter Cat-6	No	1		
47.					
48.	Single Mode Fiber Patch Cord LC- LC/ SC-SC/ SC-LC, 1 or 3M, Duplex	No	1		
	Multi-Mode Fiber Patch Cord LC- LC/ SC-SC/	No	1		
49.	SC-LC, 1 or 3M, Duplex	2.7			
50.	Multiprotocol Network Tester (Set)	No	1		
51.	Coaxial Cable (1000ft)	M	1		
52.	UTP Cat 6 Cable (1000ft)	M	1		
	Shielded UTP Cat6 Outdoor Direct Burial	M	1		
53.	23AWG Pure Copper (1000ft)	D1-4	1		
54.	RJ45 Connectors (100 Pack)	Pkt	1		
55.	RJ45 Coupler, 2 Port, UTP	No	1		
56.	PoE Extender	No	1		
57.	PoE Injector for IP cameras	No.	1		
58.	Armored outdoor direct burial 4-6 core fiber optic cable (1000ft)	Roll	1		
	Network Media Converter and associated	No.	1		
59.	network accessories				
	SFP Transceiver Module (SMF, 1550nm,	No.	1		
60.	20/50/100km, LC, DOM) Cisco, Max Data Rate: >1000Mbps and associated fiber network				
00.	raic 10001v10ps and associated fivel lictWOIK			1	

	accessories			
61.	White Conduits 25mm	No	1	
62.	White Conduits 32mm	No	1	
63.	White Bends 25/32mm	No	1	
64.	White Connectors 25/32mm	No	1	
65.	Saddle clips (100 pack)	Pkt	1	
63.	Screws (100-count box of 1 <sup>3</sup> / <sub>4</sub> -inch- long	Pkt	1	
66.	screws)	1 Kt	1	
	Galvanized Metallic Trunking 100mm X	No	1	
67.	50mm (3m)	3.7	1	
68.	PVC Cable Trunk 16 X 25 mm White duct (3m)	No	1	
69.	Camera Stainless Steel Pole	No.	1	
07.	ACCESS CONTROL (LOT1, LOT 2, LOT			
	3 ,LOT 4 AND 5)			
70	Door Access Controller Compatible with	No	1	
70.	Genetec Access Controller Door Interface	No.	1	
71.	Access Controller Door	No.	1	
72.	Access Control Cards	No.	1	
73.	Biometric/Card Reader Fingerprint	No.	1	
74.	Biometric/Card Reader Facial	No.	1	
75.	Smart Card Reader- Proximity	No.	1	
76.	Access Control Management/Application	No.		
77.	Software	No.	1	
78.	Access control staff card Printer	No	1	
79.	Control Room System Printer	No	1	
80.	Genetec Synergies Master Controller (SMC)	No.	1	
81.	Single Door Maglock	No.	1	
82.	Double Door Maglock	No.	1	
83.	Emergency Release Button	No.	1	
84.	Key Switch	No.	1	
	LICENSING REQUIREMENT (LOT1,			
	LOT 2, LOT 3, LOT 4 AND 5)			
85.	Federation License (general)	No	1	
86.	3 <sup>rd</sup> part integration License per workstation	No.	1	
87.	License per operator/user workstation	No.	1	
88.	Video analytics per channel	No.	1	
89.	Incident management module license	No.	1	
90.	Industrial IOT License	No.	1	
91.	Logbook License	No.	1	
92.	1no Door License (general price, including integration)	No.	1	
93.	1no IP Camera License (general price, including integration)	No	1	
94.	1no Access Door controller SDK License (general price, including integration)	No	1	
95.	1no Access control reader SDK License (general price, including integration	No	1	

96.	1no Alarm input License (general price, including integration			
97.	Repair network switch	No.	1	
98.	Optical drive (HDD)	No.	1	
99.	Power supply unit	No.	1	
100.	Processor and heat sink	No.	1	
100.	System board (Mother Board)	No.	1	
101.	Fan	No.	1	
102.	Drive backplane	No.	1	
103.	Memory module (RAM)	No.	1	
104.	NIC Card	No.	1	
105.	Access control staff card Printer Ribbon	No	1	
107.	Control Room System Printer	No	1	
108.	Control Room System Printer ink 200ml	No	1	
109.	Renovation/repair of raised floor per 600mm X 600mm with associated accessories	Sq mm (600X6 00)	1	
110.	Falls Seiling renovation/replacement per 600mm X 600mm with associated accessories	Sq mm (600X6 00)	1	
111.	Aluminum frame gypsum partition pers square meter	Sq meter	1	
112.	Door Hingers	No.	1	
113.	Aluminum Door with accessories	No.	1	
114.	Aluminum Double Door with accessories	No.	1	
	CONTROL ROOM FUNITURE (LOT1, LOT 2, LOT 3, LOT 4 AND 5)			
115.	Control Room Chair	No.	1	
116.	Control Room table	No.	1	
	AIR CONDITIONER (AC) (LOT1, LOT 2, LOT 3, LOT 4 AND 5)			
117.	Complete set of Air Conditioner AC	No.	1	
118.	AC Condenser Unit	No.	1	
119.	AC Condenser Split Unit	No.	1	
120.	AC Drainage Pump	No.	1	
121.	AC Remote Control	No.	1	
122.	Refilling of AC gas per refill per AC	No.	1	
	EMERGENCY RESPONSE (LOT1, LOT 2, LOT3, LOTT 4 AND 5)			
123.	Emergency repair for a call/ticket per technician per day (installation and configurations of key components)	No.	1	
124.	Support service for a call/ticket per casual laborer per day (installation of key components)	No.	1	
125.	Emergency repair/meeting for a call/ticket per	No.	1	
126.	T	No.	1	

	aniana inta aniatina annun annlinationa fan a			
	arises into existing server applications for a call/ticket per one			
	technician per day			
	Unscheduled service per site as per the	No.	1	
127.	description in schedule of requirement under			
	0.0. 3.5.1	No.	1	
128. 129.	7 11 777 1 1 7 7 7 7 7 7 7 7 7 7 7 7 7	No.	1	
130.		No.	1	
130.	Cordless Rotary Hammer Drill (Includes 20-	No	1	
	Volt Li-ion Rechargeable Battery, Fast	110		
	Charger, SDS Plus Hammer Drill, Set of drill			
	bits, Heavy Duty Brushless			
131.		3.7		
132.	- 1 1 1	No.	1	
133.		No.	1	
134.		No.	1	
135.		No.	1	
136.	Windows antiviruses complete with license (for 1No. PC)	No.	1	
137.	Multiprotocol Network tester (Pair)	No.	1	
138.	A 177.1	No	1	
139.	4 core Alarm cable (100m/Roll)	Roll	1	
140.	Speaker 1.5mm sq. (70/0.15) cable	M	1	
140.	2.5mm sq Stranded Twin with Earth cable	Roll	1	
141.	(100m/Roll)			
142.	2.5mm sq PVC CU Cable 3 Core	M	1	
143.	2.5mm sq PVC CU Cable S/C (100m/Roll)	Roll	1	
144.		Roll	1	
145.	6.0mm sq PVC CU Cable S/C (100m/Roll)	Roll	1	
146	4.0mm sq PVC CU Armoured Cable 2 Core (100m/Roll)	Roll	1	
110	13A Socket 2-gang DP Switched Plug Socket	No	1	
147.				
148.		No	1	
149.	Amalgamating Tape (Rubber splicing tape)	No	1	
150.		No	1	
151.	UPS 1.5KVA	No	1	
152.	UPS 3KVA	No	1	
153.	UPS 6KVA	No	1	
154.	UPS 10KVA	No	1	
155.	7AH 12V battery	No	1	
156.	8A ,12V Power supplies	No	1	
157.	12-15 A ,12V Power supplies	No	1	
158.	Power supply transformer 12v	No	1	
	Supply and installation of 8m	No.	1	
159.	Camera/light Stainless Steel Pole	NI	1	
160	LED Flood lights 50W (with brackets)	No.	1	
100.	orwene)	1		1

	LED Flood lights 100W (with	No.	1		
161.					
1.60	12U × Depth 1000mm Wall Mount Cabinet	No.	1		
162.	(mounting brackets) Outdoor Box (Measurement 500x500x250 mm	NO	1		
	minimum, 1.2mm Galvanized Steel, Powder	NO	1		
	Coating, Corrosion Resistance, sealed and				
	dustproof; IP54, Built in Converter Fixed				
	Slots, Air Switch Rail and Fixed Socket				
163	Position, clear acrylic inspection window)				
105.	SECURITY LIGHTS (LOT1, LOT 2, LOT				
	3, LOT 4 AND 5)				
164.	1000 watts Security lights with solar	No.	1		
165.	1000 watts Security lights	No.	1		
166.	300 watts Security lights with solar	No.	1		
167.	300 watts Security lights	No.	1		
168.	200 watts Security lights with solar	No.	1		
169.	<b>^</b>	No.	1		
170.	Photocell Switch	No.	1		
171.	Security light 6 Meter Pole	No.	1		
172.	600X600 ceiling lights	No.	1		
173.	Lights Dimmer Switch	No.	1		
	ELECTRIC FENCE (LOT 5-ISS SPARES)				
174.	3 Joule Fence Energizer	NO	1		
175.	-	NO	1		
	8 Joule Fence Energizer	NO	1		
177.		NO	1		
	Energizer Key Switch	NO	1		
	Energizer ON/OFF Key	NO	1		
	D.C. siren	NO	1		
	D.C. strobe light	NO	1		
182.		NO	1		
183.		NO	1		
184.		NO	1		
185.	•	NO	1		
186.	1.6/2.0mm Solid galvanized HT wire (1000m)	Roll	1		
	1.6/2.0mm Solid stainless steel HT wire				
187.		Roll	1		
188.	1 /	NO	1		
	INSULATORS & EARTHING				
	Flat/round bar insulator	NO	1		
190.		NO	1		
191.	1 0	NO	1		
192.	11	NO	1		
193.	Earth Rod INTRUDER ALARMS (LOT 5-ISS	NO	1		
	SPARES)				
194.	Control Panel	NO	1		
			•	•	

195.	Zone Expander	NO	1	
196.	PIR Detector	NO	1	
197.	Ceiling Mount PIR Detector	NO	1	
	Siren	NO	1	
199.	GSM Module	NO	1	
	UVSS SPARE PART (LOT 5-ISS SPARES)			
200.	Under Vehicle Scanning system (UVSS)	No	1	
200.	system			
201.	Under Vehicle Scanning system (UVSS) with similar features to Uveye system	No	1	
202.		No	1	
203.	8 8	No	1	
204.	O-ring rubber	No	1	
	Bolt and nut (number 17)	No	1	
206.	Loop sensor cable	No	1	
207.	Workstation computer	No	1	
208.	PC quad port NIC card	No	1	
209.	24V 10A power supply	No	1	
210.	Loop detector	No	1	
211.	Flir thermal Camera	No	1	
212.	3KVA online double conversion UPS	No	1	
213.	Cat6A keystone connectors	No	1	
214.	Patch cord 1 meter	No	1	
215.	Graphics card 16GB	No	1	
	High beam LED light bar	No	1	
217.		No	1	
218.	Cat 7 cable	No	1	
219.	UVSS Multicore communication cable	No	1	
	PIDS SPARE PART (LOT 5-ISS SPARES)			
220.	PIDS Detector Line 3M Long	No	1	
	Lantronix	No	1	
	PIDS Motherboad Qc 2019	No	1	
	Power Supply 12V 15A	No	1	
	PIDS Connectors	No	1	
	AUTOMATIC BOLLARDS (LOT 5-ISS SPA	ARES)	<b>!</b>	
225	Down limit switch	No	1	
	Up limit switches	No	1	
227.	•	No	1	+
	Old K4 LED strips	No	1	
229.	•	No	1	
	Side screws M8	No	1	†
231.		No	1	<del> </del>
	DIN 7991-M8X20	No	1	
	O-rings	No	1	
	Solenoids valves	No	1	
	One-way valves	No	1	
	Pressure valves	No	1	+
236.	riessure vaives	110	1	

227	D 11 1 1 24 1	No	1	
	Bollard relays 24vdc	No	1	
	Loop detectors	No	1	-
	24 VDC 10A power supply	No		
	12VDC 6.3A power supply	No	1	-
241.	1 11 2	No		
	Bollard magnetic solenoid		1	
	Bollard led lens	No	1	
	Bollard cup	No	1	
	Bollard backup batteries	No	1	
	Rubber rings	No	1	
247.		No	1	
248.	Piston	No	1	
249.	Traffic light bulbs	No	1	
250.	Arm barrier limit switches	No	1	
251.	Arm barrier arm(SQUARE)	No	1	
252.	Bollard shrink tubes	No	1	
253.	Bollard control panel	No	1	
254.	Bollard push button	No	1	
255.	Remote	No	1	
256.	Receiver	No	1	
257.	centurion d10 motor	No	1	
258.	centurion d20 motor	No	1	
259.	gate rolling wheels	No	1	
260.		No	1	
261.	Batteries 12v 7.2ah	No	1	
262.	IR beam detectors	No	1	
	X-RAY BAGGAGE SCANNER (LOT 5-ISS SI	PARES)		-
	X-Ray Baggage Scanner system HI Scan 7551i	No	1	-
	X-Ray Baggage system with same	No	1	
	functionality as Scanner HI Scan 7551i or			
264.	1	NT.	1	
265.	X-ray Generator HiScan 7551i	No	1	
266.		No	1	
267.	Control Panel for Hi-Scan 7551i	No	1	
268.	Power Supplies for HI Scan 7551i	No	1	
269.		No	1	
270.	Conveyor Belt system for HI Scan 7551i	No	1	
271.	proximity sensors	No	1	
272.	High-voltage cables	No	1	
273.	X-ray tube	No	1	
274.	circuit breakers	No	1	

Name of Tenderer	Signature & Official Stamp
ivallic of Tellucici	Signature & Official Stamp

#### 5 MP OUTDOOR/INDOOR CAMERAS

Feature	Technical Specification	Bidder's Response
5 MEGAPIXEL ENVIR	ONMENTAL IP OUTDOOR/INDOOR FIXED DOME/BU	
CAMERAS WITH WDI	₹	
Max Resolution	Up to 5 Megapixel (MPx) Resolution	
Compatibility	Compatible with Unified Genetec and Hikcentral software	
Image Sensor	1/3.2-inch CMOS	
Lens	3-9 mm, Varifocal	
IR Illumination	Integrated Adaptive IR Illumination	
Focus /Zoom	Auto focus, remote zoom	
Compression	H.264 and MJPEG Compression Capability	
Day/Night	True Day/Night Capability with ability to display colour at night with minimum lighting.	
Wide Dynamic Range	65 dB	
Illumination	0.03 lux @ f/1.2	
Backlight Compensation	Auto multi-matrix white balance compensation to restore	
Dackinghi Compensation	objects to their true color	
Supplement Light	IR, White supplement light 40m distance	
- Promont Digit	,me supprement ugar tom distante	
Max IPS at Max	Up to 30 Images per Second (IPS) at 1080p	
Resolution		
Video Streams	2 configurable streams	
Audio	Bidirectional	
Analytics	Shall support onboard video analytics like motion	
	detection, camera sabotage, people/Vehicle analysis e.g	
	counting, sorting per gender, colour, size, type etc,	
	Perimeter intrusion ,temperature sensing, Scene change	
	detection, audio exception detection, defocus detection, No	
	Line crossing, intrusion, region entrance, region exiting	
	loitering detection, people gathering detection, fast moving detection, parking detection, unattended baggage detection,	
	object removal detection	
	Upload to FTP/NAS/memory card, notify surveillance	
	center, trigger recording, trigger capture, send email,	
	audible warning	
Local Storage	Accessible Edge Storage with Micro SD Card (Up to	
	512GB with micro SDHC or SDXC to record video)	
Power Input	PoE (IEEE 802.3af, Class 3), 24 Vac	
Warranty	3-Year Warranty and Support	
ONVIF	ONVIF Profile S Conformant	
Web Browser	Support latest version for common browsers with Plug-in	
	free live view including but not limited to Chrome, Firefox,	
	Edge, Safari.	

## 20-MP 180 DEG OMNI DIRECTIONAL CAMERA

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	
Compatibility	Compatible with Unified Genetec and Hikcentral	
	software	
Optical Format	1/2.5"	
Pixel Pitch	2.2µm	
Minimum Illumination	Color-0.3 Lux	
	Color Binning -0.15 Lux	
	Day/Night -0.03 Lux, IR sensitive	
Full Field of View	Total:10240 H x 1920 V	
(FOV) Resolution	Per Sensor:2560 H x 1920 V	
1/4 Resolution	Total:5120 H x 960 V	
	Per Sensor:1280 H x 960 V	
Lens	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	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	
Streaming	Multi-streams of at least 8no non-identical streams.	
WDR	Auto switch control adjustment between WDR and LDR	
	modes .70.1dB at Full Resolution	
Audio	Bidirectional with in-built microphones	
Analytics	Shall support onboard video analytics like motion	
	detection, camera sabotage, people/Vehicle analysis e.g.	
	counting, sorting per gender, colour, size, type etc.,	
	Perimeter intrusion ,temperature sensing, Scene change detection, audio exception detection, defocus detection,	
	No Line crossing, intrusion, region entrance, region	
	exiting loitering detection, people gathering detection,	
	fast moving detection, parking detection, unattended	
	baggage detection, object removal detection	
	Upload to FTP/NAS/memory card, notify surveillance	
	center, trigger recording, trigger capture, send email,	
	audible warning	
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	
Dinning Made	filter	
Binning Mode	Binning mode for strong low light performance(24fps-5120x960)	
Casing	Die-cast aluminum chassis with polycarbonate dome	
Casing	bubble	
Data	Compression Type:H.264 (MPEG-4, Part 10)/Motion	
Transmission	JPEG 21 levels of quality	
Warranty	3-Year Warranty and Support	
<b>Motion Detection</b>	Real-time, 1024 detection zones	
<b>Moonlighting Mode</b>	Extended exposure and noise cancellation	
0 0	1	

Simultaneous delivery of full field-of-view and zoomed	
images	
Auto multi-matrix white balance to restore objects to their	
true color	
IR, White supplement light 40m distance	
Unlimited	
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	
Selectable flicker control 50/60 Hz	
Accessible Edge Storage with Micro SD Card (Up to	
512GB with micro SDHC or SDXC to record video)	
Protection Ratings: IP66 water/duct protection rating; IK-	
10 impact-resistant polycarbonate dome	
-40°C (-40°F) to +50°C (122°F)	
0% to 90% (non-condensing)	
0°C (32°F) to +50°C (122°F)	
-40°C (-40°F) to +60°C (140°F)	
Support latest version for common browsers with Plug-in	
free live view including but not limited to Chrome,	
Firefox, Edge, Safari.	
	Auto multi-matrix white balance to restore objects to their true color  IR, White supplement light 40m distance Unlimited  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 Accessible Edge Storage with Micro SD Card (Up to 512GB with micro SDHC or SDXC to record video)  Protection Ratings: IP66 water/duct protection rating; IK- 10 impact-resistant polycarbonate dome -40°C (-40°F) to +50°C (122°F)  0% to 90% (non-condensing) 0°C (32°F) to +50°C (122°F)  -40°C (-40°F) to +60°C (140°F) Support latest version for common browsers with Plug-in free live view including but not limited to Chrome,

### PTZ CAMERA SPECIFICATIONS

Feature	<b>Technical Specification</b>	Bidder's
	-	Response
<b>AUTO DOME IP FULL</b>	HD PTZ CAMERA	
Image Sensor	The HD PTZ camera shall offer a 1/2.8-inch type Exmor CMOS imager	
Compatibility	Compatible with Unified Genetec and Hikcentral software	
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 on-board 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  8. Scene change detection, audio exception detection, defocus detection  9. Other events like No Line crossing, intrusion, region entrance, region exiting loitering detection, people gathering detection, fast moving detection, parking detection, unattended baggage detection, object removal detection  10. Upload to FTP/NAS/memory card, notify surveillance center, trigger recording, trigger capture, send email, audible warning		
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 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"		

Minimum Illumination	Output (4): 1 dry contact relay, 3 open collector/transistor outputs 32 VDC @ 150 ma max.  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	
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 tracking	<ol> <li>Camera shall offer Intelligent Tracking to continuously track an object using pan, tilt, and zoom actions.</li> <li>Camera shall have the ability to follow an object continually when passing behind a privacy mask.</li> <li>Camera shall provide automatic motion tracking using intelligent video analytics.</li> <li>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.</li> <li>Camera shall offer the following control options for</li> </ol>	
	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.  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.  e. 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.	
	moving along the last known trajectory.	
Network Interface	10-Base T/100 Base-TX, auto-sensing, half/full duplex, 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 connection using H.264 and –M-JPEG compression	
Transmission	and bandwidth throttling to efficiently manage	
	bandwidth and storage requirements while delivering	
	outstanding image quality.	
Warranty	3-Year Warranty on replacement, repair and	
haaldiah4	Support  Auto graphic matrix Sections Was a White Delawar	
backlight Compensation	Auto multi-matrix Sodium Vapor White Balance mode that automatically compensate for light from a	
Compensation	sodium vapor lamp to restore objects to their true color	
	2000 K to 10,000 K; ATW, Indoor, Outdoor, AWB	
C I III	Hold, Extended ATW, Manual, Outdoor	
Supplement Light	IR, White supplement light 40m distance	
<b>Preset Positions</b>	256 user defined presets, each with a 20-character title	
Privacy Masking	24 individually configurable privacy with up to 8 masks 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	
Compatibility,	standard ITU-T G.652.	
SMF/MMF	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	Supply with the following:	
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	
	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:  Turbo Mode (manual control): Pan: 0.1°/s to 400°/s Tilt: 0.1°/s to 300°/s  Normal Mode: Pan: 0.1°/s to 120°/s Tilt: 0.1°/s to 120°/s Preposition speed 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         <ul> <li>(5) pre-programmed but configurable user modes.</li> </ul> </li> <li>The pre-programmed modes shall be optimized with the best settings for the following environments:         <ul> <li>a. Outdoor</li> <li>b. Indoor</li> <li>c. Low Light</li> <li>d. Motion</li> <li>e. Vibrant</li> </ul> </li> <li>The HD PTZ camera shall allow users to customize these modes for the specific requirements of the camera site.</li> </ol>	
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 (dripping and light splashing, hosedown and splashing) d) Corrosive agents	
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), 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, noncondensing, 0% to 100% RH, condensing 7	
Web Browser	Support latest version for common browsers with Plug-in free live view including but not limited to Chrome, Firefox, Edge, Safari.	

## NETWORK VIDEO RECORDERS (NVR)

### **16 CHANNEL NVR SPECIFICATIONS**

Feature	Technical Specification	Bidder's Response Yes/No
16 CHANNEL EM MANAGEMENT	IBEDDED NVR SPECIFICATIONS COMPLETE WI SOFTWARE	TH VIDEO
Key Features	<ul> <li>Combined server and workstation in a small appliance designed to secure remote sites quickly and easily.</li> <li>Centralized Genetec/Hikcentral Compatible video surveillance and access control to perform local monitoring and recording, deployed as standalone or as part of a larger, multi-site system.</li> <li>Machine learning endpoint protect</li> <li>Perform video Analytics</li> </ul>	
Model	Rackmount	
IP Video Input	16 video channels and upto 16 readers pre- licensed	
Video Compression	H.264 and greater video compression	
OS	Installed on current Windows or equivalent and compatible with cameras and Central management software	
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	Endpoint protection	

	BlackBerry Protect machine learning antivirus	
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/Comp atibility /operability with other systems	<ul> <li>ONVIV enabled to allow integration and especially with KPLC existing system(GENETIC/Hikcentral)</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>	
Video Analytics/AI Functions	<ul> <li>Shall support Analytics/AI Functions both at Camera and NVR level.</li> <li>Facial recognition(Face picture comparison, human face capture, face picture search) perimeter protection, video structuralization(2MP for 4-16-ch MP, motion detection, ANPR, people counting,</li> <li>Analytics engine shall run an intelligent algorithm, with adjustable mode and performance of each engine</li> </ul>	

	<ul> <li>Allow by Camera and NVR intelligence search (By Camera All channels) in English with ability to process at least 32 pictures per second.</li> <li>Vehicle analytics as follows:         <ul> <li>Automatic Number Plate recognition (ANPR)Cameras: All channels</li> <li>Plate Attributes: Plate number, license plate color, license plate type</li> <li>Vehicle Attributes: Vehicle brand, vehicle color, vehicle type etc.</li> </ul> </li> <li>Graphics Processing Units: at least two Engines.</li> <li>Support all other intelligent analytics/AI Functions as described under Camera specifications.</li> </ul>
Other Auxiliary Interfaces	Auxiliary Interface: Controllable 12 VDC, 1 A power output for external alarm device; The power will be turned on when the alarm output is triggered.  SATA: Support at least 16 SATA interfaces; 3.5-inch HDD  Serial Interface: 1 RS-232, 1 RS-485 (full-duplex)  USB Interface: 2 × USB 2.0 and USB 3.0  Alarm In/Out: 16 input & 9 output

### **32 CHANNEL NVR SPECIFICATIONS**

Feature	Technical Specification	Bidder's Response Yes/No
32 CHANNEL EME MANAGEMENT SO	BEDDED NVR SPECIFICATIONS COMPLETE WITH OFTWARE	( VIDEO
Key Features	<ul> <li>Combined server and workstation in a small appliance designed to secure remote sites quickly and easily.</li> <li>Centralized Genetec/Hikcentral         Compatible video surveillance and access control to perform local monitoring and recording, deployed as standalone or as part of a larger, multi-site system.     </li> <li>Machine learning endpoint protect</li> <li>Perform video Analytics</li> </ul>	
Model	Rackmount	
IP Video Input	32 video channels pre-licensed	
OS	Installed on current Windows or equivalent and compatible with cameras and Central management software	
Video Compression	H.264 and greater video compression	
OS	• 2 x 120 GB SSD RAID-1 configuration	
Channel Capacity	<ul> <li>32 cameras (local viewing)</li> <li>200 Mbps / 32 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	
Connectivity	Allow remote connections	
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/Comp atibility /operability with other systems	<ul> <li>ONVIV enabled to allow integration and especially with KPLC existing system(GENETIC/Hikcentral)</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 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>	
Video Analytics/AI Functions	<ul> <li>Shall support Analytics/AI Functions both at Camera and NVR level.</li> <li>Facial recognition(Face picture comparison, human face capture, face picture search) perimeter protection, video structuralization(2MP for 4-16-ch MP, motion detection, ANPR, people counting,</li> </ul>	

	<ul> <li>Analytics engine shall run an intelligent algorithm, with adjustable mode and performance of each engine</li> <li>Allow by Camera and NVR intelligence search (By Camera All channels) in English with ability to process at least 32 pictures per second.</li> <li>Vehicle analytics as follows:         <ul> <li>Automatic Number Plate recognition (ANPR)Cameras: All channels</li> <li>Plate Attributes: Plate number, license plate color, license plate type</li> <li>Vehicle Attributes: Vehicle brand, vehicle color, vehicle type etc.</li> </ul> </li> <li>Graphics Processing Units: at least two Engines.</li> <li>Support all other intelligent analytics/AI Functions as described under Camera</li> </ul>	
	specifications.	
Other Auxiliary Interfaces	Auxiliary Interface: Controllable 12 VDC, 1 A power output for external alarm device; The power will be turned on when the alarm output is triggered.  SATA: Support at least 16 SATA interfaces; 3.5-inch HDD  Serial Interface: 1 RS-232, 1 RS-485 (full-duplex)	
	USB Interface: 2 × USB 2.0 and USB 3.0 Alarm In/Out: 16 input & 9 output	

### **64 CHANNEL NVR SPECIFICATIONS**

Feature	Technical Specification	Bidder's Response Yes/No
64 CHANNEL EMBEDDED NVR SPECIFICATIONS COMPLETE WITH VIDEO MANAGEMENT SOFTWARE		
Key Features	<ul> <li>Combined server and workstation in a small appliance designed to secure remote sites quickly and easily.</li> <li>Centralized Genetec/Hikcentral Compatible video surveillance and access control to perform local monitoring and recording, deployed as standalone or as part of a larger, multisite system.</li> <li>Machine learning endpoint protect</li> <li>Perform video Analytics</li> </ul>	
Model	Rackmount	
IP Video Input	Up to 64 cameras and 64 readers (local/Recorded viewing)	
Video Compression	H.264 and greater video compression	
OS	Installed on current Windows or equivalent and compatible with cameras and Central management software	
Channel Capacity	<ul> <li>100 Mbps / 64cameras (local viewing)</li> <li>200 Mbps / 64 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	
Connectivity	Allow Remote Connection	
Processor	• Intel® x Core i9	
Peripherals	• 1x USB 2.0 + 2x USB 3.0	
Display	• 1x HDMI + 1x DisplayPort	

	• 1x USB-C 3.1 - iGFX Port	
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/Comp atibility /operability with other systems	<ul> <li>ONVIV enabled to allow integration and especially with KPLC existing system(GENETIC/Hikcentral)</li> <li>Shall allow third party systems operations.</li> </ul>	
Warranty:	3-Years warranty with 1-year advance replacement	
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 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>	
Video Analytics/AI Functions	<ul> <li>Shall support Analytics/AI Functions both at Camera and NVR level.</li> <li>Facial recognition(Face picture comparison, human face capture, face picture search) perimeter protection, video structuralization(2MP for 4-16-ch MP, motion detection, ANPR, people counting,</li> </ul>	

	<ul> <li>Analytics engine shall run an intelligent algorithm, with adjustable mode and performance of each engine</li> <li>Allow by Camera and NVR intelligence search (By Camera All channels) in English with ability to process at least 32 pictures per second.</li> <li>Vehicle analytics as follows:         <ul> <li>Automatic Number Plate recognition (ANPR)Cameras: All channels</li> <li>Plate Attributes: Plate number, license plate color, license plate type</li> <li>Vehicle Attributes: Vehicle brand, vehicle color, vehicle type etc.</li> </ul> </li> <li>Graphics Processing Units: at least two Engines.</li> <li>Support all other intelligent analytics/AI Functions as described under Camera specifications.</li> </ul>
Other Auxiliary Interfaces	Auxiliary Interface: Controllable 12 VDC, 1 A power output for external alarm device; The power will be turned on when the alarm output is triggered.  SATA: Support at least 16 SATA interfaces; 3.5-inch HDD  Serial Interface: 1 RS-232, 1 RS-485 (full-duplex)  USB Interface: 2 × USB 2.0 and USB 3.0  Alarm In/Out: 16 input & 9 output

## **LCD MONITORS 32 INCHES**

Feature	Technical Specification	Bidder's Response
Display		
Screen Size	32 inch	
Active Display Area	698.4 (H) mm × 392.85 (V) mm	
Resolution	1920 × 1080	
Backlight	D-LED	
Pixel Pitch	0.12125 (H)mm x 0.36375 (V) mm	
Brightness	300 cd/m <sup>2</sup>	

Viewing Angle	178° (H) / 178° (V)		
Color Depth	8 bit		
Contrast Ratio	4000:01:00		
Response Time	8 ms		
Refresh Rate	Typ. 60 Hz, Max. 75 Hz		
Haze	Haze 2 %		
Reliability	7 × 24 H		
Color Gamut	72 % NTSC		
Interface			
Video & Audio Input	VGA × 1, HDMI 1.4 × 1, Audio Output × 1		
Video & Audio Output	Speaker(8Ω 10W) × 2		
Data Transmission Interface	None		
Control Interface	None		
Power			
Power Supply	100~240 VAC, 50/60 Hz		
Power Consumption	≤ 48 W		
Standby Consumption	≤ 0.5 W		
Working Environmen	Working Environment		
Working Temperature	0°C to 40 °C (32 °F to 104 °F)		
Working Humidity	20% to 90% RH (Non-Condensing)		
Storage Temperature	-20 ℃ to 60 ℃ (-4 ℉ to 140 ℉)		
Storage Humidity	10% to 90% RH (Non-Condensing)		

## **LCD MONITORS 42/43 INCHES**

Feature	Technical Specification	Bidder's Response
Display		
Screen Size	42/43 inch	
Active Display Area	950.896 (H) mm × 529.254 (V) mm	
Resolution	1920 ×1080 @60 Hz	
Backlight	D-LED	
Pixel Pitch	0.49005 (H) × 0.49005 (V) mm	
Brightness	300 cd/m2	
Viewing Angle	178° / 178°	
Color Depth	8 bit	
Contrast Ratio	4000:01:00	

Response Time	6.5 ms (typ)		
Refresh Rate	60 Hz		
Haze	25%		
Color Gamut	72% NTSC		
Reliability	7 * 24H		
Interface			
Video & Audio Input	VGA × 1, HDMI 1.4 × 1		
Video & Audio Output	LINE OUT × 1, Speaker OUT × 2 ( 8Ω 10W )		
Data Transmission Interface	USB2.0 × 1		
Control Interface			
Power			
Power Supply	100~240 VAC, 50/60Hz, 1.0 A Max		
Power Consumption	≤80W		
Standby Consumption	≤ 0.5 W		
Working Environment			
Working Temperature	0 °C to 50 °C (41 °F to 104 °F)		
Working Humidity	20% to 90% RH (Non-Condensing)		
Storage Temperature	-20 °C to 60 °C (14 °F to 140 °F)		
Storage Humidity	5% to 90% RH (Non-Condensing)		

## **NETWORK MEDIA CONVERTORS**

Feature	Technical Specification	Bidder's Response
General		
Shell	Metal	
Operating Temperature	-20 °C to 60 °C (-4 °F to 140 °F)	
Storage Temperature	-40 °C to 85 °C (-40 °F to 185 °F)	
Operating Humidity	5% to 95% (no condensation)	
Relative Humidity	5% to 95% (no condensation)	
Power Supply	5 V DC, 0.6 A	
Max. Power Consumption	3 W	
Power Consumption in Idle	1.5 W	
Installation Mode	Desk-Mounted	
Surge Protection	4 kV	
Network Parameters		
Ports	1 x 10/100/1000 Mbps RJ45 port and 1 x 1000 Mbps SC fiber optical port	
Switching Capacity	4 Gbps	
Packet Forwarding Rate	2.98 Mpps	
Optical Module Para	meters	
Optical Interface	SC	
Fiber Type	Single-mode bidirectional fiber	
Transmission Distance	20 km	
Wavelength	Tx1310 nm/Rx1550 nm	
Transmit Power	-9 dBm~-3 dBm	
Receiver Sensitivity	≤ -24 dB	

## **CORE NETWORK SWITCH**

Port Number	Feature	Technical Specification	Bidder's Response
MAC Address   32 K	Port Number	24 Gigabit electrical ports and 6 10 Gigabit SFP+ optical port	•
Table   St.   Whole-Device Performance: 168 Gbps	Forwarding Mode	Store-and-forward switching	
Port Performance: 168 Gbps		32 K	
Packet Forwarding   Port Performance: 108 Gbps	Ci4-1-i Ci4	Whole-Device Performance:168 Gbps	
Port Performance: 124.99 Mpps	Switching Capacity	Port Performance:168 Gbps	
Support Console, Telnet, SSH	Packet Forwarding	Whole-Device Performance: 124.99 Mpps	
Support web, http.https	Rate	Port Performance:124.99 Mpps	
Device   Support FTP, TFTP, Xmodem, SFTP		Support Console, Telnet, SSH	
Support SNMP V1/V2c/V3		Support web, http,https	
Support RMON	Device	Support FTP, TFTP, Xmodem, SFTP	
Support NTP	Maintenance	Support SNMP V1/V2c/V3	
Reliability  Support EAPS/MEAPS Support MRD-Ring Support ERPS Support DVRP Support BFD for OSPF Support BFD for OSPF Support BFD for BGP Support GVRP Support GVRP Support GVRP Support GVRP Support GVRP Support Open GVRP Support		Support RMON	
Support EAPS/MEAPS		Support NTP	
Reliability  Support MRD-Ring  Support ERPS  Support VRRP  Support BFD for OSPF  Support BFD for DSPF  Support BFD for BGP  Support GVRP  Support GVRP  Support QNR  Support VLAN based on MAC/ protocol /IP subnet / policy / port  Support Private VLAN  Support I:l and N:l VLAN Mapping functions  Support Index mirroring  Support MAC mirroring  Support MAC mirroring  Support MAC mirroring  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv6 Support Routing, RIPn, OSPFv3  Support Boult Pv6 Support Routing, RIPng, OSPFv3  Support IPv6 Support Routing, RIPng, OSPFv3  Support Boult Pv6 Support Routing including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support STP/RSTP/MSTP	
Reliability  Support ERPS Support VRRP Support BFD for OSPF Support BFD for BGP  Support IEEE 802.1Q (VLAN), 4096 VLAN IDS Support QinQ Support VLAN based on MAC/protocol /IP subnet / policy / port Support Private VLAN Support 1:1 and N:1 VLAN Mapping functions Support local and remote port mirroring Support MAC mirroring Support MAC mirroring Support IPv4/IPv6 ECMP Support IPv4/IPv6 ECMP Support IPv4/IPv6 Routing policy Support IPv4/IPv6 dual stack Support IPv4/IPv6 dual stack Support IPv6 Static routing, RIPn, OSPFv3 Support IPv6 Support IPv6 Static routing, RIPn, OSPFv3 Support IPv6 Support IPv6 Support IPv6 Static routing, RIPn, OSPFv3 Support IPv6 Support IPv6 Support IPv6 Static routing, RIPn, OSPFv3 Support IPv6 Static routing, RIPng, OSPFv3 Support IPv6 Static routing, RIPng, OSPFv3 Support IPv6 Static routing, RIPng, OSPFv3 Support Static routing, RIPng, OSPFv3 Support Support Static routing including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support EAPS/MEAPS	
Support VRRP Support BFD for OSPF Support BFD for BGP  Support BFD for BGP  Support IEEE 802.1Q (VLAN), 4096 VLAN IDS Support GVRP Support QinQ Support VLAN based on MAC/ protocol /IP subnet / policy / port Support Private VLAN Support 1:1 and N:1 VLAN Mapping functions  Support local and remote port mirroring Support flow mirroring Support flow mirroring Support MAC mirroring Support MAC mirroring Support IPv4/IPv6 ECMP Support IPv4/IPv6 Folicy-based routing Support IPv4/IPv6 Routing policy Support IPv4/IPv6 Routing policy Support IPv6 Static routing, RIPng, OSPFv3 Support IPv6 Static routing, RIPng, OSPFv3 Support IPv6 Support IPv6 Static routing, RIPng, OSPFv3 Support IPv6 Support IPv6 Support IPv6 Support IPv6 Support Su		Support MRD-Ring	
Support BFD for OSPF Support BFD for BGP  Support IEEE 802.1Q (VLAN), 4096 VLAN IDS Support GVRP Support QinQ Support VLAN based on MAC/ protocol /IP subnet / policy / port Support Private VLAN Support 1:1 and N:1 VLAN Mapping functions Support local and remote port mirroring Support MAC mirroring Support MAC mirroring Support MAC mirroring Support Static routing, RIP, OSPF,BGP,MPLS Support IPv4/IPv6 ECMP Support VRRP, VRRP v3 Support IPv4/IPv6 Policy-based routing Support IPv4/IPv6 Routing policy Support IPv4/IPv6 dual stack Support IPv6 static routing, RIPng, OSPFv3 Support IPv6 static routing, RIPng, OSPFv3 Support IPv6 Support IPv	Reliability	Support ERPS	
Support BFD for BGP  Support IEEE 802.1Q (VLAN), 4096 VLAN IDS  Support GVRP  Support QinQ  Support VLAN based on MAC/ protocol /IP subnet / policy / port  Support Private VLAN  Support 1:1 and N:1 VLAN Mapping functions  Support local and remote port mirroring  Support flow mirroring  Support MAC mirroring  Support MAC mirroring  Support Static routing, RIP, OSPF,BGP,MPLS  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv6 static routing, RIPn, OSPFv3  Support IPv6 Suppor		Support VRRP	
Support IEEE 802.1Q (VLAN), 4096 VLAN IDS		Support BFD for OSPF	
Support GVRP  Support QinQ  Support VLAN based on MAC/ protocol /IP subnet / policy / port  Support Private VLAN  Support 1:1 and N:1 VLAN Mapping functions  Support local and remote port mirroring  Support Row mirroring  Support flow mirroring  Support MAC mirroring  Support MAC mirroring  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv4/IPv6 dual stack  Support IPv6 Static routing, RIPng, OSPFv3  Support Support Static routing, RIPng, OSPFv3  Support Support Support IPv6 Static routing, RIPng, OSPFv3  Support Suppor		Support BFD for BGP	
VLAN  Support QinQ Support VLAN based on MAC/ protocol /IP subnet / policy / port Support Private VLAN Support 1:1 and N:1 VLAN Mapping functions  Support local and remote port mirroring Support N:4 port mirroring Support flow mirroring Support MAC mirroring Support MAC mirroring Support IPv4/IPv6 ECMP Support IPv4/IPv6 ECMP Support VRRP, VRRP v3 Support IPv4/IPv6 Routing policy Support IPv4/IPv6 dual stack Support IPv4/IPv6 dual stack Support IPv6 static routing, RIPn, OSPFv3 Support Support Support IPv6 Support IPv6 Static routing, RIPng, OSPFv3 Support IPv6 Static routing, RIPng, OSPFv3 Support S		Support IEEE 802.1Q (VLAN), 4096 VLAN IDs	
Support VLAN based on MAC/ protocol /IP subnet / policy / port  Support Private VLAN  Support 1:1 and N:1 VLAN Mapping functions  Support local and remote port mirroring  Support N:4 port mirroring  Support flow mirroring  Support MAC mirroring  Support Static routing, RIP, OSPF,BGP,MPLS  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv6 static routing, RIPng, OSPFv3  Support IPv6 static routing, RIPng, OSPFv3  Support IPv6 Support IPv6 Support IPv6 Routing RIPng, OSPFv3  Support Support IPv6 Static routing, RIPng, OSPFv3  Support Sup		Support GVRP	
Support VLAN based on MAC/ protocol /IP subnet / policy / port  Support Private VLAN  Support 1:1 and N:1 VLAN Mapping functions  Support local and remote port mirroring  Support N:4 port mirroring  Support flow mirroring  Support MAC mirroring  Support IPv4/IPv6 ECMP  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv4/IPv6 dual stack  Support IPv6 Static routing, RIPng, OSPFv3  Support Support Diff-Serv QoS  Support Supp	371 ANI	Support QinQ	
Support 1:1 and N:1 VLAN Mapping functions  Support local and remote port mirroring  Support N:4 port mirroring  Support flow mirroring  Support MAC mirroring  Support Static routing, RIP, OSPF,BGP,MPLS  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv6 static routing, RIPng, OSPFv3  Support Sup	VLAN	Support VLAN based on MAC/ protocol /IP subnet / policy / port	
Port Mirroring  Support local and remote port mirroring  Support N:4 port mirroring  Support flow mirroring  Support MAC mirroring  Support Static routing, RIP, OSPF,BGP,MPLS  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv6 static routing, RIPng, OSPFv3  Support IPv6 static routing, RIPng, OSPFv3  Support Support Diff-Serv QoS  Support 802.1p/DSCP priority mapping  Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support Private VLAN	
Port Mirroring  Support N:4 port mirroring  Support flow mirroring  Support MAC mirroring  Support Static routing, RIP, OSPF,BGP,MPLS  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv6 static routing, RIPng, OSPFv3  Support IPv6 static routing, RIPng, OSPFv3  Support 802.1p/DSCP priority mapping  Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support 1:1 and N:1 VLAN Mapping functions	
Support flow mirroring Support MAC mirroring Support Static routing, RIP, OSPF,BGP,MPLS Support IPv4/IPv6 ECMP Support VRRP, VRRP v3 Support IPv4/IPv6 Policy-based routing Support IPv4/IPv6 Routing policy Support IPv4/IPv6 dual stack Support IPv4/IPv6 static routing, RIPng, OSPFv3 Support Diff-Serv QoS Support 802.1p/DSCP priority mapping Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support local and remote port mirroring	
Support flow mirroring Support MAC mirroring  Support Static routing, RIP, OSPF,BGP,MPLS Support IPv4/IPv6 ECMP Support VRRP, VRRP v3 Support IPv4/IPv6 Policy-based routing Support IPv4/IPv6 Routing policy Support IPv4/IPv6 dual stack Support IPv4/IPv6 static routing, RIPng, OSPFv3  Support Diff-Serv QoS Support 802.1p/DSCP priority mapping Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ	David Minnamina	Support N:4 port mirroring	
Routing  Support Static routing, RIP, OSPF,BGP,MPLS  Support IPv4/IPv6 ECMP  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv6 static routing, RIPng, OSPFv3  Support Diff-Serv QoS  Support 802.1p/DSCP priority mapping  Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ	Port Mirroring	Support flow mirroring	
Routing  Support IPv4/IPv6 ECMP Support VRRP, VRRP v3 Support IPv4/IPv6 Policy-based routing Support IPv4/IPv6 Routing policy Support IPv4/IPv6 dual stack Support IPv6 static routing, RIPng, OSPFv3 Support Diff-Serv QoS Support 802.1p/DSCP priority mapping Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support MAC mirroring	
Routing  Support VRRP, VRRP v3  Support IPv4/IPv6 Policy-based routing  Support IPv4/IPv6 Routing policy  Support IPv4/IPv6 dual stack  Support IPv6 static routing, RIPng, OSPFv3  Support Diff-Serv QoS  Support 802.1p/DSCP priority mapping  Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support Static routing, RIP, OSPF,BGP,MPLS	
Routing  Support IPv4/IPv6 Policy-based routing Support IPv4/IPv6 Routing policy Support IPv4/IPv6 dual stack Support IPv6 static routing, RIPng, OSPFv3  Support Diff-Serv QoS Support 802.1p/DSCP priority mapping Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support IPv4/IPv6 ECMP	
Support IPv4/IPv6 Routing policy Support IPv4/IPv6 dual stack Support IPv6 static routing, RIPng, OSPFv3 Support Diff-Serv QoS Support 802.1p/DSCP priority mapping Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support VRRP, VRRP v3	
Support IPv4/IPv6 dual stack Support IPv6 static routing, RIPng, OSPFv3  Support Diff-Serv QoS Support 802.1p/DSCP priority mapping Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ	Routing	Support IPv4/IPv6 Policy-based routing	
Support IPv6 static routing, RIPng, OSPFv3  Support Diff-Serv QoS  Support 802.1p/DSCP priority mapping  Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support IPv4/IPv6 Routing policy	
Support Diff-Serv QoS Support 802.1p/DSCP priority mapping Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support IPv4/IPv6 dual stack	
Support 802.1p/DSCP priority mapping  Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support IPv6 static routing, RIPng, OSPFv3	
QoS Support Queue scheduling including SP, WRR, WFQ, SP+WRR, SP+WFQ		Support Diff-Serv QoS	
SP+WFQ		Support 802.1p/DSCP priority mapping	
Support Priority marking and remarking	QoS		
		Support Priority marking and remarking	

	Support Traffic shaping	
	Support Congestion avoidance, Tail-Drop and WRED	
	Support 802.1p, TOS, DSCP, and EXP priority mapping	
	Support Port/Flow- based Rate Limiting	
	Support IGMP v1/v2/v3 Snooping	
Multicast	Support IGMP V1/V2/V3	
Mutticast	Support MLD Snooping v1/v2	
	Support MLD v1/v2	
	Support IP-based ACL/MAC-based ACL	
ACL	Support based on MAC Address, IP Address, Ethertype, Protocol Type, VLAN ID, DSCP, 802.1p Priority	
	Support up to 256 ACLs	
Link Aggregation	Support IEEE 802.3ad LACP/static link aggregation	
	Support AAA,TACACS+ Radius Authentication	
	Support 802.1X authentication, MAC authentication, MAC bypass authentication	
	Support to prevent DOS, ARP attack function, ICMP anti attack	
Security	Support binding of IP, MAC, port and VLAN	
	Support MAC authentication	
	Support MAC address filtering	
	Support Broadcast/Multicast/Unknown-unicast Storm Control	
Shell	Iron shell, Fan cooling design	

## **EDGE NETWORK SWITCH**

Feature	<b>Technical Specification</b>	Bidder's Response
Service ports	24×10/100/1000BASE-T ports (POE+), 4×1000Base-X SFP ports.	
Switching capacity	Whole-Device Performance:56 Gbps Port Performance:56 Gbps	
Packet forwarding rate	Whole-Device Performance:41.66 Mpps Port Performance:41.66 Mpps	
Management port	1 Console port	
71	Half-duplex, full-duplex, and auto-negotiation	
Electrical port attribute	MDI/MDI-X	
POE	POE+ with the maximum 30w output power per port	
	LLDP	
	Static MAC configuration	
	Limit of number of MAC addresses to be learned (up to 8K)	
	Port mirroring and traffic mirroring	
Ethernet functions	Port aggregation (up to 24 groups and 8 ports for each group)	
	Port isolation	
	STP/RSTP/MSTP	
	IEEE 802.3ad (dynamic link aggregation) and static port aggregation	
	802.1Q (up to 4K VLAN)	
	Protocol-based VLAN	
	MAC-based VLAN	
VLAN	GUEST VLAN	
	VLAN mapping	
	MVRP	
IP routing	Static routing	
	DHCP Relay	
DHCP	DHCP Client	
	DHCP Snooping	
	IGMP V1/V2/V3 snooping	
	PIM Snooping	
Multicast	Multicast VLAN	
	IPv6 multicast setting	
	SP/WRR/SP+WRR queue scheduling	
QoS	802.1p and DSCP priority mapping	
	Port speed limit	
	ACL on Layer 2, Layer 3 and Layer 4	
ACL	IPv4 and IPv6 ACLs	
	VLAN ACL	
IPv6	IPv6 static routing and dual-stack	
	DHCPv6 Client and DHCPv6 Snooping	
	ND and PMTU	
	IPv6 Ping, IPv6 Telnet, IPv6 SSHv2, and IPv6 domain name resolution	
	Ethernet OAM	
	DLDP	
Reliability	Smart Link	
	Monitor Link	

	Hierarchical user management and password protection
	SSH for a secure encrypted channel for user login
	Specific IP address based FTP logging and password mechanism
	Prevent attacks from ARP, unknown multicast packet, broadcast packet, unknown unicast packet, TTL=1 packet, and protocol packet
Security	MAC address limit
•	IP+MAC+PORT binding
	IEEE 802.1x
	Radius and AAA
	SNMPv3
	Broadcast suppression
	Command line configuration via console/AUX Modem/Telnet/SSH
	Uploading and downloading of FTP, TFTP, and Xmodem, and SFTP files
	SNMP V1/V2c/V3
System management	sFlow
	NQA
	NTP clock
	System operating logs

# 1.5/2KVA & 3KVA ONLINE UPS

Feature	eature Technical Specification				
Capacity	1500/2000VA/1800W	3000VA/2700W			
Nominal Voltage	208/220/230				
Input Voltage					
Range	110~300Vac (176~264	Vac @ 100% load)			
Input Frequency	40~70Hz (50/60Hz	Auto-Sensing)			
Phase	Single P	hase			
Power factor	≥0.99	9			
Output Voltage	208/220/230	/240Vac			
Output Waveform	Pure Sine	wave			
Power factor	0.9				
Output Sockets	IEC panel / EU panel/UK p	anel/US panel Optional			
Output Frequency	Online mode: 46~54  Bat. Mode: (50/6	Hz or 56~64Hz			
Crest factor	3:01	•			
Harmonic distortion (THDv)	3% Linea 5% Non line				
Transfer Time	AC mode to Bat Inverter to Bypass:				
Battery Type	Valve Regulated Lea				
Typical Recharging					
Time	4 hours (To 90% o	4 hours (To 90% of full capacity)			
Capacity (Standard	1277/0				
Unit)	12V/9				
Battery Number	4	6			
DC System Voltage(VDC)	48V	72V			
Charging	1.				
Current(Max.)	1A				
LCD display	Input voltage, Input frequency frequency, Load percentage, Batte & Remaining batte	ery voltage, Inner temperature			
Alarm	Battery mode/Battery low v	voltage /Overload/Fault			
AC Mode	91%	0.92			
Battery Mode	87%	0.88			
Operating					
Temperature	0°C~40				
Storage					
Temperature	-25°C~5				
Humidity Range	20~95%RH @ 0~40°C				
Altitude	<1500m, derating requ				
Noise Level	<55dB at 1	Meter			

## **6KVA ONLINE UPS**

Feature	Technical Specification	Bidder's Response
UPS Capacity	6000 VA / 6000 W	
Nominal Voltage	208/220/230/240Vac	
Phase	Single Phase	
Input Voltage Range	110~300Vac (110~300Vac@50% load/176~300Vac@100% load)	
Input Frequency	40~70Hz (50/60Hz Auto-Sensing)	
Power factor	≥0.99	
Output Voltage	208/220/230/240Vac	
Crest factor	3:01	
Power factor	1	
Output Frequency	Online mode: ±1%/±2%/±4%/±5%/±10% of the rated frequency (Optional) Battery mode: (50/60±0.1%)Hz	
Harmonic distortion (THDv)	1% Linear load 3% Non linear load	
Transfer Time	AC mode to Bat.mode: Oms Inverter to Bypass: Oms	
Output Waveform	Pure Sinewave	
Battery Type	Valve Regulated Lead Acid (VRLA)	
DC System Voltage(VDC)	192/240Vdc (Settable)	
Charging Current(Max.)	12A	
Expandable Runtime	Yes,	
Alarm	Battery mode/Battery low voltage/Overload/Fault	
LCD display	Input voltage, Input frequency, Output voltage, Output frequency, Load	
LCD display	percentage, Battery voltage, Inner temperature & Remaining battery backup time	
AC Mode	Up to 95%	
Battery Mode	Up to 93%	
Storage Temperature	-25℃ ~55℃	
Humidity Range	0~95% (Non - condensing)	
Altitude	<1000m, derating required between 1000~3000m	
Noise Level	≤50dB	

## **ACCESS CONTROL TERMINAL**

Feature	Technical Specification	Bidder's Response	
System			
Operating system	Linux		
ROM	4 GB		
RAM	256 MB		
CPU	960 MHz		
Video			
Lens	1		
Video compression standard	H.264 and H.265		
Resolution	2 MP		
FOV	HFOV = 110°; VFOV = 81°; DFOV = 122°		
Video standard	PAL (Default) and NTSC		
Aperture	F 2.0		
Audio			
Audio input	Build-in omnidirectional microphone		
Audio output	Build-in loudspeaker		
Volume adjustment	Adjust via web or client		
Network			
Network protocol	IPV4: SADP, SIP 2.0, SIP, RTSP, ISAPI (80\443 Interface), ISAPI, ISUP 5.0; IPV6: SADP, SIP, RTSP, ISAPI (80\443 Interface), ISAPI		
Wired network	Support		
Wi-Fi	Support, 2.4 G, 802.11b/g/n		
Bluetooth	BT 2.1/4.2		
Interface			
Network interface	1 RJ-45 10/100 Mbps self-adaptive		
Lock control	1		
Exit button	1		
Door contact input	1		
Alarm input	1		
Alarm output	1		
TAMPER	1		
RS-485	1,RS-485 (Half duplex)		
Wiegand	1, Wiegand		
SD card slot			
Capacity			
Fingerprint capacity	10,000		
Card capacity	100,000		
Event capacity	300,000		
Authentication			
Fingerprint module	Capacitive fingerprint recognition		
Card type	M1 card,DESfire card		
Card reading distance	0 to 3 cm		
Card reading duration	<1s		

General		
Built-in access controller	Yes	
Supplement light	White light and IR light	
Working temperature	-40 °C to 70 °C (-40 °F to 158 °F)	
Protective level	IK09, IP65	
Function		
Video intercom	Support	
Live view	Support	
Two-way audio	Support	
Multi-factor authentication	Support	

## **INTEGRTAED SECURITY SPECIFICATIONS (ISS)**

#### CCTV AND ACCESS CONTROL SUBSYSTEMS

- i. Specification as Described elsewhere in the document under CCTV and Access control Specifications
- ii. The CCTV system shall be integrated with other security systems such as: SMS, PIDS, IDS, and ACS and the Central Management software (SMS) to achieve the following:
  - a. The integration between the CCTV and other security systems shall be via the SMS and will enable automatic display of camera images triggered by any event or alarm which is monitored by the SMS.
  - b. An alarm triggered by one of the detection systems and received by the SMS, shall generate a command by the SMS to the CCTV system (via the virtual matrix), to display a specific camera/s on specific monitor/s according to a preconfigured settings.
  - c. Clearing of the camera from the display shall be done by another command generated and transmitted by the SMS to the CCTV system (via the virtual matrix), upon completion of the event management and clearing of the alarm at the SMS.
  - d. The integration between the CCTV system and the SMS shall enable receiving and displaying fault and alert messages from the CCTV system on the SMS workstation in a format and method identical to display of other alarms and fault messages in the system, such as
    - Camera fault.
    - Camera communication fault.
    - Camera video loss.
    - Camera housing tamper.
    - NVR communication fault
    - NVR storage error.
    - NVR shutdown
- iii. The SMS workstation shall be capable of transmitting at least the following commands to the CCTV system:
  - Manual selection of a camera to be displayed on a selected monitor.
  - Manual selection of a camera tour to be activated on a selected monitor.
  - Alarm triggered camera image to be displayed on the SMS workstation video monitor or on other selected monitor.
  - Display of live camera images on the NVR viewing stations.
  - Display of recorded camera images on the NVR viewing stations.
  - Retrieving of Pre-Alarm and Post-Alarm clips stored in the NVR systems.
  - Receiving a time set command from the SMS for synchronizing the time clock of all systems
- iv. Integration with PIDS
  - The integration between the CCTV system and the PIDS system shall be through the integration with the SMS.
  - The integration will enable automatic display of camera image viewing the alarm area, following alarm indication received from the PIDS system.
  - Correlation between cameras and alarms will be performed individually for each PIDS zone and usually will involve displaying the relevant camera related to the zone (both live video and recorded video of pre alarm side by side) as well as displaying adjacent two cameras and the PTZ camera located near the zone
- v. Integration with IDS/intruder alarms, ACS and wireless panic button system
  - The integration between the CCTV system and the IDS/ACS/PANIC systems shall be through integration with the SMS.

- The integration will enable automatic display of an image from camera viewing the alarm area, once an alarm is received from the IDS / ACS / PANIC systems.
- Integration with the ACS will be used as well for displaying live image of cardholders side by side with cardholder's photo from the ACS subsystem popped us as a result of access granted event

#### PERIMETER INTRUSION DETECTION SYSTEM

- i. Shall comprise of the following:
  - Vibration Sensors.
  - Sensors cable (including the sensors and the cable between them).
  - Field controllers.
  - Data and power cables.
  - Application software
- ii. The Contractor shall supply and install along the entire perimeters of KPLC sites Perimeter Intrusion Detection (herein: the "PID") system based on combination of vibration sensors and electric fence installed
- iii. The PID will be installed on welded mesh fences.
- iv. Combination of the fence as follows:
  - a) Free standing welded mesh fence Three (3) meters high with vibration sensors line installed on it and electric fence 60 CM outrigger on top of it.
  - b) One (1) meter welded mesh fence with vibration sensors line installed on it and electric fence 60 CM outrigger on top of it
- v. Civil Works along the Perimeter outrigger on top of it
  - Prior to installation of the perimeter fence the Contractor shall implement civil works in order to establish a new fencing system: Removing of any existing temporary fence structure to approved disposal area (e. g vegetation or old mesh fences
  - All cables, sensor lines, and field controllers shall be installed along the fence and must operate successfully in the local environmental conditions
  - A 20 cm metal duct with metal cover and internal divider (between electricity and communication cables) will be install along the wall/fence and shall be used to connect the fence elements to the field cabinets and to the ISS internal communication network.

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### vi. Detection capability and Resolution

- The system will ensure detection of the following intrusion attempts: Vibration, Climbing, cutting, drilling etc.
- The system shall detect and display the actual occurrence of intrusion on the perimeter within the accuracy of  $\pm$  10 meters
- The system shall not produce alarms for the following intrusion attempts: Winds up to 100 km/h, Strong rains, snow or ice, Small animals touching the fence.
- Automatic Self-test capabilities to for at least the following functionalities; the sensor line, the field Controller, data communication line, System computer etc.

### vii. Work in zones

- The system shall allow dividing/zoning the perimeter to independent alarm zones.
- The sensitivity of each zone shall be configured separately.
- The length of each alarm zone shall be no longer than 10m

### viii. System Immunity

- The system shall detect and alert on any attempt of vandalism or intended destruction or tampering of any part of the field elements of system such as vibration detectors, vibration sensors cable, data cable or field controllers, power supplies etc.
- EMI/RFI and high voltages protection according to the relevant standards
- Lightning protection to the controller electronic cards

#### ix. Vibration Sensors

- Electronic vibration sensors shall be connected to a single cable that shall be attached to the fence mesh. At least 1 sensor per each fence section (between adjacent fence poles) must be assured.
- The sensor shall be incased into a rigid, weather proof, sealed, UV protected housing.

- The sensor shall be maintenance free.
- The sensor shall be sensitive to high frequencies only above 50HZ to reduce nuisance alarms due to winds, noises etc.

#### x. Field Controllers

- Field Controllers shall be installed along the perimeter in quantities required by system manufacturer.
- The distance between the controllers will be not less than 400 meters.
- The Field Controllers shall have the capability to operate in wide range of voltages, at least from 12 VDC to 28 VDC.
- The Field Controllers shall have a LAN port for TCP/IP communication.
- The Contractor shall supply and install the Field Controller in an outdoor, weatherproof metal cabinet which will comply at least with IP-66 standard.
- Field Controller MTBF shall be better than 60,000 hours.
- The Field Controller shall have tamper switch, which shall provide a separate alarm.
- The Field Controller shall provide separate alarms for each of the following: Tamper activation, Malfunction of the unit, Low voltage of the Power Supply, Communication Fault Alarm.

### xi. PID Application Software and integration with the SMS

- The PID system shall be integrated with the SMS at the LSC level and be controlled and operated by the SMS application software.
  - The Contractor has to assure full integration between the PID system and the SMS.
  - The PID application software shall receive the "change of state" information from the field controller, analyze it and transmit relevant data to the SMS. Set up functions shall be transmitted from the SMS to the field controllers.
  - The following information from the PID system shall be presented to the Operators:
    - a. Fence zone alarm or fault and its location within resolution of  $\pm 10$  meter.
    - b. Gate open/close alarm with its location
    - c. Sensor line input fault.
    - d. Low voltage message.
    - e. Voltage is back to normal.

- f. Tamper switch open/close message of each controller.
- g. Communication and/or unit malfunction
- The application software shall reduce or increase system sensitivity automatically, according to weather conditions

#### **ELECTRIC FENCE**

- i. The electric fence shall be based on vertical or overhang electrified wires. The system shall make use of wires fitted on insulators and powered by an energizer which is capable of delivering a substantial and most uncomfortable shock
- ii. The electric fence will go to an alarm when the wire is cut or short and shall have Earth (ground) loop (cut), High Voltage (cut) and Short circuit (High Voltage to earth loop / fence).
- iii. The electric fence will be used as an early warning device should the above occur.
- iv. The electric fence perimeter shall be divided into zones in maximum length of 200 meters.
- v. Each field controller will be responsible to at least two (2) zones
- vi. For each zone the electric fence shall have a dedicated output relay connected in dry contact mode to the vibration fence as a separate alarm zone
- vii. Each detection zone shall have its own energizer. So every zone shall be capable to be set to High voltage separately
- viii. Other specifications as follows:

NO	ITEMS NAME	SPECIFI	ICATIONS	REQUIREME NT	BIDDER'S RESPONSE (QUOTED BRAND
1.	Energizer	i.	Specification of the energizer will be in accordance with IEC 60335-2-76 the International	Must share brochure with Technical Bid & MAF	
		ii.	The robust and flexible design	3 Joule Energizer	
		iii.	Standard Peak value of input voltage must be above 7.5kV, but not exceeding 10kV		
		iv.	Maximum energy delivered to a load of $500\Omega$ must not be less than 3 Joule per zone.	5 Joule Energizer	
		V.	Minimum interval between impulses should not be less than 1.0 Second		
		vi.	Impulse duration must not exceed be 50ms	0.1.1	
		vii.	Shock energy delivered anywhere on the fence should not be less than 3 Joules depending upon the energizer selected.	8 Joule Energizer	
		viii.	For multi-zone systems the energizer must be able to energize the fence from		
			both ends. This will ensure that the fence will still be live and able to deliver shock when a fence wire is cut from any point on the perimeter	12 Joule Energizer	
		ix.	Multiple energizers must synchronize their output in order to be regarded as one energizer with multiple outputs, all firing at the same time, as one single pulse		
		X.	Lightning and power surge protection		
		xi.	The energizer must have its own stand-by DC power (Standby Time:		

NO	ITEMS NAME	SPECIFI	CATIONS	REQUIREME NT	BIDDER'S RESPONSE (QUOTED BRAND
			24hrs) and be		
			programmable for up to 20		
			zones, with intelligent		
			power saving to extend		
			battery life		
		xii.	Can be programmed into		
			alarm sensor mode		
			allowing it to be integrated		
			into a separate burglar alarm system		
		xiii.	Connectable to armed		
		AIII.	response radio or GSM		
			module		
		xiv.	Built-in gate alarm input		
			to monitor if the gate is		
			open or closed		
		XV.	Optional keypad for		
			controlling and		
			programming the		
			energizer. This allows the		
			user to control the		
			energizer remotely, with up to two keypads		
		xvi.	Electrical supply voltage:		
		77.	240V		
		xvii.	Walk test mode for easy		
			fence testing		
		xviii.	Built-in alarm monitors		
			tampering or faults on the		
			high voltage and earth		
			fence wires		
		xix.	Associated accessories i.e.		
			keypads, remote key switch, tags		
		XX.	Mimic panel showing		
		AA.	status of each zone		
			equipped with visual and		
			audio alarms.		
		xxi.	Other devices like sirens,		
			security lights can also be		
			triggered through the		
			fence controller.		
		xxii.	Fiber Optic based Climb		
			Detection Systems and Seismic Detectors can be		
			integrated in solutions for		
			high security areas to		
			detect wall scaling or		

NO	ITEMS NAME	SPECIFI	CATIONS	REQUIREME NT	BIDDER'S RESPONSE (QUOTED BRAND
			tunneling attempts even before the actual electrified wires are tampered.		
2.	High Tension (HT) Insulated Cables	i.	Double insulated HT cables must be used to connect the energizer output connectors to the fence conductor wires of the energized perimeter fence		
		ii. iii.	Insulation of HT cables should be UV stabilized for outdoor installation The HT cables must be run through a 32mm conduit for added protection and facilitate future repairs		
3.	Solid / Stranded stainless steel / Aluminium HT wire	i. ii.	Low resistance, corrosion resistant wire should be used with operational life of over ten years. Each strand should be tensioned at around 20Kgs each to prevent stretching the gaps between wires and avoid controlled electrical bypass.		
4.	Crimp Ferrules /Split Bolts	i.	The fence wire and the High Voltage cable should be connected with suitable aluminium crimp ferrules or Stainless Steel split bolts. These components shall have the same material composition as the fence wire and the High Voltage cable		
5.	Insulators	i.	The insulators should be made from a UV resistant material	Must share brochure with Technical Bid	

NO	ITEMS NAME		CATIONS	REQUIREME NT	BIDDER'S RESPONSE (QUOTED BRAND
		ii.	The insulator surface should not be damaged by flash over		
		iii.	The insulators should retain their rated		
			mechanical strength over the temperature range of - 10°C to +60°C. The		
			insulators should not become brittle or soft		
		:	under any ambient temperature conditions.		
		iv.	The insulator should be designed as such that the fence wire cannot be removed once installed		
		v.	Tested to withstand a minimum arcing voltage		
			of min 15kV when applied between the mounting screw and the 1.6mm		
			aluminium conductor wire. During the test, insulators must be soaked		
			with a 2 % saline solution, in order to simulate coastal conditions		
		vi.	No arcing may occur during the test. Strain		
			insulators when fastened to a fixed point with its standard attachment		
			screw, must withstand a pulling force of 300kg at 45°C when applied to a		
			2.24mm steel wire attached to the insulator		
6.	Tensioning Devices	i.	A non-metallic tensioning device should be used to tension the electric fence	Must share brochure with Technical Bid	
		ii.	wires The tensioning devices should be able to		
			withstand at least five times the maximum installed wire tension of		
		iii.	20kg The tensioning device		

NO	ITEMS NAME	SPECIFI	CATIONS	REQUIREME NT	BIDDER'S RESPONSE (QUOTED BRAND
			should allow for the accurate tensioning of the fence wires to the required tension. It should only be possible to tension the fence wires by means of a special made tool which should indicate the correct wire tension		
7.	Strain posts	i. ii.	All strain posts should be manufactured from 50mm x 50mm x 2mm square tubing (height 1500mm) with end caps Strain posts should be fully galvanized/powder coated. All holes should be pre-drilled before galvanizing/coating		
8.	Intermediat e posts	i. ii.	All intermediate posts will be manufactured from 25mm x 25mm x 2mm (20 x 20 x 1.6mm) square tubing (height 1500mm) with end caps. Intermediate posts should be fully		
		iii. iv.	galvanized/powder coated. All holes should be predrilled before galvanizing/coating Gap between the strands should be 4 inches Low resistance, corrosion resistant Aluminum Alloy wire should be used with		
9.	Lightning Protection	i.	operational life of over ten years.  The electric fence should be fitted with the appropriate lightning protection system in accordance with SANS 62305 Protection against	Must share brochure with Technical Bid	
		ii.	lightning Protection should be provided on both the high		

NO	ITEMS NAME	SPECIFICA	ATIONS	REQUIREME NT	BIDDER'S RESPONSE (QUOTED BRAND
		iii. A	woltage output as well as the 230VAC input. A common earth point at the enclosure for both the high voltage and 230VAC input lightning protection systems		
10	Earthing	ii. T	Earth pegs must be used at the beginning or end of each zone, at a maximum distance of 50m apart. Earth pegs must be connected to the main earth rod, the fence posts and earth conductors of the fence Three (3) earth pegs, 1.8m apart in a triangle layout, must be installed at both sides of the Access Control Building (ACB). The pegs must be connected to the main earth rod and the first post on each side of the fence		
11	Universal GSM / GPRS Module	ii. To so the solution of the	GSM fully integrated with central alarm system to Voice/SMS/E-mail all alerts with details to multiple mobile subscribers on intrusions. To transmit zone activations and other alarm events such as specific alarm activation zones, arm/disarm users plus time of arm/disarm, oss of power on the system, system failure/restore and others. Should be compatible with multiple transmitters in the market and including those used in Kplc accommodating VHF and contact ID transmitters and Alarm control Panels.	Must share brochure with Technical Bid & MAF	

NO	ITEMS NAME	SPECIF	ICATIONS	REQUIREME NT	BIDDER'S RESPONSE (QUOTED BRAND
		vi. vii. viii. ix.	through a PC/Laptop and also through mobile phone commands. Communication: Must be able to communicate independently to mobile phone and also through alarm server/decoder with ability to send SMSs in both ways without relying on server only. Support both prepaid and post-paid SIM Cards Support both prepaid and post-paid SIM Cards (facilitate acquisition). Support remote upload and download. Allow sending of automated self-test, power supply alerts eg AC and battery status Internet of Things (IOT) capabilities with ability to allow preconfigured commands to be received and sent to other transmitters or devices to trigger further actions/alerts locally and remotely .The configurations should allow customizable if-and if then commands triggers while accepting analogue inputs through additional relays, and general telemetry to allow monitoring through other multipurpose necessary to trigger other alerts for example temperature, Fuel levels, water levels and other		\ <u> </u>
		xi.	commercial/industrial applications. Allow the user to configure and manage the		

NO	ITEMS NAME	SPECIFI	CATIONS	REQUIREME NT	BIDDER'S RESPONSE (QUOTED BRAND
		xii. xiii.	device without requirement of the manufacturer.		
12	Fence Manageme nt Software	i.	PC running management software to control fence energizers and detailed event logging. With this arrangement the controls can extended to any geographical location over the Internet.  Management software can be linked to surveillance cameras to activate and pop up display of cameras installed in the affected zone.		
13	Light Stainless Steel Pole	i. ii. iii. iv.	Height 8m – 12m, Dimension 80mm/200mm Hot-dip galvanized not less than 80μm, Powder coated thickness not less than 100 μm, Rust proof Flange 400mm*20mm Access door		

#### GATES, BOLLARDS AND TURNSTILES

### Construction of new Gates

- i. The Contractor shall replace, wherever required the existing gates with new gates.
- ii. Gates dimensions and structure shall be adapted to the new conditions at the gates.
- iii. The installation of a new gate shall include removal of the dismantled existing gate from the site to an external approved waste location.
- iv. The required gates shall comply with the following specification:
  - Structure: Metal gate, mono or dual wing as necessary, made of massive vertical bars.
  - Dimensions of a wing: as specifically defined per each gate.
  - Metal Protection: Galvanized according to General Technical Specifications as detailed in this specifications.
  - Finish: Painted at least in 3 layers according to General Technical Specifications as detailed in these specifications. Color to be chosen by the Customer.
  - Security: Locked by heavy duty electromagnetic lock designed for outdoor use and capable to withstand 1200 Newton of direct power.
- v. A pair of two active IR sensors shall be installed above the gate to detect intrusion attempts over the gate.
- vi. Metal fence section of a 'Y" profile with outrigger and in rigger shall be installed above the gate, on which vibration detection system shall be installed to detect intrusion attempts over the gate. Decision upon installation of active IR detectors above the gate shall be taken during the detailed design stage. The profile and structure of this fence shall be identical to the type installed on the walls which arrive at the gates.
- vii. A vibration sensor line operating as a separate zone in the perimeter protection system shall be installed on the gate and the fence mounted on top of it.

- viii. The gate protection shall be a part of the Perimeter Protection system. All intrusion detection elements installed on the gates shall be connected to the perimeter protection system.
- ix. Other elements installed on the gates, such as AIUs, magnetic contacts for gate status indication, etc. shall be connected to the ACS system.
- x. The monitoring and control of the various gates shall be carried out by the Local Security Center (LSC) or manually by a Manual Control Panel.
- xi. The following paragraphs include additional requirements, specific to various types of the gate

## Sliding Gates

Structure	Metal frame with vertical bars. Horizontal/diagonal enforcements as needed.  Distance between vertical bars: at least 10 cm. between centers  Bars: Square > 2.0 cm each side	
Dimensions	Height: at least 2 meters, adjusted to the height of the wall/fence built at the two sides of the gate  Length: 3.5 - 4 meters, according to the gate width.	
Weather protection	As required to assure protection from local weather conditions.  Galvanized according to General Technical Specifications detailed in this document.	
Painting	Painted at least in 3 layers according to general Technical Specifications detailed in this Technical Specifications.	
Color	As determined by the Customer	
Speed	>20cm/sec	
Drive	Hydraulic	
Safety	Vehicle presence loop detectors and photoelectric beam protection against closure	
Security elements:	As defined in the specific chapters	

## Pedestrians Metal Door

	The gate and the lock will be made of stainless steel frame with stainless steel	
	vertical bars. Horizontal/diagonal enforcements as needed.	
Structure	Frame dimensions: As required.	
	Distance between vertical bars: not more than 5 cm. between centers	
	Bars: Square profile > 2.0 cm each side.	
Dimensions	Height: at least 2 meters, adjusted to the height of the wall/fence built at the two	
	sides of the gate	
	Width: $1 - 1.80$ meters.	
Treatment	As required to assure withstanding the local weather conditions.	
Painting	Painted at least in 3 layers according to General Technical Specifications	
	detailed in this document.	
Color	As determined by the Customer.	
Security elements:	1. electromagnetic lock	
	2. Magnetic Contact	
	3. Hydraulic door closer	
	4. Electronic fence section on a 'Y" profile fence with outrigger and in	
	rigger installed above the gate to detect intrusion attempts over the gate.	
	The profile and structure of this fence shall be identical to what shall be	
	installed on the walls or fences which arrive at the gates.	

#### Full Height Turnstile

- i. Turnstiles shall have two drive units: electro-mechanical and motorized drive unit.
- ii. The Electro-Mechanical Drive Unit shall consist of the following elements
  - A locking system with electromagnets to prevent simultaneous double passage.
  - A self-centering mechanism to assure completion of the rotation of the turnstile to its home position.
  - A hydraulic shock absorber to assure smooth and progressive slow down operation.
  - A blocking mechanism to prevent reverse rotation.
  - The Motorized Drive unit shall include the following components:
  - Effective blocking system.
  - Automatically set rotation speed according to the force applied on the turnstile.
  - Torque setting.
  - High degree of safety by stopping rotation at any obstacle.
  - Silent and smooth operation.
  - Adjustable slow-down.

### iii. Functional Specifications

- a. The turnstile shall be controlled by a microprocessor logic unit:
  - i. One input for opening/closing the mechanism in each direction.
  - ii. One protected input for unlocking the turnstile in on an emergency situation.
  - iii. Two multi-functional inputs ready for future expansion purposes.
  - iv. One output for indication of turnstile's actual status (BUSY signal).
  - v. Four (4) protected outputs for communication with LED traffic light
  - vi. Two outputs to check completed passage through the turnstile in a direction.
- b. Adjustable "time out" (from 6 to 30 sec.) to cancel the GO signal if passage through the turnstile is not completed within the assigned time.
- c. The logic unit shall be protected against overloads, short circuits and polarity inversion.
- d. Operational modes: The turnstile can be set for different operational modes in either direction simultaneously:
  - Free access.
  - Controlled access.
  - Locked.
  - Emergency.
  - The following modes of operation shall be available in an emergency

iv. Other Technical Specifications

Features:	Bi-directional
Control Possibilities:	Manually by a local control panel
Cond'of Fossionides.	By Access Control subsystem
	Casework: Polished Stainless Steel (2 mm thick)
Materials:	Roof: Polished Stainless Steel sheet (2 mm thick)
	Turnstile and Gate Pillar: Polished Stainless Steel
	Tripod and Gate Arms: Polished Stainless Steel made 40 mm diameter tube
Shock absorber:	Hydraulically adjustable
Operating temperature:	-30°C to +50°C
Humidity:	Maximum100%. (non - condensing)
Anti-	Mechanical parts: 10 – 15 μm, steel sheets 15 - 20 μm
corrosion treatment by zinc plating, of thicknesses:	Casing: Application of AISI 304 stainless steel sheet
MCBF (Mean Cycle before Failure)	3.000.000 cycles
Power supply:	24VAC/DC, 2A
Back-up Battery:	Supports turnstile motorized drive unit for at least six (6) hours of continuous operation

### Half- Height Turnstile

The specifications are similar to the specification of the full height turnstiles, as described above but for half the height.

Pop Up" Pneumatic Bollards (K4)

Functionality:	To stop crash into the bollards of the following vehicles
r unctionanty.	Standard K4
Structure:	Of a length required to block fully the entire vehicle lane. Each metal bollard will be of at least 20 cm thick and 70 cm height from the road when in popped-up position
Installation:	Concealed in the road at "O" level and pop-up upon remote control operation
Response time:	< 1 sec from receiving the lifting or lowering command
Life Cycle	At least 7 years of 24/7 operation with over 2000 open/close operations per day
Galvanized:	According to the General Technical Specification detailed in this document
Painting:	With night shining colors

#### Manual Bollards (K4)

- i. The bollards shall be DOD K4 rated.
- ii. The bollards shall be manually raised and lowered.
- iii. The bollards shall be installed at the site's emergency exits and any swing case where there is a requirement for a gate complying with DOD K4 standard and the gate is seldom in use. The specific installation locations are according to the BOQ and detail design.
- iv. The bollards shall assure immobilizing of vehicles, attempting to penetrate into the site.

#### v. Construction

- Installed on a mounting which shall allow easy manual raising and lowering.
- In lowered position, the bollards shall consist of no protruding

obstructions or hinged joints to present a trip hazard to pedestrians or damage vehicle tires or undercarriages

## vi. Technical Specifications

Structure	The bollard components shall be made of steel, hot dip galvanized for corrosion resistance according to ASTM A 123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel.
Quantity of bollards per gate	According to gate's width. Distance between bollards < 1.2 meter center to center
Dimensions	Diameter at least 20 cm.
Treatment	As required to assure withstanding the site environmental conditions. Hot galvanizing according to ASTM A 123 - Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel.
Painting	3 paint layers
Raised height	At least 75 cm.
Grade	DOD K4
IP	IP 68

#### Standard Vehicles Barrier

- i. The Contractor shall supply and install vehicles barrier that shall be located at the entrance of vehicle lanes at selected gates according to the table of gates elements
- ii. Gate design and equipment quality of the supplied equipment must assure successful 24/7 operation at over 2000 open/close operations per day. The longest response time of the barrier shall be less than 4 sec.
- iii. The arm shall be made of aluminum, 3.5 to 4.5 m long. The arm shall be at least 50 cm high from the ground
- iv. Photoelectric beams shall prevent the gate from closing during vehicle's presence
- v. Traffic lights shall be placed near the gate for progress steps indication to drivers
- vi. The gate arm shall be painted with night shining color and shall have a stop sign and a written stop sign attached to the arm

#### Local Control Panel

- i. The Local Control Panel shall be installed in every control center to allow manual operation of the gates and turnstiles.
- ii. The Local Control Panel shall consist of illuminated momentary, DPDT push buttons. Each controlled element (gate or turnstile) shall be controlled from the Local Control Panel by two pushbuttons: one to open, the other to close the gate/turnstile.
- iii. The light indication of the pushbutton shall present the status of the gate (open or closed).

  The lights shall be driven by status indication coming from the controlled element
- iv. The Local Control Panel shall include an emergency pushbutton that shall release all turnstiles in case of an emergency situation. Additional pushbutton shall provide a test of all status indications on the panel
- v. The panel shall consist of an electronic circuitry located in a special electronic unit which shall be installed in the vicinity of the panel. All cables arriving from the gates/turnstiles shall be connected to terminals in this electronic unit.
- vi. The panel design shall be submitted to Customer approval and modified according to his remarks.
- vii. The electronic unit and the panel shall be powered by a power supply

#### viii. Panel Specifications

Structure	Aluminum panel including illuminated momentary, DPDT push buttons, led indicators, functional switches in quantities according to the number of manually controlled elements
Dimensions	According to the number of manually controlled elements.
Treatment	Brush Anodized

## Scanning Devices

# Walkthrough Metal Detector

	Multi-zone security metal detector,
Features	Self-test diagnostics capabilities
	Microprocessor controlled
Programming	Access for programming shall be protected by a lock and key and by a dual-level password or by magnetic or chip card programming key.
Detection	Regardless of metal orientation
Working environment	Outdoor
Network Connection:	Ethernet, IP based protocol
Alarms:	Visual signaling: multi-zone display
z riarino.	Audible signaling
Alarm Outputs:	Relay contact for remote alarm
Power Supply:	240 VAC/50 Hz
Galvanization	According to the General Technical Specification detailed in this document
	Electrical safety
	Emission
Standards Conformity:	Immunity
	Security levels 1-5 NILEC J-0601.
	Safe for pregnant women, for heart pacemakers implants and for magnetic recording materials

### X-Ray Luggage Screening System (LSS)

- i. The required Luggage Screening System (LSS) shall be an X-ray security inspection system designed to inspect personal baggage and small cargo.
- ii. The LSS shall enable rapid and consistent detection capabilities, identifying explosives, narcotics, gold, currency and agricultural products.
- iii. The LSS shall provide real time operator training and performance monitoring. The system shall enable insertion of images of threat objects at predefined settings and intervals, into apparently clean bags enabling supervision of monitor operator's response. The dialogue with the operator may be in a various languages.
- iv. The LSS shall provide easy management of multiple users, test schedule settings, data download, etc.
- V. Network Display Stations: This feature allows multiple x-ray units to be linked to a remote search area for additional review.
- vi. Functional Requirements:
  - Multi Energy imaging (4 colors)
  - Density Threat Alert
  - Variable Edge Enhancement
  - High/Low Penetration
  - Variable Gamma
  - Inverse Video
  - Pseudo Color
  - Variable Density Zoom
  - Organic/Inorganic Stripping
  - Black and White Viewing
  - Variable Color Stripping
  - Up to 16 Times Zoom
  - View Previous Bag (up to 2 screens).
  - Baggage Counter
  - Search Indicator.
  - Date/Time Display.
  - Full Diagnostic Built in Test Facility.
  - Enhanced Performance X-Ray
  - Operator Training Program
  - Threat Image Projection (TIP)
  - Automatic Image Archiving
  - NVR Output

vii. Technical Specifications

Dimensions:	Approximately: 4m', Height: approx. 2 m', Width: approx. 1.4 m'.
Tunnel Size:	1m (W) x 1m (H)
Resolution of Detection	38 AWG guaranteed, 40 AWG typical
Penetration:	27 mm guaranteed, 29 mm typical.
Material Separation:	Low Z, Medium Z, High Z to 0.5 Z accuracy
Conveyor Speed:	0.20 M/Sec
Conveyor Load:	165 Kg (365 lbs) evenly distributed
Comply with applicable international health and safety regulations such	USA FDA X-ray systems Federal Standard 21-CFR1020.40
	USA Health and Safety at Work Act 1974-section 6, Amended by the
as:	Consumer Protection Act 1987
	Maximum radiation leakage less than $0.1 mR/hr$ ( $1\mu$ Sv/hr) in contact with outer panels
Film safety:	ISO 1600/33 DIN, guaranteed up to 10 times exposure to radiation.
System Power:	230 VAC +/- 10% / 50 Hz / 5 A Max

#### ADDITIONAL SPECIFICATIONS 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:

- i. 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 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.

# Additional information on 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

# 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 works** 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 is** 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.

 $<sup>^6</sup>$ In lump sum contracts, delete "Bill of Quantities" and replace with "Activity Schedule."

### 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

6.1 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.
- 134 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
- 16.1 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.
- 17.4 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
- 22.1 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

### 24.1 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.

### 24.6 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.

### 24.7 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

- 26.1 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

- 28.1 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
- 30.1 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>

- 36.1 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.
- 38.4 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.
- <sup>8</sup>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
- 38.7 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
- 40.1 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.
- 40.7 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 X100.
- 41. Payments
- 4l.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.
- 41.4 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.

<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."

<sup>424</sup> 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: P is 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 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

56.1 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 or amalgamation;
- 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 hasengaged 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

- 58.1 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

60.1 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 wasmade.

### 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 GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of 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 – XXXXXX ,  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 spread across the regions: Specific site location details are as detailed schedule of requirement and 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	C 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 special 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 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.		

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract		
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 as per the Bills of Quantities		
	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 & GCC 23.2	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	ol		
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 Con	itrol		
GCC 34.1	The Defects Liability Period is: 180 days.		
D. Cost Contro	ol .		
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 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		

Number of GC Clause	Amendments of, and Supplements to, Clauses in the General Conditions of Contract			
	<b>Price</b> ] 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 tender's contract sum			
	(a) Performance Security – Bank Guarantee: in the amount(s) of 10 percent of the Accepted Contract Amount and in the same currency(ies) of the Accepted Contract Amount N/A			
	(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 Implantation period:			
	Lot 1: Ten (10) Months from the date of site possession.			
	Lot 2: Ten (10) Months from the date of site possession.			
	Lot3: Ten (10) Months from the date of site possession			
	Lot 4: Ten (10) Months from the date of site possession.			
	Lot 5: Ten (10) Months from the date of site possession			
E. Finishing the 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: 1.0% of the contract sum.			

### **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. How to request a debriefing

- a) DEADLINE: The deadline to request a debriefing expires at midnight on [insert date] (local time).
- b) You may request a debriefing in relation to the results of the evaluation of your Tender. If you decide to request a debriefing your written request must be made within three (5) Business Days of receipt of this Notification of Intention to Award.
- c) Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:
  - i) Attention: [insert full name of person, if applicable]
  - ii) Title/position: [insert title/position]
  - 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. <u>Standstill Period</u>

- 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:		

**Board Secretary** 

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

### **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

THI	S AG	GREEMENT made the	day of	
20_			, between	
D.		of		(hereinafter "the
Enti		of the one part, and of or"), of the other part:	(her	reinafter "the
WH	ERE	AS Kenya Power desires that the Works kno	own as	should
		ted by the Contractor, and has accepted a T		
		on of these Works and the remedying of any de	•	
Ken	ıya Po	ower and the Contractor agree as follows:		
1.		this Agreement words and expressions shall signed to them in the Contract documents refer		ngs as are respectively
2.		e following documents shall be deemed to a greement. This Agreement shall prevail over all		
	a)	The Letter of Acceptance		
	b)	The Letter of Tender		
	c)	The addenda Nos(if any)		
	d)	The Special Conditions of Contract		
	e)	General Conditions of Contract.		
	f)	The Specifications		
	g)	The Drawings; and		
	h)	The completed Schedules and any other doc	uments forming part of th	e contract.
3.	this	consideration of the payments to be made by s Agreement, the Contractor hereby covenan remedy defects therein in conformity in all res	nts with Kenya Power to	execute the Works and
4.	Kenya Power hereby covenants to pay the Contractor in consideration of the execution and completion of the Works and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.			
		NESS whereof the parties hereto have caused Laws of Kenya on the day, month and year sp		ecuted in accordance
Sign	ned an	nd sealed by		(for Kenya Power)
	ned an	nd sealed by or).		(for the

### FORM NO. 5 - PERFORMANCE SECURITY

# [Option 1 - Unconditional Demand Bank Guarantee]

[Gua	rantor letterhead]	
Bene	ficiary:finsert name and Address of Procuring Entity]	
Date	:[Insert date of issue]	
Gua	rantor: [Insert name and address of place of issue, unless indicated in the letterhead]	
1.	We have been informed that	
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 and 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]

Beneficiary:	[insert name and Address of Procuring Entity]
Date:	[Insert date of issue].
PERFORMANCE RONDNo ·	
	ress of place of issue, unless indicated in the letterhead]
By this Bond	as Principal (hereinafter called "the
Contractor") and	as Suret
(hereinafter called "the Surety"),	are held and firmly bound unto] a
Obligee (hereinafter called "Kenya	Power ") in the amount offor the payment of which sum well and trul
to be made in the types and proport	ions of currencies in which the Contract Price is payable, the Contractor an
the Surety bind themselves, their he	eirs, executors, administrators, successors and assigns, jointly and severally
firmly by these presents.	
WHEREAS the Contractor has ent	ered into a written Agreement with Kenya Power dated the
day of	, 20, for in accordance with the documents thereto, which to the extent herein provided for, are by reference mad
plans, specifications, and amendme	ents thereto, which to the extent herein provided for, are by reference mad
part hereof and are hereinafter refer	
	n of this Obligation is such that, if the Contractor shall promptly and faithfull
	ing any amendments thereto), then this obligation shall be null and voice
	orce and effect. Whenever the Contractor shall be, and declared by Keny
	e Contract, Kenya Power having performed Kenya Power 's obligation
	y remedy the default, or shall promptly:
, ·	rdance with its terms and conditions; or
	qualified tenderers for submission to Kenya Power for completing the
	s terms and conditions, and upon determination by Kenya Power and the
•	e Tenderers, arrange for a Contract between such Tenderer, and Procuring
	work progresses (even though there should be a default or a succession of
	Contracts of completion arranged under this paragraph) sufficient funds
1 1	ess the Balance of the Contract Price; but not exceeding, including other
	ne Surety may be liable hereunder, the amount set forth in the first paragraph
	he Contract Price," as used in this paragraph, shall mean the total amount
	Contractor under the Contract, less the amount properly paid by
Procuring Entity to Contractor	
	required by Procuring Entity to complete the Contract in accordance with total not exceeding the amount of this Bond.
	reater sum than the specified penalty of this Bond.
	nstituted before the expiration of one year from the date of the issuing of the
	faction shall accrue on this Bond to or for the use of any person or corporation
	rein or the heirs, executors, administrators, successors, and assigns of Keny
Power.	on of the news, executors, administrators, successors, and assigns of fremy
	for has hereunto set his hand and affixed his seal, and the Surety has cause
•	corporate seal duly attested by the signature of his legal representative, th
dayof20	
CICNED ON	1 1 10 00
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] [Guarantor letterhead] **Beneficiary:** [Insert name and Address of Procuring Entity] [Insert date of issue] Date: ADVANCE PAYMENT GUARANIFENo.: [Insert guarantee reference number | Guarantor: [Insert name and address of place of issue, unless indicated in the letterhead] We have been informed that \_\_\_\_\_\_ (hereinafter called "the Contractor") has entered into Contract No. \_\_\_\_\_ dated \_\_\_\_\_ with the Beneficiary, for the execution of (hereinafter called "the Contract"). 2. Furthermore, we understand that, according to the conditions of the Contract, an advance payment in (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: Has used the advance payment for purposes other than the costs of mobilization in respect of the Works: or Has failed to repay the advance payment in accordance with the Contract conditions, specifying the b) amount which the Applicant has failed to repay. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate 4. from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Contractor on its account number at 5. The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Contractor as specified in copies of interim statements or payment certificates which shall be presented to us. This guarantee shall expire, at the latest, upon our receipt of a copy of the interim payment certificate indicating that ninety (90) percent of the Accepted Contract Amount, less provisional sums, has been certified for payment, or on the \_\_\_\_ day of\_\_, 2, whichever is earlier. Consequently, plemand for payment under this guarantee must be received by us at this office on or before that date. 6. The Guarantor agrees to a one-time extension of this guarantee for a period not to exceed [six months] [one year], in response to the Beneficiary's written request for such extension, such request to be presented to the Guarantor before the expiry of the guarantee. [Name of Authorized Official, signature(s) and seals/stamps]

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

<sup>1</sup>The Guarantor shall insert an amount representing the amount of the advance payment and denominated either in the currency of the advance payment as specified in the Contract.

<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.

# [Guarantor letterhead] **Beneficiary:** [Insert name and Address of Procuring Entity] [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 1. venture shall be the name of the joint venture] (hereinafter called "the Contractor") has entered into [insert reference number of the contract] dated\_\_\_\_\_\_ with the Beneficiary, for the execution of [insert contract and brief description of Works/ (hereinafter called "the Contract"). 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. 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 [insert amount in figures] ([insert \_/) upon receipt by us of the Beneficiary's complying demand amount in words 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. A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate 4. 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 finsert name and address of Applicant's bank]. 2...., 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. $^{\it l}$ The Guarantor shall insert an amount representing the amount of the second half of the Retention Money. <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

FORM NO. 9 BENEFICIAL OWNERSHIP DISCLOSURE FORM

guarantee.

[Demand Bank Guarantee]

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

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

This Beneficial Ownership Disclosure Form ("Form") is to be completed by the successful tenderer pursuant to Regulation 13 (2A) and 13 (6) of the Companies (Beneficial Ownership Information) Regulations, 2020. In case of joint venture, the tenderer must submit a separate Form for each member. The beneficial ownership information to be submitted in this Form shall be current as of the date of its submission.

For the purposes of this Form, a Beneficial Owner of a Tenderer is any natural person who ultimately owns or controls the legal person (tenderer) or arrangements or a natural person on whose behalf a transaction is conducted and includes those persons who exercise ultimate effective control over a legal person (Tenderer) or arrangement.

Tender Reference No.:	[insert identification no]
Name of the Tender Title/Description:	[insert name of the assignment] to:
[insert complete name of Procuring Entity]	
In response to the requirement in your notification of awar additional information on beneficial ownership:	rd dated [insert date of notification of award] to furnish[select one option as applicable

I) We hereby provide the following beneficial ownership information.

**Details of Beneficial ownership** 

	Details of all Beneficial Owners	% of shares a person holds in the company Directly or indirectly	% of voting rights a person holds in the company	Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer (Yes/No)	Whether a person directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)
	Full Name:	Directly  % of shares	Directly% of voting rights	<b>1.</b> Having the right to appoint a majority of the board of directors or an equivalent governing body of the Tenderer: YesNo	1. Exercises significant influence or control over the Company body of the Company (tenderer) YesNo
	National identity card number or Passport number:	Indirectly-  % of shares	Indirectly% of voting rights	<b>2.</b> Is this right held directly or indirectly? Direct	2. Is this influence or control exercised directly or indirectly? Direct
1	Personal Identification Number (where applicable);			Indirect	Indirect
	Nationality:				
	Date of birth [dd/mm/yyyy]				
	Postal address				
	Residential address				
	Telephone number				
	Email address				

	Occupation or				
	profession				
	•				
2	Details of all Beneficial Owners	% of shares a person holds in the company Directly or indirectly	% of voting rights a person holds in the company	Whether a person directly or indirectly holds a right to appoint or remove a member of the board of directors of the company or an equivalent governing body of the Tenderer (Yes / No)	Whether a person directly or indirectly exercises significant influence or control over the Company (tenderer) (Yes / No)
	Full Name;	Directly  % of shares	Directly% of voting rights	1. Having the right to appoint a majority of the board of the directors or an equivalent governing body of the Tenderer: YesNo	1. Exercises significant influence or control over the Company body of the Company (tenderer) YesNo
	National identity card number or Passport number;	Indirectly-  % of shares	Indirectly% of voting rights	2. Is this right held directly or indirectly? Direct	2. Is this influence or control exercised directly or indirectly?
	Personal Identification Number (where applicable)			Indirect	Indirect
	Nationality(ies):			Indirect	Indirect
	Date of birth [dd/mm/yyyy]				
	Postal address;				
	Residential address;				
	Telephone number;				
	Email address;				
	Occupation or profession;				



### SITE VISIT/PRE-BID MEETING FORM

# PRE-BID SITE/ VISIT FOR PROPOSED SUPPLY, INSTALLATION, TESTING AND COMMISSIONING OF CCTV AND ACCESS CONTROL IN MAJOR STORES & OFFICES & INTEGRATED SECURITY SYSTEMS.

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### TENDER NO. KP1/9A.2/OT/012/SS/25-26.

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