



**KENYA FORESTRY RESEARCH INSTITUTE
P.O.BOX 20412-00200
NAIROBI.**

TENDER NO: KEFRI/ONT/005/2021- 2022

**TENDER NAME: SUPPLY, INSTALLATION,
CONFIGURATION, TESTING AND COMMISSIONING
OF KEFRI DATA CENTRE**

RELEASE DATE: Tuesday, 26th October, 2021

CLOSING DATE: Friday, 12th November, 2021

TIME: 12:00 NOON



Table of Contents

INVITATION TO TENDER (ITT)	3
SECTION I - INSTRUCTIONS TO TENDERERS (ITT)	5
SECTION II - TENDER DATA SHEET (TDS).....	34
SECTION III - EVALUATION AND QUALIFICATION CRITERIA.....	37
SECTION IV - TENDERING FORMS	51
1. FORM OF TENDER.....	51
2. TENDERER'S ELIGIBILITY-CONFIDENTIAL BUSINESS QUESTIONNAIRE	54
3. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION.....	58
4. SELF-DECLARATION FORMS.....	60
5. DECLARATION AND COMMITMENT TO THE CODE OF ETHICS	62
6. APPENDIX 1 - FRAUD AND CORRUPTION.....	63
7. PRICE SCHEDULE FORMS.....	66
A. Grand Summary Cost Table.....	67
B. Supply and Installation Cost Summary Table.....	67
C. Recurrent Cost Summary Table	68
D. Supply and Installation Cost Sub-Table.....	69
E. Recurrent Cost Sub-Table [insert: identifying number] –Warranty Period	70
8. QUALIFICATION FORMS	73
A. Form ELL-1 Tenderer Information Form.....	73
C. Form ELL-1 Tenderer's JV Members Information Form.....	74
D. Form CON-1 Historical Contract Non-Performance and Pending Litigation.	75
E. Form EXP - 1 Experience – General Experience	76
F. Form EXP – 2 Specific Experience	77
G. Form CCC-1 Summary Sheet: Current Contract Commitments/ Work in Progress.....	79
H. Form FIN – 1 Financial Situation	80
I. Form FIN –2 Average Annual Turnover.....	81
J. Form F-3 Financial Resources.....	81
K: Personnel Capabilities.....	82
L. Form of Tender Security	89
M. Tender - Securing Declaration Form {r 46 and 155(2)}.....	92
SECTION V - REQUIREMENTS OF THE INFORMATION SYSTEM	93
5.2 Network Operations Center (NOC).....	94
5.3 SMART Racks.....	95
5.4 Switching.....	105
5.5 Servers.....	125
5.6 Structured Cabling.....	129
6.0 SUB-CONTRACTOR 1: CIVIL WORKS.....	133
7.0 ELECTRICAL SUB CONTRACT WORKS	138
SECTION VI - GENERAL CONDITIONS OF CONTRACT.....	200
SECTION VII - SPECIAL CONDITIONS OF CONTRACT	242
SECTION VIII - CONTRACT FORMS.....	256

KENYA FORESTRY RESEARCH INSTITUTE
P.O.BOX 20412-00200 NAIROBI
Tel: 0724259781/2
director@kefri.org



INVITATION TO TENDER (ITT)

TENDER NAME: SUPPLY, INSTALLATION, CONFIGURATION, TESTING AND COMMISSIONING OF KEFRI DATA CENTRE

1. KEFRI invites sealed tenders for Supply, Installation, Configuration, Testing and Commissioning of KEFRI Data Centre.
2. Tendering will be conducted under open competitive method, (National Open Tender) using a standardized tender document. The Tender is open to all qualified and interested Tenderers.
3. Qualified and interested tenderers may obtain further information from the email address – tenders@kefri.org and inspect the Tender Document at <https://www.kefri.org/components/tenders/tenders.html> or during office hours, Monday – to Friday between 8:00am to 4:30 pm except for public holidays at the address given below.

**Kenya Forestry Research Institute Headquarters,
Muguga, off Nairobi – Naivasha Road,
Supply Chain Management Division
P.O Box 20412-00200, Nairobi**

4. A complete set of tender document may be obtained by interested tenderers electronically free of charge from; <https://www.kefri.org/components/tenders/tenders.html> or Public Procurement Information Portal (www.tenders.go.ke). Tender document shall be obtained electronically **free of charge**.
5. Tender documents may be viewed and downloaded for free from the website www.kefri.org or Public Procurement Information Portal www.tenders.go.ke. Tenderers who download the tender document must forward their particulars immediately to tenders@kefri.org to facilitate any further clarification or addendum. The procedure to be followed by tenders in registering their particulars will be as **follows**:

Tenderers shall indicate, Tender reference No; Tender Name; official Email Address and the Telephone number and the complete name and Designation of

the Person to be contacted. KEFRI will not be liable for failure of delivery of the Clarification/Addenda to the indicated Contacts, therefore the tenderers are reminded to re-confirm their contacts before they emailed.

6. All Tenders must be accompanied by a tender Security of **Kes. 200,000.00** or a **duly filled and signed Tender-Securing Declaration form where applicable.**
7. Completed tenders must be delivered to the address below on or before **Friday, 12th November, 2021 at 12:00 noon.** Electronic Tenders submission will not be permitted.
8. Tenders will be opened immediately after the deadline date and time specified above or any deadline date and time specified later. Tenders will be publicly opened in the presence of the Tenderers' designated representatives and anyone who chooses to attend at the address below –
9. Late tenders will be rejected.
10. The addresses referred to above are:

A. Address for obtaining further information and for purchasing tender documents

Kenya Forestry Research Institute (KEFRI)
Supply Chain Management Office
Ag. Deputy Director-Supply Chain Management
Email: tenders@kefri.org
Tel: 0722157414 / 0724259781 / 0734251888

B. Address for Submission of Tenders.

Kenya Forestry Research Institute (KEFRI)
The Director,
P.O Box 20412-00200 City Square, Nairobi
Tender Box, situated outside Director's offices

N/B: Large tenders that cannot be dropped in the tender box shall be received at the main registry opposite the Directors office registered in the tender register on or before the closing time of 12:00pm, Friday, 12th, November, 2021.

C. Address for Opening of Tenders.

Kenya Forestry Research Institute (KEFRI)
Auditorium Hall, immediately after the closing of the tender.

Designation: Ag. Deputy Director-Supply Chain Management
For: DIRECTOR-KEFRI

SECTION I - INSTRUCTIONS TO TENDERERS (ITT)

Section I - Instructions to Tenderers

A. GENERAL

1. Scope of Tender

1.1 KEFRI, as indicated **in the TDS**, issues this tendering document for the supply and installation of the Information System as specified in Section V, Procuring Entity's Requirements. The name, identification and number of lots (contracts) of this ITT are specified **in the TDS**.

2. Definitions

2.1 Unless otherwise stated, throughout this tendering document definitions and interpretations shall be as prescribed in the Section VI, General Conditions of Contract.

2.2 Throughout this tendering document:

- a) The term "in writing" means communicated in written form (e.g., by mail, e-mail, fax, including if specified in the **TDS**, distributed or received through the electronic-procurement system used by KEFRI) with proof of receipt;
- b) If the context so requires, "singular" means "plural" and vice versa; and
- c) "Day" means calendar day, unless otherwise specified as "Business Day". A Business Day is any day that is an official working day of KEFRI. It excludes KEFRI's official public holidays.
- d) "Information System" shall carry the same meaning as "Information Technology".

3. Fraud and Corruption

3.1 KEFRI 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.

3.2 KEFRI requires compliance with the provisions of the Competition Act 2010, regarding collusive practices in contracting. Any tenderer found to have engaged in collusive conduct shall be disqualified and criminal and/ or civil sanctions may be imposed. To this effect, Tenderers shall be required to complete and sign the "Certificate of Independent Tender Determination" annexed to the Form of Tender.

3.3 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. KEFRI shall indicate in the TDS firms (if any) that provided

consulting services for the contract being tendered for. KEFRI shall check whether the owners or controllers of the Tenderer are same as those that provided consulting services. KEFRI shall, upon request, make available to any tenderer information that would give such firm unfair competitive advantage over competing firms.

- 3.4 Tenderers shall permit and shall cause their agents (whether declared or not), subcontractors, sub-consultants, service providers, suppliers, and their personnel, to permit KEFRI to inspect all accounts, records and other documents relating to any initial selection process, pre-qualification process, tender submission, proposal submission, and contract performance (in the case of award), and to have them audited by auditors appointed by KEFRI.

4 Eligible Tenderers

- 4.1 A Tenderer may be a firm that is a private entity, a state-owned enterprise or institution subject to ITT 4.6, or any combination of such entities in the form of a joint venture (JV) under an existing agreement or with the intent to enter in to such an agreement supported by a Form 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 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. 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. The maximum number of JV members shall be specified in the TDS.
- 4.2 Public Officers of KEFRI, 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.
- 4.3 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 KEFRI regarding this Tendering process; or
 - e. Any of its affiliates participates as a consultant in the preparation of the design or technical specifications of the Information System that are the subject of the

Tender; or

- f. Or any of its affiliates has been hired (or is proposed to be hired) by KEFRI or Procuring Entity as Project Manager 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 project specified in the TDSITT2.1 that it provided or were provided by any affiliate that directly or indirectly controls, is controlled by, or is under common control with that firm; or
 - h. Has a close business or family relationship with a professional staff of KEFRI who: -
 - i. Are directly or indirectly involved in the preparation of the tendering document or specifications of the Contract, and/ or the Tender evaluation process of such Contract. or
 - ii. Would be involved in the implementation or supervision of such Contract unless the conflict stemming from such relationship has been resolved in a manner acceptable to KEFRI throughout the Tendering process and execution of the Contract.
- 4.4 A firm that is a Tenderer (either individually or as a JV member) shall not participate as a Tenderer or as JV member in more than one Tender except for permitted alternative Tenders. Such participation shall result in the disqualification of all Tenders in which the firm is involved. However, this does not limit the participation of a Tenderer as subcontractor in another Tender or of a firm as a subcontractor in more than one Tender.
- 4.5 A Tenderer may have the nationality of any country, subject to the restrictions pursuant to ITT4.9. 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 maybe. This criterion also shall apply to the determination of the nationality of proposed sub-contractors or sub-consultants for any part of the Contract including related Services.
- 4.6 A 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.
- 4.7 Tenderers that are state-owned enterprises or institutions in Kenya may be eligible to compete and be awarded a Contract(s) only if they can establish that they (i) are legally and financially autonomous (ii) operate under commercial law, and (iii) are not under supervision of KEFRI.
- 4.8 Firms and individuals may be ineligible if (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.

- 4.9 KEFRI may require tenderers to be registered with certain authorities in Kenya. Such registration shall be defined in the **TDS**, but care must be taken to ensure such registration requirement does not discourage competition, nor exclude competent tenderers. Registration shall not be a condition for tender, but where a selected tenderer is not so registered, the tenderer shall be given opportunity to register before signing of the contract.
- 4.10 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 KEFRI determine if this condition is met shall be provided in for this purpose is be provided in “SECTION III- EVALUATION AND QUALIFICATION CRITERIA, Item 9”.
- 4.11 Pursuant to the eligibility requirements of ITT 4.11, a tenderer is considered a foreign tenderer, if it is registered in Kenya, has less than 51 percent ownership by nationals of Kenya and if it does not subcontract foreign contractors more than 10 percent of the contract price, excluding provisional sums. JVs are considered as foreign tenderers if the individual member firms are registered in Kenya have less than 51 percent ownership by nationals of Kenya. The JV shall not subcontract to foreign firms more than 10 percent of the contract price, excluding provisional sums.
- 4.12 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
- 4.13 Tenderers shall be considered ineligible for procurement if they offer 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.
- 4.14 A Kenyan tenderer shall be eligible to tender if it provides evidence of having fulfilled his/her tax obligations by producing a valid tax compliance certificate or tax exemption certificate issued by the Kenya Revenue Authority.

5 Eligible Goods and Services

- 5.1 The Information Systems to be supplied under the Contract may have their origin in any eligible country.
- 5.2 For the purposes of this tendering document, the term “Information System”

means all:

- i. The required information technologies, including all information processing and communications-related hardware, software, supplies, and consumable items that the Supplier is required to supply and install under the Contract, plus all associated documentation, and all other materials and goods to be supplied, installed, integrated, and made operational; and
 - ii. The related software development, transportation, insurance, installation, customization, integration, commissioning, training, technical support, maintenance, repair, and other services necessary for proper operation of the Information System to be provided by the selected Tenderer and as specified in the Contract.
- 5.3 For purposes of ITT 5.1 above, “origin” means the place where the goods and services making the Information System are produced in or supplied from. An Information System is deemed to be produced in a certain country when, in the territory of that country, through software development, manufacturing, or substantial and major assembly or integration of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components.
- 5.4 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 under this Act.

B. CONTENTS OF TENDERING DOCUMENT

6 Sections of Tendering Document

PART 1 - Tendering Procedures

Section I - Instructions to Tenderers (ITT)

Section II - Tender Data Sheet (TDS)

Section III - Evaluation and Qualification Criteria

Section IV - Tendering Forms

PART 2 - Procuring Entity's Requirements

Section V - Requirements of the Information Systems

Section VI - Technical Requirements

Section VII - Implementation Schedule

Section VIII - System Inventory Tables

Section IX - Background and Informational Materials

PART 3 - Contract

Section X - General Conditions of Contract

Section XII - Special Conditions of Contract

Section XIII - Contract Forms

- 6.1 The Invitation to Tender Notice issued by KEFRI is not part of this tendering document.
- 6.2 Unless obtained directly from KEFRI, KEFRI is not responsible for the completeness of the document, responses to requests for clarification, the Minutes of the pre-Tender meeting (if any), or Addenda to the tendering document in accordance with ITT 10. In case of any contradiction, documents obtained directly from KEFRI shall prevail.
- 6.3 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tendering document and to furnish with its Tender all information or documentation as is required by the tendering document.

7 Site Visit

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

8 Pre-Tender Meeting and a pre- arranged pretender visit of the site of the works

- 8.1 KEFRI shall specify in the **TDS** if a pre-tender conference will be held, when and where. KEFRI shall also specify in the **TDS** if a pre-arranged pretender visit of the site of the works 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 KEFRI not later than the period specified in the **TDS** before the meeting.
- 8.3 Minutes of the pre-Tender meeting and the pre-arranged pre-tender 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 KEFRI shall also promptly publish anonymized (*no names*) Minutes of the pre-Tender meeting and the pre-arranged pre-tender 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 shall be made by KEFRI exclusively through the issue of an Addendum pursuant to ITT 10 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 of Tender Documents

- 9.1 A Tenderer requiring any clarification of the Tender Document shall contact KEFRI in writing at KEFRI'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. KEFRI 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. KEFRI 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 so specified in the TDS, KEFRI shall also promptly publish its response at the web page identified in the TDS. Should the clarification resulting changes to the essential elements of the Tender Documents, KEFRI shall amend the Tender Documents appropriately following the procedure under ITT 10.

10 Amendment of Tendering Document

- 10.1 At any time prior to the deadline for submission of Tenders, KEFRI 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 KEFRI in accordance with ITT 6.3. KEFRI shall also promptly publish the addendum on KEFRI's webpage in accordance with ITT 8.1.
- 10.3 To give prospective Tenderers reasonable time in which to take an addendum into account in preparing their Tenders, KEFRI shall extend, as necessary, the deadline for submission of Tenders, in accordance with ITT 24.2 below.
- 10.4 Addendum into account in preparing their Tenders, KEFRI shall extend, as necessary, the deadline for submission of Tenders, in accordance with ITT 24.2 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 KEFRI 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 KEFRI, 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 translation of the relevant passages in 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 submitted by the Tenderer shall comprise the following:

- a. **Form of Tender** prepared in accordance with ITT 14;
- b. **Price Schedules** completed in accordance with ITT 14 and ITT 16;
- c. **Tender Security or Tender-Securing Declaration** in accordance with ITT 22;
- 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 23.3;
- f. **Eligibility of Information System:** documentary evidence established in accordance with ITT 16.1 that the Information System offered by the Tenderer in its Tender or in any alternative Tender, if permitted, are eligible;
- g. **Tenderer's Eligibility:** documentary evidence in accordance with ITT 17 establishing the Tenderer's eligibility and qualifications to perform the contract if its Tender is accepted;
- h. **Conformity:** documentary evidence established in accordance with ITT 18 that the Information System offered by the Tenderer conform to the tendering document;
- i. **Subcontractors:** list of subcontractors, in accordance with ITT 18.4;
- j. **Intellectual Property:** a list of: Intellectual Property as defined in GCC Clause 15;
 - ii. All Software included in the Tender, assigning each item to one of the software categories defined in GCC Clause 1.1(C):
 - a. System, General Purpose, and Application Software; or
 - b. Standard and Custom Software;
 - ii. All Custom Materials, as defined in GCC Clause 1.1(c), included in the Tender;

All Materials not identified as Custom Materials shall be deemed Standard Materials, as defined in GCC Clause 1.1 (c); Re-assignments among the Software and Materials categories, if necessary, will be made during the implementation of the Contract according to GCC Clause 39 (Changes to the Information System); and
- k. Any other document required **in the TDS.**

13.2 In addition to the requirements under ITT 13.1, Tenders submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members indicating at least the parts of the Information System to be executed by the respective members. Alternatively, a Form of intent to execute a Joint Venture Agreement in the information System to be executed by the respective members.

13.1 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. The Tenderer shall serialize page so fall tender documents submitted.

14 Form of Tender and Price Schedules

14.1 The Tenderer shall complete the Form of Tender, including the appropriate Price

Schedules, 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 21.3. All blank spaces shall be filled in with the information requested. The Tenderer shall chronologically serialize all pages of the tender documents submitted.

15 Alternative Tenders

- 15.1 The TDS indicates whether alternative Tenders are allowed. If they are allowed, the **TDS** will also indicate whether they are permitted in accordance with ITT 13.3, or invited in accordance with ITT 13.2 and/or ITT 13.4.
- 15.2 When alternatives to the Time Schedule are explicitly invited, a statement to that effect will be included **in the TDS**, and the method of evaluating different time schedules will be described in Section III, Evaluation and Qualification Criteria.
- 15.3 Except as provided under ITT 15.4 below, Tenderers wishing to offer technical alternatives to KEFRI's requirements as described in the tendering document must also provide: (i) a price at which they are prepared to offer an Information System meeting KEFRI's requirements; and (ii) all information necessary for a complete evaluation of the alternatives by KEFRI, including drawings, design calculations, technical specifications, breakdown of prices, and proposed installation methodology and other relevant details. Only the technical alternatives, if any, of the Tenderer with the Best Evaluated Tender conforming to the basic technical requirements shall be considered by KEFRI.
- 15.4 When Tenderers are invited **in the TDS** to submit alternative technical solutions for specified parts of the system, such parts shall be described in Section V, Procuring Entity's Requirements. Technical alternatives that comply with the performance and technical criteria specified for the Information System shall be considered by KEFRI on their own merits, pursuant to ITT 35.

16 Documents Establishing the Eligibility of the Information System

- 16.1 To establish the eligibility of the Information System in accordance with ITT 5, Tenderers shall complete the country-of-origin declarations in the Price Schedule Forms, included in Section IV, Tendering Forms.

17. Documents Establishing the Eligibility and Qualifications of the Tenderer

- 17.1 To establish its eligibility and qualifications to perform the Contracting accordance with Section III, Evaluation and Qualification Criteria, the Tenderer shall provide the information requested in the corresponding information sheets included in Section IV, Tendering Forms.
- 17.2 In the event that pre-qualification of potential Tenderers has been undertaken as stated **in the TDS**, only Tenders from pre-qualified Tenderers shall be considered for award of Contract. These qualified Tenderers should submit with their Tenders any information updating their original pre-qualification applications or, alternatively, confirm in their Tenders that the originally submitted pre-qualification information remains essentially correct as of the date of Tender submission.

- 17.3 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 KEFRI, a particular contractor or group of contractors qualifies for a margin of preference. Further the information will enable KEFRI 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.
- 17.4 The purpose of the information described in ITT 15.1 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 KEFRI as a justification for a Tenderer's failure to disclose, or failure to provide required information on its ownership and control.
- 17.5 The Tenderer shall provide further documentary proof, information or authorizations that KEFRI may request in relation to ownership and control, 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.
- 17.6 All information provided by the tenderer pursuant to these requirements must be complete, current and accurate as at the date of provision to KEFRI. 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 KEFRI.
- 17.7 If a tenderer fails to submit the information required by these requirements, its tenderer will be rejected. Similarly, if KEFRI 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.
- 17.8 If information submitted by a tenderer pursuant to these requirements, or obtained by KEFRI (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:
- a. If the procurement process is still ongoing, the tenderer will be disqualified from the procurement process,
 - b. If the contract has been awarded to that tenderer, the contract award will be set aside,
 - c. 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.

17.9 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 KEFRI 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.

18 Documents Establishing Conformity of the Information System

18.1 Pursuant to ITT 11.1(h), the Tenderer shall furnish, as part of its Tender documents establishing the conformity to the tendering documents of the Information System that the Tenderer proposes to design, supply and install under the Contract.

18.2 The documentary evidence of conformity of the Information System to the tendering documents including:

- a) Preliminary Project Plan describing, among other things, the methods by which the Tenderer will carry out its overall management and coordination responsibilities if awarded the Contract, and the human and other resources the Tenderer proposes to use. The Preliminary Project Plan must also address any other topics **specified in the TDS**. In addition, the Preliminary Project Plan should state the Tenderer's assessment of what it expects KEFRI and any other party involved in the implementation of the Information System to provide during implementation and how the Tenderer proposes to coordinate the activities of all involved parties;
- b) Written confirmation that the Tenderer accepts responsibility for the successful integration and inter- operability of all components of the Information System as required by the tendering documents;
- c) An item-by-item commentary on KEFRI's Technical Requirements, demonstrating the substantial responsiveness of the Information System offered to those requirements. In demonstrating responsiveness, the Tenderer is encouraged to use the Technical Responsiveness Checklist (or Checklist Format) in the Sample Tendering Forms (Section IV). The commentary shall include explicit cross-references to the relevant pages in the supporting materials included in the tender. Whenever a discrepancy arises between the item-by-item commentary and any catalogs, technical specifications, or other preprinted materials submitted with the tender, the item-by-item commentary shall prevail;
- d) Support material (e.g., product literature, white papers, narrative descriptions of technologies and/or technical approaches), as required and appropriate; and
- e) Any separate and enforceable contract(s) for Recurrent Cost items which the TDS ITT 17.2 required Tenderers to tender.

18.3 References to brand names or model numbers or national or proprietary standards designated by the Procuring Entity in the tendering documents are intended to be descriptive and not restrictive. Except where explicitly prohibited in the **TDS** for specific items or standards, the Tenderer may substitute alternative brand /model names or standards in its tender, provided that it demonstrates to KEFRI's satisfaction that the use of the substitute(s) will result in the Information System being able to perform substantially equivalent to or better than that

specified in the Technical Requirements.

- 18.4 For major items of the Information System as listed by KEFRI in Section III, Evaluation and Qualification Criteria, which the Tenderer intends to purchase or subcontract, the Tenderer shall give details of the name and nationality of the proposed subcontractors, including manufacturers, for each of those items. In addition, the Tenderer shall include in its Tender information establishing compliance with the requirements specified by KEFRI for these items. Quoted rates and prices will be deemed to apply to whichever subcontractor is appointed, and no adjustment of the rates and prices will be permitted.
- 18.5 The Tenderer shall be responsible for ensuring that any subcontractor proposed complies with the requirements of ITT 4, and that any goods or services to be provided by the subcontractor comply with the requirements of ITT 5 and ITT 16.1.

19 Tender Prices

- 19.1 All Goods and Services identified in the Supply and Installation Cost Sub-Tables in System Inventory Tables in Section VII, and all other Goods and Services proposed by the Tenderer to fulfill the requirements of the Information System, must be priced separately and summarized in the corresponding cost tables in the Sample Tendering Forms (Section IV), in accordance with the instructions provided in the tables and in the manner specified below.
- 19.2 **Unless otherwise specified in the TDS**, the Tenderer must also tender Recurrent Cost Items specified in the Technical Requirements, Recurrent Cost Sub-Table of the System Inventory Tables in Section VII (if any). These must be priced separately and summarized in the corresponding cost table in the Sample Tendering Forms (Section IV), in accordance with the instructions provided in the tables and in the manner specified below:
- a) **If specified in the TDS**, the Tenderer must also tender separate enforceable contracts for the Recurrent Cost Items not included in the main Contract;
 - b) prices for Recurrent Costs are all-inclusive of the costs of necessary Goods such as spare parts, software license renewals, labor, etc., needed for the continued and proper operation of the Information System and, if appropriate, of the Tenderer's own allowance for price increases;
 - c) Prices for Recurrent Costs beyond the scope of warranty services to be incurred during the Warranty Period, defined in GCC Clause 29.4 and prices for Recurrent Costs to be incurred during the Post-Warranty Period, defined in SCC Clause 1.1. (e) (xiii), shall be quoted as Service prices on the Recurrent Cost Sub-Table in detail, and on the Recurrent Cost Summary Table in currency totals.
- 19.3 Unit prices must be quoted at a level of detail appropriate for calculation of any partial deliveries or partial payments under the contract, in accordance with the Implementation Schedule in Section VII), and with GCC and SCC Clause 12 – Terms of Payment. Tenderers may be required to provide a breakdown of any composite or lump-sum items included in the Cost Tables
- 19.4 The price of items that the Tenderer has left blank in the cost tables provided in the Sample Tender Forms (Section IV) shall be assumed to be included in the

price of other items. Items omitted altogether from the cost tables shall be assumed to be omitted from the tender and, provided that the tender is substantially responsive, an adjustment to the tender price will be made during tender evaluation in accordance with ITT 31.3.

- 19.5 The prices for Goods components of the Information System are to be expressed and shall be defined and governed in accordance with the rules prescribed in the edition of incoterms **specified in the TDS**, as follows:
- a) Goods supplied from outside Kenya: **Unless otherwise specified in the TDS**, the prices shall be quoted on a CIP (named place of destination) basis, exclusive of all taxes, stamps, duties, levies, and fees imposed in Kenya. The named place of destination and special instructions for the contract of carriage are as specified in the SCC for GCC 1.1(e) (iii). In quoting the price, the Tenderer shall be free to use transportation through carriers registered in any eligible countries. Similarly, the Tenderer may obtain insurance services from any eligible source country;
 - b) Locally supplied Goods: Unit prices of Goods offered from within Kenya, shall be quoted on an EXW (ex- factory, ex works, ex ware house or off- the-shelf, as applicable) basis, including all customs duties, levies, fees, sales and other taxes incurred until delivery of the Goods, but excluding all VAT or sales and other taxes and duties/fees incurred for the Goods at the time of invoicing or sales transaction, if the Contract is awarded; and
 - c) Inland transportation.
- 19.6 Unless otherwise stated in the **TDS**, inland transportation, insurance and related local costs incidental to the delivery of the Goods to the designated Project Sites must be quoted separately as a Service item in accordance with ITT 17.5, whether the Goods are to be supplied locally or from outside Kenya, except when these costs are already included in the price of the Goods, as is, e.g., the case, when ITT 17.5 (a) specifies CIP, and the named places of destination are the Project Sites.
- 19.7 The price of Services shall be separated into their local and foreign currency components and where appropriate, broken down into unit prices. Prices must include all taxes, duties, levies and fees whatsoever, except only VAT or other indirect taxes, or stamp duties, that may be assessed and/ or apply in Kenyan /to the price of the Services invoiced to KEFRI, if the Contract is awarded.
- 19.8 Unless otherwise specified in the **TDS**, the prices must include all costs incidental to the performance of the Services, as incurred by the Supplier, such as travel, subsistence, office support, communications, translation, printing of materials, etc. Costs incidental to the delivery of the Services but incurred by KEFRI or its staff, or by third parties, must be included in the price only to the extent such obligations are made explicit in these tendering documents (as, e.g., a requirement for the Tenderer to include the travel and subsistence costs of trainees).
- 19.9 Unless otherwise specified in the **TDS**, prices quoted by the Tenderer shall be fixed during the Tenderer's performance of the Contract and not subject to increases on any account. Tenders submitted that are subject to price adjustment will be rejected.

20 Currencies of Tender and Payment

- 20.1 The currency(ies) of the Tender and currencies of payment shall be the same. The Tenderer shall quote in Kenya shillings the portion of the Tender price that corresponds to expenditures incurred in Kenya currency, unless otherwise specified in the **TDS**.
- 20.2 The Tenderer may express the Tender price in any currency. If the Tenderer wishes to be paid in a combination of amounts in different currencies, it may quote its price accordingly but shall use no more than **two foreign currencies** in addition to Kenyan currency.

21 Period of Validity of Tenders

- 21.1 Tenders shall remain valid for the period specified in the **TDS** after the Tender submission deadline date prescribed by KEFRI in accordance with ITT 23.1. A Tender valid for a shorter period shall be rejected by KEFRI as non-responsive.
- 21.2 Exceptional circumstances, prior to the expiration of the Tender validity period, KEFRI 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 20.1, it shall also be extended for thirty days (30) 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 19.3.

22 Tender Security

- 22.1 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**.
- 22.2 A Tender-Securing Declaration shall use the form included in Section IV, Tendering Forms.
- 22.3 If a Tender Security is specified pursuant to ITT 20.1, the tender security shall be a demand guarantee in any of the following forms at the Tenderer's option:
- a. cash;
 - b. a bank guarantee;
 - c. a guarantee by an insurance company registered and licensed by the Insurance Regulatory Authority listed by the Authority; or
 - d. a guarantee issued by a financial institution approved and licensed by the Central Bank of Kenya,
 - e. any other form specified in the **TDS**.

If an unconditional guarantee is issued by a non-bank financial institution located outside Kenya, the issuing non-bank financial institution shall have a correspondent financial institution located in Kenya to make it enforceable unless KEFRI has agreed in writing, prior to Tender submission, that a correspondent

financial institution is not required.

22.4 In the case of a bank guarantee, the Tender Security shall be submitted either using the Tender Security Form included in Section IV, Tendering Forms or in another substantially similar format approved by KEFRI prior to Tender submission. In neither case, the form must include the complete name of the Tenderer. The Tender Security shall be valid for thirty days (30) beyond the original validity period of the Tender, or beyond any period of extension if requested under ITT 19.2.

22.5 If a Tender Security or a Tender-Securing Declaration is specified pursuant to ITT 20.1, any Tender not accompanied by a substantially responsive Tender Security or Tender-Securing Declaration shall be rejected by KEFRI as non-responsive.

22.6 The Tender Security shall be returned/release as promptly as possible

- a) The procurement proceedings are terminated;
- b) KEFRI determines that none of the submitted tenders is responsive;
- c) A bidder declines to extend the tender validity.
- d) Once the successful Tenderer has signed the Contract and furnished the required Performance Security.

22.7 The Tender Security may be forfeited or the Tender-Securing Declaration executed:

- a) if a Tenderer withdraws its Tender during the period of Tender validity specified by the Tenderer on the Form of Tender; or
- b) if the successful Tenderer fails to:
 - i) sign the Contract in accordance with ITT 47; or
 - ii) furnish a performance security in accordance with ITT 48.

22.8 Where the Tender-Securing Declaration is executed KEFRI will recommend to the PPRA to debar the Tenderer from participating in public procurement as provided in the law.

22.9 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 in to 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 Form of intent referred to in ITT 4.1 and ITT 11.2.

22.10 A tenderer shall not issue a tender security to guarantee itself.

23 Format and Signing of Tender

23.1 The Tenderer shall prepare one original of the documents comprising the Tender as described in ITT 11 and clearly mark it "ORIGINAL." Alternative Tenders, if permitted in accordance with ITT 13, 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.

- 23.2 Tenderers shall mark as “CONFIDENTIAL” information in their Tenders which is confidential to their business. This may include proprietary information, trade secrets, or commercial or financially sensitive information.
- 23.3 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.
- 23.4 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 so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.
- 23.5 Any interlineations, 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

24 Submission, Sealing and Marking of Tenders

- 24.1 The Tenderer shall deliver the Tender in a single, sealed envelope (one (1) envelope process). Within the single envelope the Tenderer shall place the following separate, sealed envelopes:
- a) In an envelope marked “ORIGINAL”, all documents comprising the Tender, as described in ITT 13; and
 - b) In an envelope 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 marked “ORIGINAL–ALTERNATIVETENDER”, the alternative Tender; and
 - ii) In the envelope marked “COPIES – ALTERNATIVE TENDER” all required copies of the alternative Tender.
- 24.2 The inner envelopes shall:
- a) Bear the name and address of the Tenderer;
 - b) Be addressed to KEFRI/ Employer in accordance with ITT 23.1;
 - c) Bear the specific identification of this Tendering process specified in accordance with ITT 1.1; and
 - d) Bear a warning not to open before the time and date for Tender opening.

The outer envelopes shall:

- e) Be addressed to KEFRI/ Employer in accordance with ITT 23.1;

- f) Bear the specific identification of this Tendering process specified in accordance with ITT 1.1; and bear a warning not to open before the time and date for Tender opening.

24.3 If all envelopes are not sealed and marked as required, KEFRI will assume no responsibility for the misplacement or premature opening of the Tender. Tenders that are misplaced or opened prematurely will not be accepted.

25 Deadline for Submission of Tenders

25.1 Tenders must be received by KEFRI at the address and no later than the date and time indicated **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**.

25.2 KEFRI may, at its discretion, extend this deadline for submission of Tenders by amending the tendering documents in accordance with ITT 8, in which case all rights and obligations of KEFRI and Tenderers will thereafter be subject to the deadline as extended.

26 Late Tenders

26.1 KEFRI shall not consider any Tender that arrives after the deadline for submission of Tenders, in accordance with ITT 23. Any Tender received by KEFRI after the deadline for submission of Tenders shall be declared late, rejected, and returned unopened to the Tenderer.

27 Withdrawal, Substitution, and Modification of Tenders

27.1 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 21.3, (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 21 and ITT 22 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," "MODIFICATION;" and
- b) Received by KEFRI prior to the deadline prescribed for submission of Tenders, in accordance with ITT25.

27.2 Tenders requested to be withdrawn in accordance with ITT 25.1 shall be returned unopened to the Tenderers.

27.3 No Tender may be withdrawn, substituted, or modified in the interval between the deadline for submission of Tender and the expiration of the period of Tender validity specified by the Tenderer on the Form of Tender or any extension thereof.

28 Tender Opening

- 28.1 Except as in the cases specified in ITT 24 and ITT 25.2, KEFRI shall conduct the Tender opening in public, in the presence of Tenderers' designated representatives who chooses to attend, and at the address, date and time specified **in the TDS**. Any specific electronic Tender opening procedures required if electronic tendering is permitted in accordance with ITT 23.1, shall be as specified **in the TDS**.
- 28.2 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.
- 28.3 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.
- 28.4 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. Only Tenders that are opened and read out at Tender opening shall be considered further.
- 28.5 Next, all remaining envelopes shall be opened one at a time, reading out: the name of the Tenderer and the Tender Price(s), including any discounts and alternative Tenders, and indicating whether there is a modification; the presence or absence of a Tender Security or Tender-Securing Declaration; and any other details as KEFRI may consider appropriate.
- 28.6 Only Tenders, alternative Tenders and discounts that are opened and read out at Tender opening shall be considered further in the evaluation. The Form of Tender and the Price Schedules are to be initialed by representatives of KEFRI attending Tender opening in the manner specified **in the TDS**.
- 28.7 KEFRI shall neither discuss the merits of any Tender nor reject any Tender (except for late Tenders, in accordance with ITT 26.1).
- 28.8 KEFRI shall prepare a record 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 if applicable, including any discounts;
 - c) Any alternative Tenders; and
 - d) The presence or absence of a Tender Security or a Tender-Securing Declaration.

28.9 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

29 Confidentiality

29.1 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 Tendering process until the Notification of Intention to Award the Contract is transmitted to all Tenderers in accordance with ITT 42.

29.2 Any effort by a Tenderer to influence KEFRI in the evaluation of the Tenders or Contract award decisions may result in the rejection of its Tender.

29.3 Not with standing ITT 27.2, from the time of Tender opening to the time of Contract award, if any Tenderer wishes to contact KEFRI on any matter related to the Tendering process, it should do so in writing.

30 Clarification of Tenders

30.1 To assist in the examination, evaluation, and comparison of the Tenders, and qualification of the Tenderers, KEFRI may, at its discretion, ask any Tenderer for a clarification of its Tender. Any clarification submitted by a Tenderer that is not in response to a request by KEFRI shall not be considered. KEFRI's request for clarification and the response shall be in writing. No change in the prices or substance of the Tender shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by KEFRI in the evaluation of the Tenders, in accordance with ITT32.

30.2 If a Tenderer does not provide clarifications of its Tender by the date and time set in KEFRI's request for clarification, its Tender may be rejected.

31 Deviations, Reservations, and Omissions

31.1 During the evaluation of Tenders, the following definitions apply:

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

32 Determination of Responsiveness

32.1 KEFRI's determination of a Tender's responsiveness is to be based on the contents of the Tender itself, as defined in ITT 11.

32.2 A substantially responsive Tender is one that meets the requirements of the tendering document without material deviation, reservation, or omission. A material deviation, reservation, or omission is one that;

- a) If accepted, would:
 - i) Affect in any substantial way the scope, quality, or performance of the Information System specified in the Contract; or
 - ii) Limit in any substantial way, in consistent with the tendering document, KEFRI's rights or the Tenderer's obligations under the proposed Contract; or
- b) if rectified, would unfairly affect the competitive position of other Tenderers presenting substantially responsive Tenders.

32.3 KEFRI shall examine the technical aspects of the Tender in particular, to confirm that all requirements of Section V, Procuring Entity's Requirements have been met without any material deviation, reservation, or omission.

32.4 To be considered for Contract award, Tenderers must have submitted Tenders:

- a) for which detailed Tender evaluation using the same standards for compliance determination as listed in ITT 29 and ITT 30.3 confirms that the Tenders are commercially and technically responsive, and include the hardware, Software, related equipment, products, Materials, and other Goods and Services components of the Information System in substantially the full required quantities for the entire Information System or, if allowed in the TDS ITT 35.8, the individual Subsystem, lot or slice Tender on; and are deemed by KEFRI as commercially and technically responsive; and
- b) that offer Information Technologies that are proven to perform up to the standards promised in the tender by having successfully passed the performance, benchmark, and/or functionality tests KEFRI may require, pursuant to ITT 39.3.

33 Non-material Non-conformities

33.1 Provided that a Tender is substantially responsive, KEFRI may waive any nonconformity in the Tender that does not constitute a material deviation, reservation or omission.

33.2 Provided that a Tender is substantially responsive, KEFRI may request that the Tenderer submit the necessary information or documentation, within a reasonable period of time, 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.

33.3 Provided that a Tender is substantially responsive, KEFRI 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.**

34 Correction of Arithmetical Errors

- 34.1 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 anyway by any person or entity.
- 34.2 Provided that the Tender is substantially responsive, KEFRI 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, 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, unless the amount expressed in words is related to an arithmetic error, in which case the amount in figures shall prevail.

35 Conversion to Single Currency

- 35.1 For evaluation and comparison purposes, the currency(ies) of the Tender shall be converted into a single currency as specified **in the TDS**.

36 Margin of Preference and Reservations

- 36.1 A margin of preference on local contractors may be allowed only when the contract is open to international competitive tendering where foreign contractors are expected to participate in the tendering process and where the contract exceeds the value/ threshold specified in the Regulations.
- 36.2 A margin of preference shall not be allowed unless it is specified so in the **TDS**.
- 36.3 Contracts procured on basis of international competitive tendering shall not be subject to reservations exclusive to specific groups as provided in ITT 34.4.
- 36.4 Where it is intended to reserve a contract to a specific group of businesses (these groups are Small and Medium Enterprises, Women Enterprises, Youth Enterprises and Enterprises of persons living with disability, as the case maybe), and 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 in the **TDS** that only businesses or firms belonging to the specified group are eligible to tender. No tender shall be reserved to more than one group. If not so stated in the Invitation to Tender and in the Tender documents, the invitation to tender will be open to all interested tenderers.

37 Evaluation of Tenders

- 37.1 KEFRI 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

KEFRI shall determine the Best Evaluated Tender.

37.2 To evaluate a Tender, KEFRI shall consider the following:

- a) Price adjustment due to discounts offered in accordance with ITT 14.4;
- b) converting the amount resulting from applying (a) and (b) above, if relevant, to a single currency in accordance with ITT 33;
- c) price adjustment due to quantifiable non material non-conformities in accordance with ITT 31.3; and
- d) any additional evaluation factors specified **in the TDS** and Section III, Evaluation and Qualification Criteria.

38 Preliminary Examination

38.1 KEFRI will examine the tenders, to determine whether they have been properly signed, whether required sureties have been furnished, whether any computational errors have been made, whether required sure ties have been furnished and are substantially complete (e.g., not missing key parts of the tender or silent on excessively large portions of the Technical Requirements). In the case where a pre-qualification process was undertaken for the Contract (s) for which these tendering documents have been issued, KEFRI will ensure that each tender is from a pre-qualified Tenderer and, in the case of a Joint Venture, that partners and structure of the Joint Venture are unchanged from those in the pre-qualification.

39 Technical Evaluation

39.1 KEFRI will examine the information supplied by the Tenderers Pursuant to ITT 13 and ITT 16, and in response to other requirements in the Tendering document, considering the following factors:

- a) Overall completeness and compliance with the Technical Requirements; and deviations from the Technical Requirements;
- b) suitability of the Information System offered in relation to the conditions prevailing at the site; and the suitability of the implementation and other services proposed, as described in the Preliminary Project Plan included in the tender;
- c) achievement of specified performance criteria by the Information System;
- d) compliance with the time schedule called for by the Implementation Schedule and any alternative time schedules offered by Tenderers, as evidenced by a milestone schedule provided in the Preliminary Project Plan included in the tender;
- e) type, quantity, quality, and long-term availability of maintenance services and of any critical consumable items necessary for the operation of the Information System;
- f) any other relevant technical factors that KEFRI deems necessary or prudent to take into consideration;
- g) any proposed deviations in the tender to the contractual and technical provisions stipulated in the tendering documents.

- 39.2 KEFRI's evaluation of tenders will consider technical factors, in addition to cost factors. The Technical Evaluation will be conducted following the Criteria specified in Section III, Evaluation and Qualification Criteria, which permits a comprehensive assessment of the technical merits of each Tender. All tenders that fail to pass this evaluation will be considered non-responsive and will not be evaluated further.
- 39.3 Where alternative technical solutions have been allowed in accordance with ITT 13, and offered by the Tenderer, KEFRI will make a similar evaluation of the alternatives. Where alternatives have not been allowed but have been offered, they shall be ignored.
- 39.4 Where the tender involves multiple lots or contracts, the tenderer will be allowed to tender for one or more lots (contracts). Each lot or contract will be evaluated in accordance with ITT 35.2. The methodology to determine the lowest evaluated tenderer or tenderers based one lot (contract) or based on a combination of lots (contracts), will be specified in Section III, Evaluation and Qualification Criteria. In the case of multiple lots or contracts, tenderer will be required to prepare the Eligibility and Qualification Criteria Form for each Lot.

40 Financial/ Economic Evaluation

40.1 To evaluate a Tender, KEFRI shall consider the following:

- a) price adjustment due to unconditional discounts offered in accordance with ITT 26.8; excluding provisional sums and contingencies, if any, but including Day work items, where priced competitively.
- b) Price adjustment due to quantifiable non material non-conformities in accordance with ITT 31.3;
- c) converting the amount resulting from applying (a) to (c) above, if relevant, to a single currency in accordance with ITT 33; and
- d) the evaluation factors indicated in Section III, Evaluation and Qualification Criteria.

If price adjustment is allowed in accordance with ITT 17.9, 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.

40.1 KEFRI will evaluate and compare the Tenders that have been determined to be substantially responsive, pursuant to ITT 35.4. The evaluation will be performed assuming either that:

- a) The Contract will be awarded to the Lowest Evaluated Tender for the entire Information System; or
- b) if specified **in the TDS**, Contracts will be awarded to the Tenderers for each individual Subsystem, lot, or slice if so defined in the Technical Requirements whose Tenders result in the Lowest Evaluated Tender/ Tenders for the entire System.

In the latter case, discounts that are conditional on the award of more than one Subsystem, lot, or slice may be offered in Tenders. Such discounts will be considered in the evaluation of tenders as specified **in the TDS**.

41 Comparison of Tenders

41.1 KEFRI shall compare all substantially responsive Tenders in accordance with ITT 35.6 to determine the lowest evaluated cost.

42 Abnormally Low Tenders and Abnormally High Tenders

42.1 An Abnormally Low Tender is one where the Tender price in combination with other constituent elements of the Tender appears unreasonably low to the extent that the Tender price raises material concerns as to the capability of the Tenderer to perform the Contract for the offered Tender Price or that genuine competition between Tenderers is compromised.

42.2 In the event of identification of a potentially Abnormally Low Tender, KEFRI 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 tendering document.

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

Abnormally High Tenders

42.4 An abnormally high tender price is one where the tender price, in combination with other constituent elements of the Tender, appears unreasonably too high to the extent that KEFRI is concerned that it (KEFRI) 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.

42.5 In case of an abnormally high price, KEFRI 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. KEFRI may also seek written clarification from the tenderer on the reason for the high tender price. KEFRI shall proceed as follows:

- a. If the tender price is abnormally high based on wrong estimated cost of the contract, KEFRI may accept or not accept the tender depending on KEFRI's budget considerations.
- b. If specifications, scope of work and/ or conditions of contract are contributory to the abnormally high tender prices, KEFRI 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.

42.6 If KEFRI determines that the Tender Price is abnormally too high because

genuine competition between tenderers is compromised (*often due to collusion, corruption or other manipulations*), KEFRI shall reject all Tenders and shall institute or cause competent Government Agencies to institute an investigation on the cause of the compromise, before retendering.

43 Unbalanced or Front-Loaded Tenders

- 43.1 If the Tender that is evaluated as the lowest evaluated cost is, in KEFRI's opinion, seriously unbalanced or front loaded KEFRI 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 information systems, installations, proposed methodology, schedule and any other requirements of the tendering document.
- 43.2 After the evaluation of the information and detailed price analyses presented by the Tenderer, KEFRI may: -
- a) Accept the Tender; or
 - b) If appropriate, require that the total amount of the Performance Security be increased, at the expense of the Tenderer, to a level not exceeding twenty percent (20%) of the Contract Price; or
 - c) Reject the Tender.

44 Eligibility and Qualification of the Tenderer

- 44.1 KEFRI shall determine to its satisfaction whether the Tenderer that is selected as having submitted the lowest evaluated and substantially responsive Tender is eligible and meets the qualifying criteria specified in Section III, Evaluation and Qualification Criteria.
- 44.2 The determination shall be based upon an examination of the documentary evidence of the Tenderer's qualifications submitted by the Tenderer, pursuant to ITT 15.
- 44.3 Unless otherwise specified in the **TDS**, KEFRI will NOT carry out tests at the time of post-qualification, to determine that the performance or functionality of the Information System offered meets those stated in the Technical Requirements. However, if so specified in the **TDS** KEFRI may carry out such tests as detailed in the **TDS**.
- 44.4 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 KEFRI shall proceed to the next lowest evaluated cost or best evaluated Tender, as the case may be, to make a similar determination of that Tenderer's qualifications to perform satisfactorily.
- 44.5 The capabilities of the manufacturers and subcontractors proposed by the Tenderer that is determined to have offered the Best Evaluated Tender for identified major items of supply or services will also be evaluated for acceptability in accordance with Section III, Evaluation and Qualification Criteria.

Their participation should be confirmed with a Form of intent between the parties, as needed. Should a manufacturer or subcontractor be determined to be unacceptable, the Tender will not be rejected, but the Tenderer will be required to substitute an acceptable manufacturer or subcontractor without any change to the Tender price. Prior to signing the Contract, the corresponding Appendix to the Contract Agreement shall be completed, listing the approved manufacturers or subcontractors for each item concerned.

44.6 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 KEFRI determine if this condition is met shall be provided in for this purpose is be provided in *“SECTION III- EVALUATION AND QUALIFICATION CRITERIA.*

45 Procuring Entity's Right to Accept Any Tender, and to Reject Any or All Tenders

45.1 KEFRI reserves the right to accept or reject any Tender, and to annul the Tendering process and reject all Tenders at any time prior to contract award, without there by incurring any liability to Tenderers. In case of annulment, all Tenders submitted and specifically, Tender securities, shall be promptly returned to the Tenderers.

F. AWARD OF CONTRACT

46 Award Criteria

46.1 Subject to ITT 40, KEFRI shall award the Contract to the successful tenderer whose tender has been determined to be the Lowest/ best Evaluated Tender. The determination of the lowest/ Best Evaluated Tender will be made in accordance to one of the two options as defined in the **TDS**. The methodology options are:

KEFRI shall award the Contract to the successful tenderer whose tender has been determined to be the Lowest Evaluated Tender

- a) When **rated criteria are used**: The Tenderer that meets the qualification criteria and whose Tender:
 - i) Is substantially responsive; and
 - ii) Is the Best Evaluated Tender (i.e. the Tender with the highest combined technical/ quality/ price score); or
- b) When **rated criteria are not used**: The Tenderer that meets the qualification criteria and whose Tender has been determined to be:
 - i) Most responsive to the tendering document; and
 - ii) The lowest evaluated cost.

47 Procuring Entity's Right to Vary Quantities at Time of Award

47.1 KEFRI reserves the right at the time of Contract award to increase or decrease, by the percentage (s) for items as indicated in **the TDS**.

48 Notice of Intention to enter into a Contract/ Notification of award

48.1 Upon award of the contract and Prior to the expiry of the Tender Validity Period KEFRI 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;

49 Standstill Period

49.1 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.

49.2 Where a Standstill Period applies, it shall commence when KEFRI has transmitted to each Tenderer the Notification of Intention to Enter in to a Contract with the successful Tenderer.

50 Debriefing by KEFRI

50.1 On receipt of KEFRI's Notification of Intention to Enter into a Contract referred to in ITT 43, an unsuccessful tenderer may make a written request to KEFRI for a debriefing on specific issues or concerns regarding their tender. KEFRI shall provide the debriefing within five days of receipt of the request.

50.2 Debriefings of unsuccessful Tenderers may be done in writing or verbally. The Tenderer shall bear its own costs of attending such a debriefing meeting.

51 Letter of Award

51.1 Prior to the expiry of the Tender Validity Period and upon expiry of the Standstill Period specified in ITT44.1, upon addressing a complaint that has been filed within the Standstill Period, KEFRI shall transmit the Letter of Award to the successful Tenderer. The letter of award shall request the successful tenderer to furnish the Performance Security within 21days of the date of the letter.

52 Signing of Contract

52.1 Upon the expiry of the fourteen days of the Notification of Intention to enter in to contract and upon the parties meeting their respective statutory requirements, KEFRI shall send the successful Tenderer the Contract Agreement.

52.2 Within fourteen (14) days of receipt of the Contract Agreement, the successful Tenderer shall sign, date, and return it to KEFRI.

52.3 The written contract shall be entered into within the period specified in the notification of award and before expiry of the tender validity period.

52.4 Notwithstanding ITT 47.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to KEFRI, to Kenya, or to the use of the Information System to be supplied, where such export restrictions arise from trade regulations from a country supplying those Information System, the Tenderer shall not be bound by its Tender, provided that the Tenderer can demonstrate that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Tenderer in completing any formalities, including applying for permits, authorizations and licenses necessary for the export of the Information System under the terms of the Contract.

53 Performance Security

53.1 Within twenty-one (21) days of the receipt of the Form of Acceptance from KEFRI, the successful Tenderer shall furnish the performance security in accordance with the General Conditions, subject to ITT38.2 (b), using for that purpose the Performance Security Form included in Section X, Contract Forms, or another form acceptable to KEFRI. If the Performance Security furnished by the successful Tenderer is in the form of a bond, it shall be issued by a bonding or insurance company that has been determined by the successful Tenderer to be acceptable to KEFRI. A foreign institution providing a Performance Security shall have a correspondent financial institution located in Kenya.

53.2 Failure of the successful Tenderer to submit the above-mentioned Performance Security or sign the Contract shall constitute sufficient grounds for the annulment of the award and forfeiture of the Tender Security. In that event KEFRI may award the Contract to the Tenderer offering the next Best Evaluated Tender.

54 Publication of Procurement Contract

Within fourteen days after signing the contract, KEFRI 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 KEFRI;
- 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.

55 Adjudicator

55.1 Unless the TDS states otherwise, KEFRI proposes that the person named in the TDS be appointed as Adjudicator under the Contract to assume the role of informal Contract dispute mediator, as described in GCC Clause 43.1. In this case, a résumé of the named person is attached to the TDS. The proposed hourly

fee for the Adjudicator is specified in the TDS. The expenses that would be considered reimbursable to the Adjudicator are also specified **in the TDS**. If a Tenderer does not accept the Adjudicator proposed by KEFRI, it should state its non-acceptance in its Tender Form and make a counter proposal of an Adjudicator and an hourly fee, attaching résumé of the alternative. If the successful Tenderer and the Adjudicator nominated **in the TDS** happen to be from the same country, and this is not Kenya too, KEFRI reserves the right to cancel the Adjudicator nominated **in the TDS** and propose a new one. If by the day the Contract is signed, KEFRI and the successful Tenderer have not agreed on the appointment of the Adjudicator, the Adjudicator shall be appointed, at the request of either party, by the Appointing Authority specified in the SCC clause relating to GCC Clause 43.1.4, or if no Appointing Authority is specified there, the Contract will be implemented without an Adjudicator.

56. Procurement Related Complaints and Administrative Review

56.1 The procedures for making a Procurement-related Complaint are as specified in the **TDS**.

56.2 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 for the Information System to be procured shall complement, supplement, or amend the provisions in the Instructions to Tenderers (ITT). Whenever there is a conflict, the provisions here in shall prevail over those in ITT.

Table 1: Tender Data Sheet

ITT Reference	A. General
ITT 1.1	<p>Tender No: KEFRI/ONT/005/2021-2022</p> <p>Procuring Entity: KENYA FORESTRY RESEARCH INSTITUTE</p> <p>Tender Name: Supply, Installation, Configuration, Testing and Commissioning of KEFRI Data Centre.</p> <p>The tender to be quoted as one Lot</p>
ITT 2.3(a)	<i>No Electronic Procurement System</i>
ITT 3.3	Not applicable
ITT4.1	Maximum number of members in the JV shall be 2
ITT 4.9	KEFRI require tenderers to be registered with ICTA – Tenderers must comply with mandatory Requirements
B Tendering Document	
ITT8.1	<p>For Clarification of Tender purposes only, KEFRI's address is:</p> <p>Att: Director</p> <p>Address: P.O.Box 20412-00200 Nairobi</p> <p>Telephone: 0724249781/2</p> <p>Email: director@kefri.org</p> <p>Request for clarification should be received by KEFRI not later than Three (3) days to tender closing date.</p>
ITT8.2	The tender document can be downloaded free of charge in the following websites, www.kefri.org or www.tenders.go.ke
ITT8.4	Not applicable
Preparation of Tenders	
ITT 13.1(k)	Tenderers must comply with mandatory, technical and financial Criteria –Section III – EVALUATION AND QUALIFICATION
ITT 15.2	Alternative Tenders are not permitted
ITT 15.3	Alternative Technical Solutions are not permitted
ITT 17	Not applicable
ITT 18.2(a)	<p>The preliminary project plan must address the following;</p> <ul style="list-style-type: none"> (i) Implementation sub plan (ii) Integration plan (iii) Support materials (iv) Training plan

ITT Reference	A. General
	(v) Warranty Defect Repair and Technical support Service Sub-Plan
ITT 18.3	No specific brand names or models required
ITT 19.2	The Tenderer must tender recurrent cost items
ITT 19.2(a)	The Tenderer must tender for contracts of Recurrent Cost items not included in the main contract
ITT 19.5	Not applicable
ITT 19.5(a)	Not applicable
ITT 19.6	The project site is Kenya Forestry Research Institute Headquarters- Muguga
ITT 19.8	The tenderer must quote including incidental costs to the performance
ITT 19.9	The price quoted shall not be subject to adjustment during the performance of the contract.
ITT 20.1	The tenderer is required to quote in the currency of Kenya the portion of the Tender price that corresponds to expenditures incurred in that currency.
ITT21.1	The tender validity period shall be 150 days from the tender closing date
ITT 22.1	A Tender Security shall be of Kshs 200,000.00 or Tender – Securing Declaration Form (if applicable)
ITT 22.3(v)	Not applicable
ITT 23.1	Tenderers are required to submit one original Tender document
ITT 23.3	The written confirmation of authorization to sign on behalf of the Tenderer shall be letter of authorization,
Submission and Opening of Tenders	
ITT 25.1	<p>For Submission purposes only: The Director, Kenya Forestry Research Institute, P.O Box 20412-00200 Tel: 0722157414/0724259781/0734251888 City Square, Nairobi</p> <p>The Tender Closing Date shall be on Friday, 12th November, 2021 at 12:00 noon</p> <p>Tenderers shall not have an option of submitting tenders electronically</p>
ITT 28.1	<p>The tenders shall be opened at the Auditorium Hall Kenya Forestry Research Institute, P.O Box 20412-00200 Tel: 0722157414/0724259781/0734251888 City Square, Nairobi</p> <p>Date and Time: Friday,12th November, 2021 at 12:00 Noon</p>
ITT 28.1	Not applicable
ITT 28.6	The form of Tender and Price Schedule shall be initialized by atleast

ITT Reference	A. General
	3 representatives of KEFRI conducting Tender opening.
EVALUATION AND COMPARISON OF TENDERS	
ITT 33.3	N/A
ITT 35.1	N/A
ITT 36.2	Margin of preference shall not apply
ITT 36.4	The invitation to tender is extended to the following groups that qualify for reservation (i) Youth Enterprises (ii) Women Enterprises (iii) Small and Medium Enterprises (iv) PWD Enterprises
ITT 40.2(b)	Not applicable
ITT 44.3	The best evaluated Tenderer may be subjected to performance benchmarks, demonstration tests and reference site visits prior to contract award
ITT 46.1	The award will be in line with ITT 46.1 (b)
ITT 47.1	The maximum percentage by which quantities may be increased/ decreased is 15% for the aggregate.
ITT 50.1	In case of a dispute an adjudicator will be as agreed by KEFRI and the contractor.
ITT 51.1	<p>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.</p> <p>If a tenderer wishes to make a procurement related complaint, the tenderer should submit its complaint following the below procedure, in writing to: The Director, Kenya Forestry Research Institute, P.O Box 20412-00200 Tel: 0722157414/0724259781/0734251888 City Square, Nairobi director@kefri.org</p> <p>In summary, a Procurement-related Complaint may challenge any of the following; (i) KEFRI’s decision to award the contract</p>

SECTION III - EVALUATION AND QUALIFICATION CRITERIA

1. General Provision

- 1.1 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 are 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. Any error in determining the exchange rates in the Tender may be corrected by KEFRI.
- 1.2 This Section contains all the criteria that KEFRI shall use to evaluate Tenders and qualify Tenderers. No other factors, methods or criteria shall be used. The Tenderer shall provide all the information requested in the forms included in Section IV, Tendering Forms. KEFRI should use **the Standard Tender Evaluation Report for Goods and Works** for evaluating Tenders.
- 1.3 Multiple Contracts; multiple contracts will be permitted in accordance with ITT35.6. Tenderers are evaluated on basis of Lots and the lowest evaluated tenderer identified for each Lot. KEFRI will select one Option of the two Options listed below for award of Contracts.

OPTION 1

- i) If a tenderer wins only one Lot, the tenderer will be awarded a contract for that Lot, provided the tenderer meets the Eligibility and Qualification Criteria for that Lot.
- ii) If a tenderer wins more than one Lot, the tender will be awarded contracts for all won Lots, provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the Lots. The tenderer will be awarded the combination of Lots for which the tenderer qualifies and the others will be considered for award to second lowest the tenderers.

OPTION 2

KEFRI will consider all possible combinations of won Lots [contract(s)] and determine the combinations with the lowest evaluated price. Tenders will then be awarded to the Tenderer or Tenderers in the combinations provided the tenderer meets the aggregate Eligibility and Qualification Criteria for all the won Lots.

2 Evaluation and contract award Criteria

KEFRI 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.

3 Preliminary Examination for Determination of Responsiveness

KEFRI will start by examining all tenders to ensure they meet in all respects the eligibility criteria and other mandatory requirements in the ITT, and that the tender is complete in all aspects in meeting the requirements provided for in the preliminary evaluation criteria outlined below. The Standard Tender Evaluation Report Document for Goods and Works for evaluating Tenders provides very clear guide on how to deal with review of these requirements. Tenders that do not pass the Preliminary Examination will be considered non-responsive and will not be considered further.

Stage 1: Mandatory-Preliminary Criteria for Contractors

Table 2: Mandatory Requirements

MR	Mandatory Requirement (MR)	Bidder's Response with Evidence Referenced pages –Where applicable (YES /NO)
MR 1	Submit one original tender document- Original only	
MR 2	<p>The tenderer MUST submit his/her tender document as follows:</p> <p>(i) The Tender document must be submitted as issued - All parts of the tender document including addendum(s) where applicable must be submitted by the tenderer and shall be typed or written in indelible ink and be signed by an Authorized person appointed by the tenderer through Authorization Letter</p> <p>(ii) The Authorization Letter should be signed by director(s) appearing in CR12/13- At least the director(s) with the highest shares must sign. (In case of 50/50 shareholding the two Directors Must sign) and incase of many directors at least two of the director(s) with the highest shares must sign.</p> <p>(iii)The Authorization Letter Must be attached and must indicate the name, position held by person authorized to sign the tender on behalf of the tenderer and his/her Signature and Initial –The authorized person shall submit/execute this agreement as a binding document and this person should sign all the</p>	

MR	Mandatory Requirement (MR)	Bidder's Response with Evidence Referenced pages –Where applicable (YES /NO)
	<p>documents related to this tender.</p> <p>(iv)The Authorized person to sign the tender on behalf of the tenderer and must sign or initialize all the pages of the Tender where entries (i.e all the forms, priced Bills of Quantities) or amendments have been made.</p> <p>(v) 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 so as to be legally binding on all the members as evidenced by a power of attorney signed by their legally authorized representatives.</p> <p>(vi)The tender document Must have a coherent table of contents</p> <p>(vii) The entire/complete original tender document (including attachments) MUST be serialized/paginated using a numbering machine or typed numbering, and Tape/Book bound. Note: spiral bound Tender document and hand written pagination will be deemed non-responsive ITT 10.2, ITT 13, ITT 23....</p>	
MR 3	<p>The tenderer submitting the tender document must attach a duly filled, signed and stamped Form of Tender in the format provided</p> <p>The Form of Tender shall include the following Forms duly completed and signed by the Tenderer authorized person.</p> <ul style="list-style-type: none"> •Tenderer's Eligibility- Confidential Business Questionnaire •Certificate of Independent Tender Determination •Self-Declaration of the Tenderer- Forms SD1 and SD2 	
MR 4	<p>The main contractor to provide a Tender Security/Bid Bond of Kshs. 200, 000.00 valid for 150 days from the tender closing date issued in the right format or</p>	

MR	Mandatory Requirement (MR)	Bidder's Response with Evidence Referenced pages –Where applicable (YES /NO)
	<p>Dully filled, signed and stamped Tender Securing Declaration Form in the format provided herein (FOR AGPO REGISTERED FIRMS ONLY) <i>Tender security/Bid bond must be addressed and bound to KEFRI in the required format and amount, from a reputable bank or insurance company approved by PPRA and valid for 150 days from tender opening date</i></p>	
MR5	<p>The bidder must dully fill Form ELI-1: -Tenderer Information Form and must attach copies of original documents for Main contractor/ Tenderer submitting the tender and her Domestic Sub contractors where applicable as listed below:-</p> <ul style="list-style-type: none"> • Certificate of Registration/ Incorporation • In case of JV, form of intent to form JV or JV agreement, in accordance with ITT 4.1.6 • Include organizational chart, Board of Directors and Beneficial ownership • Attach CR12/13 not more than 12 Months from the date of closing the tender issued by Registrar of Companies • Attach Business Permit-Current • Attach Current AGPO Certificate- where applicable 	
MR 6	<p>The Main Contractor Must Submit;</p> <ul style="list-style-type: none"> • Valid ICTA Data Centre Contactor - ICTA Grade 6 and above and Compliance Certificate 	
MR 7	<p>The Main Contractor/tenderer must be registered or have Domestic sub-contractors forming a consortium in the following categories;</p> <ul style="list-style-type: none"> • <i>Builder's works; Sub - contractors must be registered in NCA (7) and above.</i> 	
	<p><i>Electrical installations; Sub –contractors:</i></p> <ul style="list-style-type: none"> • <i>Must be registered in NCA (7) and above.</i> • Current Licenses from Energy and Petroleum Regulatory Authority (EPRA) for Electrical Installation Works sub-contractor– Class B and 	

MR	Mandatory Requirement (MR)	Bidder's Response with Evidence Referenced pages –Where applicable (YES /NO)
	above. Attach Necessary registration from NCA and EPRA	
MR8	Fully filled signed and stamped Self- Declaration	
MR9	Must submit a duly signed Declaration and Commitment to code of ethics form by the main contractor and all sub-contractors.	
MR 10	duly signed Certificate of Independent Tender Determination	
MR11	Self-declaration on any Litigation history Certified by a commissioner of oaths (main contractor and all sub-contractors).	
MR12	The main contractor, mechanical and electrical sub-contractors to provide a Valid direct manufacturers/developer authorization letters/certificate as per the format provided if not the manufacturer/developer or Proof of ownership if the bidder is the manufacturer e.g. patent registration/copyright/ intellectual property for Active; 1. Servers 2. Biometric Access, 3. Fire detection and suppression system 4. Passive equipment's and 5. AC components	
MR13	The Bidder must submit valid letters from the proposed OEM's/manufacturer confirming: 1. Authorizing the bidder to submit a bid 2. Confirmation of the warranty and guarantee of the equipment 3. Confirm products / solutions quoted are not "end of life" products and are brand new Support including spares/patches for quoted products are available for the next 5 years post system for all equipment & software	
MR14	The bidders should provide a Certified Joint Venture Agreement Form/ Document clearly outlining the JV members and responsibilities among other details. –FORM –ELI-1.2- where applicable	

The tenderers who do not satisfy any of the above mandatory requirements shall be considered Non-Responsive and their tenders will not be evaluated further

4 Assessment of adequacy of Tender's Proposal in connection with Procuring Entity's IT Requirements.

TECHNICAL EVALUATION

The Criteria, sub-criteria, and point system for the evaluation of the Tenders Proposal on meeting KEFRI's Requirements:

STAGE II – TECHNICAL EVALUATION

Technical Requirements–Conformity to the Equipments Requirements - for Main Contractor/Tenderer

Table 3: Conformity to The Equipment’s Requirements

TR	Description	Yes/No	Reference Page
TR 1	Installation Design/Project Plan (Gantt Chart or bidder specific) How the tenderer is planning to implement the Tender		
TR 2	Certificates for Data Protection Partner/Managed Service Partner/Managed services providers (MSPs)/Value added resellers (VARs)/Large-Account Resellers (LARS) or Original Equipment Manufacturers (OEMs) for Data Center Solution		
TR 3	Must submit a delivery schedule		
TR 4	Submit a list spares part		
TR 5	Adherence to technical specifications & scope of works – Section		
TR 6	Brochures and technical notes that meet the requirements on all the equipment to be supplied as indicated in Section VI –Technical Specifications; <ol style="list-style-type: none"> 1. Servers 2. UPS 3. UTP & Fibre Optic 4. Equipment cabinet racks 5. Biometric 6. Automatic Fire Suppression 		

The tenderers who do not satisfy any of the above technical mandatory requirements shall be considered Non-Responsive and their tenders will not be evaluated further

KEFRI may seek further clarification/confirmation if necessary, to confirm authenticity/compliance of any condition of the tender.

STAGE III - PAST EXPERIENCE OF THE FIRM –MAIN CONTRACTOR – Refer to Form EXP 4.1, 4.2(a), 4.2(b) Form 1 –Personnel, Form 2 –Professional Exp.

Table 4: Experience for Main Contractor

TR	Parameters	Yes	No
TR 1	<p>EXPERIENCE OF THE FIRM IN SIMILAR SERVICES: - <u>FOR MAIN CONTRACTOR ONLY</u></p> <p>a) Provide at least three (3) assignments/Contracts of ICT Infrastructure design, development and implementation with a bias on server, active equipment and networks awarded in the Period – 2018 to 2021</p> <p>NB//: attach LPO/LSO/Contracts/Completion certificates</p> <ul style="list-style-type: none"> • Each with Ksh. 15 Million and above 		
	(b) Attach recommendation letters in official client’s letter head or completion/practical Certificate (s) from each of the 3 corporate clients submitted above in TR 1(a) above		
TR 2	TECHNICAL STAFF COMPETENCES		
	Attach the relevant Tendering forms accompanied by copies of Academic and specialization certificates for key personnel proposed for administration and execution of the contract		
TR 3	<p>Project Manager</p> <ol style="list-style-type: none"> 1. Degree Computer Science, Engineering, IT or related degree with a minimum of 5 years’ experience in IT systems a minimum of 3 years’ experience in Project Management. 2. Professional experience in developing and implementing and managing scalable systems with competencies in ICT Infrastructure design, development and implementation with a bias on data Centre, active equipment, networks and information security management and IT in general. Give a minimum of five projects- attached detailed CV in the format provided 3. ICT related certification, PRINCE2/PMI or other equivalent project management certifications an Certified EDMS 		
TR 4	<p>Data Centre Expert</p> <ol style="list-style-type: none"> 1. B.SC/ in Computer Science, Engineering or related ICT degree 2. Have relevant certifications in the area of Data Centre as a Data Center Professional/ Expert (CDCP/CDCE). <p>3+ years of experience in ICT Data Centre field and should have experience in ICT Data Centre and design, development, Implementation of security in data centers. Give reference a minimum of two projects</p>		
TR 5	<p>System Engineer</p> <ol style="list-style-type: none"> 1. B.SC/ in Computer Science, Engineering or related degree 		

TR	Parameters	Yes	No
	2. Have relevant professional certifications in Infrastructure development e.g. CCNA, certified system engineering professional (CSEP), CCNP, HCA,HCP etc 3+ years of experience in ICT Infrastructure design, development and implementation with a bias on configuring server, storage, active equipment and networks Give a minimum of two projects.		
TR 6	Network Engineers/Administrator 1. B.SC/ in Computer Science, IT or related degree 2. Have relevant certifications in Infrastructure/Network development e.g. CCNA, CCNP Have 2 years' experience in ICT Infrastructure/network design, development and implementation with a bias on configuring servers, storage, active equipment to the network (LAN, WAN, etc.)		
	Civil, Mechanical and Electrical Staff - Sub-Contractors where applicable		
TR 7	At least 1No. degree/diploma of key personnel in relevant Engineering field with over 3 years relevant experience <ul style="list-style-type: none"> <i>Civil Engineering or equivalent</i> <i>Electrical Engineering</i> 		
	At least 1No certificate holder of key personnel in relevant Engineering field with over 5 years relevant experience <ul style="list-style-type: none"> <i>Civil Engineering or equivalent</i> <i>Electrical Engineering</i> 		
TR 8	IMPLEMENTATION METHODOLOGY	Yes	No
	Provide a detailed implementation methodology indicating the following, as a minimum: (failure to provide will lead to automatic disqualification) <ol style="list-style-type: none"> Tentative project plan Test plan Training plan Configuration and backup strategy Migration and cut-over strategy Post GO-LIVE support strategy clearly indicating what is in scope and what shall be out of scope and how out of scope items shall be handled Sample Service Level Agreement and Support plan for all the equipment 		
TR 9	The main Contractor/Tenderer to submit audited financial report (last two (2) years 2019 & 2020) Average Annual Turn-over of ksh. 50 Million of ICT related project		

The tenderers who do not satisfy any of the above technical requirements shall be considered Non-Responsive and their tenders will not be evaluated further

FINANCIAL EVALUATION

Tenderers who meet any of the above technical requirements, will be automatically disqualified. Tenderers who meet all the technical evaluation will be evaluated further at financial evaluation.

AWARD CRITERIA

The bidder quoting the lowest price and having met all the technical requirements above shall be recommended for contract award.

5 Post qualification and Contract award (ITT 39), more specifically,

- a) In case the tender was subject to post-qualification, the contract shall be awarded to the lowest evaluated tenderer, subject to confirmation of pre-qualification data, if so required.
- b) In case the tender was not subject to post-qualification, the tender that has been determined to be the lowest evaluated tenderer shall be considered for contract award, subject to meeting each of the following conditions.
 - i) The Tenderer shall demonstrate that it has access to, or has available, liquid assets, unencumbered real assets, lines of credit, and other financial means (independent of any contractual advance payment) sufficient to meet the construction cash flow of Kenya Shillings.
 - ii) Minimum average annual construction turnover of Kenya Shillings ___*[insert amount]*, equivalent calculated as total certified payments received for contracts in progress and/ or completed within the last ___*[insert of year]* years.
 - iii) At least three (3) of contract(s) of a similar nature executed within Kenya, or the East African Community or abroad, that have been satisfactorily and substantially completed as a prime contractor, or joint venture member or sub-contractor each of minimum value Kenya shillings ___equivalent.
 - iv) Contractor's Representative and Key Personnel, which are specified as .
 - v) Contractors' key equipment listed on the table "Contractor's Equipment" below and more specifically listed as *[specify requirements for each lot as applicable]*
 - vi) Other conditions depending on their seriousness.

a) History of non-performing contracts:

Tenderer and each member of JV in case the Tenderer is a JV, shall demonstrate that Non-performance of a contract did not occur because of the default of the Tenderer, or the member of a JV in the last _____(*specify years*). The required information shall be furnished in the appropriate form.

b) Pending Litigation

Financial position and prospective long-term profitability of the Single Tenderer, and in the case the Tenderer is a JV, of each member of the JV, shall remain sound according to criteria established with respect to Financial Capability under Paragraph (i) above if all pending litigation will be resolved against the Tenderer.

Tenderer shall provide information on pending litigations in the appropriate form.

c) Litigation History

There shall be no consistent history of court/arbitral award decisions against the Tenderer, in the last (*specify years*). All parties to the contract shall furnish the information in the appropriate form about any litigation or arbitration resulting from contracts completed or on going under its execution over the years specified. A consistent history of awards against the Tenderer or any member of a JV may result in rejection of the tender.

6. QUALIFICATION FORM

Table 6: Qualification Form – Refer to Section III –Evaluation Criteria

<i>Item No.</i>	<i>Qualification Subject</i>	<i>Qualification Requirement to be met</i>	<i>Document To be Completed by Tenderer</i>	<i>For Procuring Entity's Use (Qualification met or Not Met)</i>
1	2.1.1 Nationality	Nationality in accordance with ITT 4.5.	Form ELI –2.1.1 and 2.1.2, with attachments	
2	Tax Obligations for Kenyan Tenderers	Has produced a current tax clearance certificate or tax exemption certificate issued by the Kenya Revenue Authority in accordance with ITT 3.14.	Form of Tender	
3	2.1.2 Conflict of Interest	No- conflicts of interests as described in ITT 4.3.	Form of Tender	
4	2.1.3 Country Ineligibility	Not having been declared ineligible by the PPRA as described in ITT 4.6.	Form of Tender	
5	2.1.4 State owned Entity of KEFRI country	Compliance with conditions of ITT 4.7	Form ELI –2.1.1 and 2.1.2, with attachments	
6	2.1.5 United Nations resolution or Kenya law	Not having been excluded as a result of prohibition in Kenya laws or official regulations against commercial relations with the Tenderer's country, or by an act of compliance with UN Security Council resolution, both in accordance with ITT 4.8	Form of Tender	
7	History of non-performing contracts	Non-performance of a contract ¹ did not occur as a result of Tenderer's default since 1 st January [<i>insert year</i>].	Form CON - 2	
8	Suspension	Not under suspension based on execution of a Tender Securing Declaration or Tender Securing Declaration pursuant to ITT 4.8 and ITT 20.10	Form of Tender	
9	Pending Litigation	Tenderer's financial position and prospective long-term	Form CON – 2	

<i>Item No.</i>	<i>Qualification Subject</i>	<i>Qualification Requirement to be met</i>	<i>Document To be Completed by Tenderer</i>	<i>For Procuring Entity's Use (Qualification met or Not Met)</i>
		profitability still sound according to criteria established in 2.3.1 below and assuming that all pending litigation will be resolved against the Tenderer.		
10	2.3.1 Historical Financial Performance	Submission of audited balance sheets or if not required by the law of the Tenderer's country, other financial statements acceptable to KEFRI, for the last ____ [] years to demonstrate the current soundness of the Tenderers financial position and its prospective long-term profitability.	Form FIN – 2.3.1 with attachments	
11	2.3.2 Average Annual Turnover	Minimum average annual turnover of _____ Kenya Shillings equivalent, calculated as total certified payments received for contracts in progress or completed, within the last _____ () years	Form FIN –2.3.2	
12	2.3.3 Financial Resources	The Tenderer must demonstrate access to, or availability of, financial resources such as liquid assets, unencumbered real assets, lines of credit, and other financial means, other than any contractual advance payments to meet the following cash-flow requirement: Minimum of _____ Kenya Shillings equivalent.	Form FIN –2.3.3	
13	2.4.1 General Experience	Experience under Information System contracts in the role of prime supplier, management contractor, JV member, or subcontractor for at least the last _____ [____] years prior to the applications submission deadline.	Form EXP-2.4.1	
	2.4.2 Specific Experience	Participation as a prime supplier, management contractor, JV ² member, sub-contractor, in at least _____ (____) contracts within the last _____ () years, each with a value of at least	Form EXP 2.4.2	

<i>Item No.</i>	<i>Qualification Subject</i>	<i>Qualification Requirement to be met</i>	<i>Document To be Completed by Tenderer</i>	<i>For Procuring Entity's Use (Qualification met or Not Met)</i>
		_____ (___), that have been successfully and substantially completed and that are similar to the proposed Information System. <i>[Specify minimum key requirements in terms of physical size, complexity, methods, technology and/or other characteristics from those described in Section VII, Procuring Entity's Requirements]</i>		

¹ Nonperformance, as decided by KEFRI, shall include all contracts where (a) nonperformance was not challenged by the contractor, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the contractor. Nonperformance shall not include contracts where Procuring Entity decision was overruled by the dispute resolution mechanism. Nonperformance must be based on all information on fully settled disputes or litigation, i.e. dispute or litigation that has been resolved in accordance with the dispute resolution mechanism under the respective contract and where all appeal instances available to the applicant have been exhausted.

² For contracts under which the Tenderer participated as a joint venture member or sub-contractor, only the Tenderer's share, by value, and role and responsibilities shall be considered to meet this requirement.

10. Personnel

The Tenderer must demonstrate that it will have the personnel for the key positions that meet the following requirements:

Table 7: Key Position Experience

No.	Position	Information System Experience <i>[Specify specific experience requirement for the key positions]</i>
1		
2		
3		
...		

The Tenderer shall provide details of the proposed personnel and their experience records in the relevant Forms included in Section IV, Tendering Forms.

11. Subcontractors/Vendors/Manufacturers

Subcontractors/vendors/manufacturers for the following major items of supply or services must meet the following minimum criteria, herein listed for that item:

Table 8: Minimum Criteria

Item No.	Description of Item	Minimum Criteria to be met
1		
2		
3		
...		

Failure to comply with this requirement will result in rejection of the subcontractor/vendor.

In the case of a Tenderer who offers to supply and install major items of supply under the contract that the Tenderer did not manufacture or otherwise produce, the Tenderer shall provide the manufacturer's authorization, using the form provided in Section IV, showing that the Tenderer has been duly authorized by the manufacturer or producer of the related sub system or component to supply and install that item in Kenya.

The Tenderer is responsible for ensuring that the manufacturer or producer complies with the requirements of ITT 4 and 5 and meets the minimum criteria listed above for that item.

SECTION IV - TENDERING FORMS

1. FORM OF TENDER

INSTRUCTIONS TO TENDERERS

- i) *The Tenderer must prepare this Form of Tender on stationery with its letter head 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 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.*
 - *Tenderer's Eligibility-Confidential Business Questionnaire*
 - *Certificate of Independent Tender Determination*
 - *Self-Declaration of the Tenderer*

Date of this Tender submission..... [*insert date (as day, month and year) of Tender submission*] **ITT No.:** [*insert number of ITT process*]

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

To: [*insert complete name of Procuring Entity*]

- a) **No reservations:** We have examined and have no reservations to the tendering document, including Addenda issued in accordance with Instructions to Tenderers (ITT 8);
- 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 debarred by the Authority based on execution of a Tender- Securing Declaration or Tender Securing Declaration in Kenya in accordance with ITT 4.8;
- d) **Conformity:** We offer to provide design, supply and installation services in conformity with the tendering document of the following: [*insert a brief description of the IS Design, Supply and Installation 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*]

[*Option1, in case of one lot:*] Total price is: [*insert the total price of the Tender in words and figures, indicating the various amounts and the respective currencies*];

Or

[Option 2, in case of multiple lots:] (a) 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]*;

- (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 the period specified in TDS ITT 19.1 (as amended if applicable) from the date fixed for the Tender submission deadline (specified in TDS ITT 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, and meet the requirements of ITT 4.3, other than alternative Tenders submitted in accordance with ITT 13;
- 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 in eligible under Laws of Kenya or 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 4.7];*
- 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]*

Table 9: Commissions, gratuities and fees

Name of Recipient	Address	Reason	Amount

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

- m) **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;
- n) **Not Bound to Accept:** We understand that you are not bound to accept the lowest evaluated cost Tender, the Best Evaluated Tender or any other Tender that you may receive; and
- o) **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.

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

- p) **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.
- q) **Code of Ethical Conduct:** We undertake to adhere by the Code of Ethical Conduct for Persons Participating in Public Procurement and Asset Disposal Activities in Kenya, copy available from www.pppra.go.ke during the procurement process and the execution of any resulting contract.
- r) We, the Tenderer, have fully completed and signed the following Forms as part of our Tender:
 - i) Tenderer's Eligibility; Confidential Business Questionnaire – to establish we are not in any conflict to interest.
 - ii) Certificate of Independent Tender Determination – to declare that we completed the tender without colluding with other tenderers.
 - iii) Self-Declaration of the Tenderer–to declare that we will, if awarded a contract, not engage in any form of fraud and corruption.
 - iv) Declaration and commitment to the code of ethics for Persons Participating in Public Procurement and Asset Disposal Activities in Kenya. Further, we confirm that we have read and understood the full content and scope of fraud and corruption as in formed in “**Appendix1-Fraud and Corruption**” attached to the Form of Tender.

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

Title of the person signing the Tender: *[insert complete title of the person signing the Tender]* **Signature of the person named above:** *[insert signature of person whose name and capacity are shown above]* **Date signed** *[insert date of signing]* **day of** *[insert month], [insert year].*

2. TENDERER'S ELIGIBILITY-CONFIDENTIAL BUSINESS QUESTIONNAIRE

Instruction to Tenderer

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

a) Tenderer's Details

Table 10: Tenderer's Details

No.	ITEM	DESCRIPTION
1	Name of KEFRI	
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.	1. Country 2. City 3. Location 4. Building 5. Floor 6. Postal Address 7. Name and email of contact person.
6	Current Trade License Registration Number and Expiring date	
7	Name, country and full address (<i>postal and physical addresses, email, and telephone number</i>) of Registering Body/Agency	
8	Description of Nature of Business	
9	Maximum value of business which the Tenderer handles.	
10	State if Tenders Company is listed in stock exchange, give name and full address (<i>postal and physical addresses, email, and telephone number</i>) 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.

Table 11: Partnership Details

	Names of Partners	Nationality	Citizenship	% Shares owned
1				
2				
3				

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

(i) Private or public Company _

(ii) State the nominal and issued capital of the Company

Nominal Kenya Shillings (Equivalent).....

Issued Kenya Shillings (Equivalent).....

(iii) Give details of Directors as follows.

Table 12: Directors Details

	Names of Director	Nationality	Citizenship	% Shares Owned
1				
2				
3				

e) **DISCLOSURE OF INTEREST - Interest of the Firm in KEFRI.**

i) are there any person/persons in..... (*Name of Procuring Entity*) who has/have an interest or relationship in this firm? Yes/ No.....

If yes, provide details as follows.

Table 13: Disclosure of Interest

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

ii) Conflict of interest disclosure

Table 14: Conflict of Interest Disclosure

	Type of Conflict	Disclosure YES OR NO	If YES provide details of the relationship with Tenderer
1	Tenderer is directly or indirectly controls, is controlled by or is under common control with another tenderer.		
2	Tenderer receives or has received any direct or indirect subsidy from another tenderer.		
3	Tenderer has the same legal representative as another tenderer		
4	Tenderer 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 KEFRI regarding this tendering process.		
5	Any of the Tenderer's affiliates participated as a consultant in the preparation of the design or technical specifications of the works that are the subject of the tender.		
6	Tenderer would be providing goods, works, non-consulting services or consulting services during implementation of the contract specified in this Tender Document.		
7	Tenderer has a close business or family relationship with a professional staff of KEFRI who are directly or indirectly involved in the preparation of the Tender document or specifications of the Contract, and/or the Tender evaluation process of such contract.		
8	Tenderer has a close business or family relationship with a professional staff of KEFRI who would be involved in the implementation or supervision of the Contract.		
9	Has the conflict stemming from such relationship stated in item 7 and 8 above been resolved in a manner acceptable to KEFRI throughout the tendering process and execution of the Contract.		

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)

3. CERTIFICATE OF INDEPENDENT TENDER DETERMINATION

I, the undersigned, in submitting the accompanying Letter of Tender to the _____
_____ [Name of Procuring Entity] for: _____ [Name and number of tenders] in response
to the request for tenders made by: _____ [Name of Tenderer] do hereby make
the following statements that I certify to be true and complete in every respect:

I certify, on behalf of _____ [Name of Tenderer] that:

- i). I have read and I understand the contents of this Certificate;
- ii). I understand that the Tender will be disqualified if this Certificate is found not to be true and complete in every respect;
- iii). I am the authorized representative of the Tenderer with authority to sign this Certificate, and to submit the Tender on behalf of the Tenderer;
- iv). 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;
- v). The Tenderer discloses that [check one of the following, as applicable]:
 - a) The Tenderer has arrived at the Tender independently from, and without consultation, communication, agreement or arrangement with, any competitor;
 - b) the Tenderer has entered into consultations, communications, agreements or arrangements with one or more competitors regarding this request for tenders, and the Tenderer discloses, in the attached document(s), complete details thereof, including the names of the competitors and the nature of, and reasons for, such consultations, communications, agreements or arrangements;
- vi). In particular, without limiting the generality of paragraphs (5) (a) or (5) (b) above, there has been no consultation, communication, agreement or arrangement with any competitor regarding:
 - a) prices;
 - b) methods, factors or formulas used to calculate prices;
 - c) the intention or decision to submit, or not to submit, a tender; or
 - d) the submission of a tender which does not meet the specifications of the request for Tenders; except as specifically disclosed pursuant to paragraph (5) (b) above;
- vii). In addition, there has been no consultation, communication, agreement or arrangement with any competitor regarding the quality, quantity, specifications or delivery particulars of the works or services to which this request for tenders relates, except as specifically authorized by the procuring authority or as

specifically disclosed pursuant to paragraph (5) (b) above;

- viii). The terms of the Tender have not been, and will not be, knowingly disclosed by the Tenderer, directly or indirectly, to any competitor, prior to the date and time of the official tender opening, or of the awarding of the Contract, whichever comes first, unless otherwise required by law or as specifically disclosed pursuant to paragraph(5)(b) above.

Name_____ Title_____ Date_____ [*Name,
title and signature of authorized agent of
Tenderer and Date*]

4. SELF-DECLARATION FORMS

FORM SD1

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

I,, of Post Office Box
being a resident of
..... in the Republic of do
hereby make a statement as follows: -

1. THAT I am the Company Secretary/ Chief Executive/Managing Director/Principal Officer/Director of
..... (*insert name of the Company*) who is a Bidder in respect of **Tender No**..... for..... (*insert tender title/description*) for..... (*insert name of KEFRI*) and duly authorized and competent to make this statement.
2. THAT the aforesaid Bidder, its Directors and subcontractors have not been debarred from participating in procurement proceeding under Part IV of the Act.
3. THAT what is deponed to here in above is true to the best of my knowledge, information and belief.

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

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 resident of in the Republic of
do hereby make a statement as follows: -

1. THAT I am the Chief Executive /Managing Director/ Principal Officer/ Director of.....
..... (*insert name of the Company*) who is a Bidder in respect of **Tender No.**
..... for (*insert tender title/description*) for (*insert name of KEFRI*) and duly authorized and competent to make this statement.
2. THAT the aforesaid Bidder, its servants and/or agents /subcontractors will not engage in any corrupt or fraudulent practice and has not been requested to pay any inducement to any member of the Board, Management, Staff and /or employees and /or agents of..... (*insert name of KEFRI*) which is KEFRI.
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 KEFRI*).
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 here in above is true to the best of my knowledge information and belief.

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

Bidder Official Stamp

5. DECLARATION AND COMMITMENT TO THE CODE OF ETHICS

I
(person) on behalf of *(Name of the Business/Company/Firm)*
declare that I have read and fully understood the contents of the Public Procurement & Asset Disposal Act, 2015, Regulations and the Code of Ethics for persons participating in Public Procurement and Asset Disposal activities in Kenya and my responsibilities under the Code.

I do hereby commit to abide by the provisions of the Code of Ethics for persons participating in Public Procurement and Asset Disposal.

Name of Authorized signatory.....

Sign.....

Position.....

Office address.....

Telephone..... E-mail.....

Name of the Firm/Company.....

Date.....

(Company Seal/ Rubber Stamp where applicable)

Witness

Name.....

Sign.....

Date.....

6. APPENDIX 1 - FRAUD AND CORRUPTION

1. Purpose

1.1 The Government of Kenya's Anti-Corruption and Economic Crime laws and their sanction's policies and procedures, Public Procurement and Asset Disposal Act, 2015 (the Act) and the Public Procurement and Asset Regulations, 2020 (the Regulations) and any other relevant 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.

2. Requirements

2.1 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.

2.2 Section 66 of the Act 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 high light Kenya's policy of no tolerance for such practices and behavior:

- i) 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;
- ii) A person referred to under subsection (1) who contravenes the provisions of that sub-section commits an offence;
- iii) 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;
- iv) The voiding of a contract by KEFRI under subsection (7) does not limit any legal remedy KEFRI may have;
- v) An employee or agent of KEFRI or a member of the Board or committee of KEFRI 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 tenderer to whom was awarded contract, or a member of the group of tenderers to whom the contract was awarded, but the

- subcontractor appointed shall meet all the requirements of this Act.
- vi) 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 KEFRI;
 - vii) If a person contravenes sub section (1) with respect to a conflict of interest described in sub section (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.

2.2 In compliance with Kenya's laws, regulations and policies mentioned above, KEFRI:

- a) Defines broadly, for the purposes of the above provisions, the terms:
 - i) "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:
 - 1) 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
 - 2) acts intended to materially impede the exercise of the PPRA's or the appointed authority's inspection and audit rights provided for under paragraph 2.3e. below.
- b) Defines more specifically, in accordance with the 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 processor the exercise of a contract to the detriment of KEFRI 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 KEFRI of the benefits of free and open competition.

- c) Rejects a proposal for award¹ 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 Act and the Regulations, KEFRI may recommend to PPRA for sanctioning and debarment of a firm or individual, as applicable under the Act and the Regulations;
- e) Requires that a clause be included in the 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 inspect² 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 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.

¹For 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.

² 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 KEFRI 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 there of 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 there of as relevant; interviewing staff and other relevant individuals; performing physical inspections and site visits; and obtaining third party verification of information.

7. PRICE SCHEDULE FORMS

Notes to Tenderers on working with the Price Schedules

1.1 General

The Price Schedules are divided into separate Schedules as follows:

- a Grand Summary Cost Table
- b Supply and Installation Cost Summary Table
- c Recurrent Cost Summary Table
- d Supply and Installation Cost Sub-Table (s)
- e Recurrent Cost Sub-Tables (s)
- f Country of Origin Code Table

[insert:]

1.2 The Schedules do not generally give a full description of the information technologies to be supplied, installed, and operationally accepted, or the Services to be performed under each item. However, it is assumed that Tenderers shall have read the Technical Requirements and other sections of these tendering documents to ascertain the full scope of the requirements associated with each item prior to filling in the rates and prices. The quoted rates and prices shall be deemed to cover the full scope of these Technical Requirements, as well as overhead and profit.

1.3 If Tenderers are unclear or uncertain as to the scope of any item, they shall seek clarification in accordance with the Instructions to Tenderers in the tendering documents prior to submitting their tender.

2. Pricing

2.1 Prices shall be filled in indelible ink, and any alterations necessary due to errors, etc., shall be initialed by the Tenderer. As specified in the Tender Data Sheet, prices shall be fixed and firm for the duration of the Contract.

2.2 Tender prices shall be quoted in the manner indicated and, in the currencies, specified in ITT 18.1 and ITT 18.2. Prices must correspond to items of the scope and quality defined in the Technical Requirements or elsewhere in these tendering documents.

2.3 The Tenderer must exercise great care in preparing its calculations, since there is no opportunity to correct errors once the deadline for submission of tenders has passed. A single error in specifying a unit price can therefore change a Tenderer's overall total tender price substantially, make the tender noncompetitive, or subject the Tenderer to possible loss. KEFRI will correct any arithmetic error in accordance with the provisions of ITT 32.

2.4 Payments will be made to the Supplier in the currency or currencies indicated under each respective item. As specified in ITT18.2, no more than two foreign currencies may be used.

A. Grand Summary Cost Table

Table 15:

		<i>[insert: Kenya shillings] Price</i>	<i>[insert: Foreign Currency A] Price</i>	<i>[insert: Foreign Currency B] Price</i>
1.	Supply and Installation Costs (from Supply and Installation Cost Summary Table)			
2.	Recurrent Costs (from Recurrent Cost Summary Table)			
3.	Grand Totals (to Tender Submission Form)			

Name of Tenderer: _____

_____ Date _____

Authorized Signature of Tenderer:

B. Supply and Installation Cost Summary Table

Costs MUST reflect prices and rates quoted in accordance with ITT17 and 18.

Table 16:

Line Item No.	Subsystem / Item	Supply and Installation Cost Sub-Table No.	<i>[insert: Kenya shillings] Price</i>	<i>[insert: Local Currency] Price</i>	<i>[insert: Foreign Currency A] Price</i>
1	Project Plan				
2	Subsystem 1				
SUB TOTALS					
TOTAL (To Grand Summary Table)					

Note: - indicates not applicable. “Indicates repetition of table entry above. Refer to the relevant Supply and Installation Cost Sub-Table for the specific components that constitute each Subsystem or line item in this summary table

Name of Tenderer:

_____ Date _____ Authorized Signature of Tenderer:

C. Recurrent Cost Summary Table

Costs MUST reflect prices and rates quoted in accordance with ITT 17 and ITT18.

Table 17:

Line Item No.	Subsystem / Item	Recurrent Cost Sub-Table No.	<i>[insert: Kenya shilling] Price</i>	<i>[insert: Foreign Currency A] Price</i>	<i>[insert: Foreign Currency B] Price</i>
	Subtotals (To Grand Summary Table)				

Note: Refer to the relevant Recurrent Cost Sub-Tables for the specific components that constitute the Sub system or line item in this summary table.

Name of Tenderer: _____

Date _____

Authorized Signature of Tenderer: _____

D. Supply and Installation Cost Sub-Table *[insert: identifying number]*

Line-item number: *[specify: relevant line-item number from the Supply and Installation Cost Summary Table (e.g., 1.1)]*

Prices, rates, and subtotals MUST be quoted in accordance with ITT 17 and ITT18.

Table 18:

				Unit Prices / Rates				Total Prices				
				Supplied Locally	Supplied from outside Kenya				Supplied Locally	Supplied from outside Kenya		
Component No.	Component Description	Country of Origin Code	Quantity	<i>[insert: local currency]</i>	<i>[insert: local currency]</i>	<i>[insert: foreign currency A]</i>	<i>[insert foreign currency B]</i>	<i>[insert: local currency]</i>	<i>[insert: local currency]</i>	<i>[insert: foreign currency A]</i>	<i>[insert: foreign currency B]</i>	
X.1	_____	--	--	--	--	--	--					
Subtotals (to <i>[insert: line item]</i> of Supply and Installation Cost Summary Table)												

Note: - - indicates not applicable

Name of Tenderer: _____

_____ Date _____ Authorized Signature of Tenderer:

E. Recurrent Cost Sub-Table [insert: identifying number] –Warranty Period

Lot number: *[if a multi-lot procurement, insert: lot number, otherwise state “single lot procurement”]* Line item number: *[specify: relevant line item number from the Recurrent Cost Summary Table– (e.g., y.1)]* Currency: *[specify: the currency of the Recurrent Costs in which the costs expressed in this Sub-Table are expressed]*

[As necessary for operation of the System, specify: the detailed components and quantities in the Sub-Table below for the line item specified above, modifying the sample components and sample table entries as needed. Repeat the Sub-Table as needed to cover each and every line item in the Recurrent Cost Summary Table that requires elaboration.]

Costs MUST reflect prices and rates quoted in accordance with ITT 17 and ITT18.

Table 19:

Component No.	Component	Maximum all-inclusive costs (for costs in <i>[insert: currency]</i>)						Sub-total for <i>[insert: currency]</i>
		Y1	Y2	Y3	Y4	...	Yn	
1.	Hardware Maintenance	Incl. in Warranty	Incl. in Warranty	Incl. in Warranty				
2.	Software Licenses & Updates	Incl. in Warranty						
2.1	System and General-Purpose Software	Incl. in Warranty						
2.2	Application, Standard and Custom Software	Incl. in Warranty						
3.	Technical Services							
3.1	Sr. Systems Analyst							
3.2	Sr. Programmer							

Component No.	Component	Maximum all-inclusive costs (for costs in <i>[insert: currency]</i>)						Sub-total for <i>[insert: currency]</i>
		Y1	Y2	Y3	Y4	...	Yn	
3.3	Sr. Network Specialist, etc.							
4.	Telecommunications costs [to be detailed]							
5.	[Identify other recurrent costs as may apply]							
	Annual Subtotals:							- -
Cumulative Subtotal (to <i>[insert: currency]</i> entry for <i>[insert: line item]</i> in the Recurrent Cost Summary Table)								

Name of Tenderer: _____ Date _____

Authorized Signature of Tenderer: _____

F. Country of Origin Code Table

Table 20:

Country of Origin	Country Code	Country of Origin	Country Code	Country of Origin	Country Code

8. QUALIFICATION FORMS

A. Form ELI-1 Tenderer Information Form

[The Tenderer shall fill in this Form in accordance with the instructions indicated below. No alterations to its format shall be permitted and no substitutions shall be accepted.]

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

ITT No.:*[insert number of Tendering process]*

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

Table 22:

1. Tenderer's Name <i>[insert Tenderer's legal name]</i>
2. In case of JV, legal name of each member: <i>[insert legal name of each member in JV]</i>
3. Tenderer's actual or intended country of registration: <i>[insert actual or intended country of registration]</i>
4. Tenderer's year of registration: <i>[insert Tenderer's year of registration]</i>
5. Tenderer's Address in country of registration: <i>[insert Tenderer's legal address in country of registration]</i>
6. Tenderer's Authorized Representative Information Name: <i>[insert Authorized Representative's name]</i> Address: <i>[insert Authorized Representative's Address]</i> Telephone/Fax numbers: <i>[insert Authorized Representative's telephone/fax numbers]</i> Email Address: <i>[insert Authorized Representative's email address]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation, in accordance with ITT 4.4. <input type="checkbox"/> In case of JV, Form of intent to form JV or JV agreement, in accordance with ITT 4.1. <input type="checkbox"/> In case of state-owned enterprise or institution, in accordance with ITT 4.6 documents establishing: <ul style="list-style-type: none"> • Legal and financial autonomy • Operation under commercial law • Establishing that the Tenderer is not under the supervision of KEFRI <input type="checkbox"/> Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

C. Form ELI-1 Tenderer's JV Members Information Form

[The Tenderer shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Tenderer and for each member of a Joint Venture].

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

ITT No.:*[insert number of Tendering process]*

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

Table 23

1. Tenderer's Name: <i>[insert Tenderer's legal name]</i>
2. Tenderer's JV Member's name: <i>[insert JV's Member legal name]</i>
3. Tenderer's JV Member's country of registration: <i>[insert JV's Member country of registration]</i>
4. Tenderer's JV Member's year of registration: <i>[insert JV's Member year of registration]</i>
5. Tenderer's JV Member's legal address in country of registration: <i>[insert JV's Member legal address in country of registration]</i>
6. Tenderer's JV Member's authorized representative information Name: <i>[insert name of JV's Member authorized representative]</i> Address: <i>[insert address of JV's Member authorized representative]</i> Telephone/Fax numbers: <i>[insert telephone/fax numbers of JV's Member authorized representative]</i> Email Address: <i>[insert email address of JV's Member authorized representative]</i>
7. Attached are copies of original documents of <i>[check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association), and/or registration documents of the legal entity named above, in accordance with ITT 4.4. <input type="checkbox"/> In case of a state-owned enterprise or institution, documents establishing legal and financial autonomy, operation in accordance with commercial law, and they are not under the supervision of KEFRI in accordance with ITT 4.6. <input type="checkbox"/> Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

D. Form CON-1 Historical Contract Non-Performance and Pending Litigation.

In case a pre-qualification process was conducted this form should be used only if the information submitted at the time of pre-qualification requires updating

Tenderer's Legal Name: _____ Date: _____ JV member Legal Name: _____ ITT No.: _____ Age of _____ pages

Table 24:

Non-Performing Contracts in accordance with Section III, Evaluation and Qualification Criteria			
Contract non-performance did not occur during the stipulated period, in accordance with Sub- Factor 2.2.1 of Section III, Evaluation Criteria			
Pending Litigation, in accordance with Section III, Evaluation and Qualification Criteria			
No pending litigation in accordance with Sub-Factor 2.2.3 of Section III, Evaluation Criteria			
Pending litigation in accordance with Sub-Factor 2.2.3 of Section III, Evaluation Criteria, as indicated below			
Year	Outcome as Percent of Total Assets	Contract Identification	Total Contract Amount (current value, US\$ equivalent)
_____	_____	Contract Identification: Name of Procuring Entity: Address of Procuring Entity: Matter in dispute:	_____
_____	_____	Contract Identification: Name of Procuring Entity: Address of Procuring Entity: Matter in dispute:	_____

E. Form EXP - 1 Experience – General Experience

Tenderer's Legal Name: _____ Date: __ JV Member Legal Name: __

_____ ITT No.: _____ Page _of ___pages

Table 25

Starting Month / Year	Ending Month / Year	Years*	Contract Identification	Role of Tenderer
_____	_____		Contract name: Brief Description of the Information System performed by the Tenderer: Name of Procuring Entity: Address:	_____ -
_____	_____		Contract name: Brief Description of the Information System performed by the Tenderer: Name of Procuring Entity: Address:	_____ -
_____	_____		Contract name: Brief Description of the Information System performed by the Tenderer: Name of Procuring Entity: Address:	_____ -
_____	_____		Contract name: Brief Description of the Information System performed by the Tenderer: Name of Procuring Entity: Address:	_____ -
_____	_____		Contract name: Brief Description of the Information System performed by the Tenderer: Name of Procuring Entity: Address:	_____ -
_____	_____		Contract name: Brief Description of the Information System performed by the Tenderer: Name of Procuring Entity: Address:	_____ -

*List calendar year for years with contracts with at least nine (9) months activity per year starting with the earliest year.

F. Form EXP – 2 Specific Experience

Tenderer's Legal Name: _____

Date: _____

JV Member Legal Name: _____ ITT No.: _____

Page _____ of _____ pages

Table 26

Similar Contract Number: ___ of ___ required.	Information		
Contract Identification	_____		
Award date	_____		
Completion date	_____		
Role in Contract	<input type="checkbox"/> Prime Supplier	<input type="checkbox"/> Management Contractor	<input type="checkbox"/> Subcontractor
Total contract amount	_____		US\$ _____
If member in a JV or subcontractor, specify participation of total contract amount	_____ %	_____	US\$ _____
Procuring Entity's Name:	_____		
Address:	_____ _____ _____		
Telephone/fax number:	_____		
E-mail:	_____		

Form EXP – 2 (cont.) Specific Experience (cont.)

Tenderer’s Legal Name: _____
 _____ pages

Page _____ of

JV Member Legal Name: _____

Table 27:

Similar Contract No. __ [insert specific number] of [total number of contracts] required	Information
Description of the similarity in accordance with Sub-Factor 2.4.2 of Section III:	
Amount	_____
Physical size	_____
Complexity	_____
Methods/Technology	_____
Key Activities	_____

G. Form CCC-1 Summary Sheet: Current Contract Commitments/ Work in Progress

Name of Tenderer or partner of a Joint Venture.

Tenderers and each partner to a Joint Venture tender should provide information on their current commitments on all contracts that have been awarded, or for which a Form 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

Table 28:

Name of Contract	Procuring Entity, contact address/tel./ fax	Value of outstanding Information System (current US\$ equivalent)	Estimated completion date	Average monthly invoicing over last six months (US\$/month)
1.				
2.				
3.				
4.				
5.				
etc.				

H. Form FIN – 1 Financial Situation

Historical Financial Performance

Tenderer's Legal Name: _____ Date: _____

JV Member Legal Name: _____ ITT No. _____

Page _____ of _____ pages

To be completed by the Tenderer and, if JV, by each member

Table 29:

Financial information in US\$ equivalent	Historic information for previous _____ () years (US\$ equivalent in 000s)						
	Year 1	Year 2	Year 3	Year ..	Year n	Avg.	Avg. Ratio
Information from Balance Sheet							
Total Assets (TA)							
Total Liabilities (TL)							
Net Worth (NW)							
Current Assets (CA)							
Current Liabilities (CL)							
Information from Income Statement							
Total Revenue (TR)							
Profits Before Taxes (PBT)							

Attached are copies of financial statements (balance sheets, including all related notes, and income statements) for the years required above complying with the following conditions:

- a) Must reflect the financial situation of the Tenderer or member to a JV, and not sister or parent companies.
- b) Historic financial statements must be audited by a certified accountant.
- c) Historic financial statements must be complete, including all notes to the financial statements.
- d) Historic financial statements must correspond to accounting periods already completed and audited (no statements for partial periods shall be requested or accepted).

I. Form FIN –2 Average Annual Turnover

Tenderer's Legal Name: _____

Date: _____

JV Member Legal Name: _____

ITT No.: _____

Page _____ of _____ pages

Table 30:

Annual turnover data (applicable activities only)		
Year	Amount and Currency	US\$ equivalent
	_____	_____
	_____	_____
	_____	_____
	_____	_____
	_____	_____
*Average Annual Turnover	_____	_____

*Average annual turnover calculated as total certified payments received for work in progress or completed, divided by the number of years specified in Section III, Evaluation and Qualification Criteria, Sub-Factor 2.3.2.

J. Form F-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 cash flow demands of the subject contract or contracts as indicated in Section III, Evaluation and Qualification Criteria.

Table 31:

Source of Financing	Amount (US\$ equivalent)
1.	
2.	
3.	
4.	

K: Personnel Capabilities

i) Key Personnel

Name of Tenderer or partner of a Joint Venture

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

Table 32:

1.	Title of position: ...	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
2.	Title of position: ...	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
3.	Title of position: ...	
	Name of candidate:	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart)]</i>
4.	Title of position:	
	Name of candidate	

	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart]</i>
6...	Title of position:	
	Name of candidate	
	Duration of appointment:	<i>[insert the whole period (start and end dates) for which this position will be engaged]</i>
	Time commitment: for this position:	<i>[insert the number of days/week/months/ that has been scheduled for this position]</i>
	Expected time schedule for this position:	<i>[insert the expected time schedule for this position (e.g. attach high level Gantt chart]</i>

ii) Candidate Summary

Table 33:

Position		Candidate <input type="checkbox"/> Prime <input type="checkbox"/> Alternate
Candidate information	Name of candidate	Date of birth
	Professional qualifications	
Present employment	Name of Employer	
	Address of Employer	
	Telephone	Contact (manager / personnel officer)
	Fax	Email
	Job title of candidate	Years with present Employer

Summarize professional experience over the last twenty years, in reverse chronological order. Indicate particular technical and managerial experience relevant to the project.

Table 34:

From	To	Company/Project/ Position/Relevant Technical and Management Experience

iii) Technical Capabilities

Tenderer shall provide adequate information to demonstrate clearly that it has the technical capability to meet the requirements for the Information System. With this form, the Tenderer should summarize important certifications, proprietary methodologies, and/or specialized technologies that the Tenderer proposes to utilize in the execution of the Contract or Contracts.

iv) Manufacturer's Authorization

Note: This authorization should be written on the Form head of the Manufacturer and be signed by a person with the proper authority to sign documents that are binding on the Manufacturer.

Invitation for Tenders Title and No.: _____ [*Procuring Entity insert: ITT Title and Number*]

To: _____ [*Procuring Entity insert: Procuring Entity's Officer to receive the Manufacture's Authorization*]

WHEREAS [*insert: Name of Manufacturer*] who are official producers of _____ [*insert: items of supply by Manufacturer*] and having production facilities at [*insert: address of Manufacturer*] do here by authorize _____ [*insert: name of Tenderer or Joint Venture*] located at _____ [*insert: address of Tenderer or Joint Venture*] (hereinafter, the "Tenderer") to submit a tender and subsequently negotiate and sign a Contract with you for resale of the following Products produced by us:

We hereby confirm that, in case the tendering results in a Contract between you and the Tenderer, the above-listed products will come with our full standard warranty.

Name [*insert: Name of Officer*] in the capacity of [*insert: Title of Officer*] Signed _____

Duly authorized to sign the authorization for and on behalf of: _____ [*insert: Name of Manufacturer*] Dated this _____ [*insert: ordinal*] day of _____ [*insert: month*], [*insert: year*]. [*add Corporate Seal (where appropriate)*]

iv) Subcontractor’s Agreement

Note: This agreement should be written on the Form head of the Subcontractor and be signed by a person with the proper authority to sign documents that are binding on the Subcontractor.

Invitation for Tenders Title and No.: _____ [*Procuring Entity insert: ITT Title and Number*]

To: _____ [*Procuring Entity insert: Procuring Entity's Officer to receive the Subcontractor's Agreement*]

WHERE AS [*insert: Name of Subcontractor*], having head offices at _____ [*insert: address of Subcontractor*], have been informed by _____ [*insert: name of Tenderer or Joint Venture*] located at _____ [*insert: address of Tenderer or Joint Venture*] (here in after, the “Tenderer”) that it will submit a tender in which _____ [*insert: Name of Subcontractor*] will provide [*insert: items of supply or services provided by the Subcontractor*]. We hereby commit to provide the above-named items, in the instance that the Tenderer is awarded the Contract.

Name [*insert: Name of Officer*] in the capacity of _____ [*insert: Title of*

Officer] Signed _____ Duly authorized to sign the authorization for and

on behalf of: _____ [*insert: Name of Subcontractor*]

Dated this _____ [*insert: ordinal*] day of _____ [*insert: month*], _____ [*insert: year*].

[*add Corporate Seal (where appropriate)*]

vi) List of Proposed Subcontractors

Table 35:

	Item	Proposed Subcontractor	Place of Registration & Qualifications

8. Intellectual Property Forms Notes to Tenderers on working with the Intellectual Property Forms

In accordance with ITT 11.1(j), Tenderers must submit, as part of their tenders, lists of all the Software included in the tender assigned to one of the following categories: (A) System, General-Purpose, or Application Software; or (B) Standard or Custom Software. Tenderers must also submit a list of all Custom Materials. These categorizations are needed to support the Intellectual Property in the GCC and SCC.

i) Software List

Table 36:

Software Item	(select one per item)			(select one per item)	
	System Software	General-Purpose Software	Application Software	Standard Software	Custom Software

ii) List of Custom Materials

Table 37:

Custom Materials

9. Conformance of Information System Materials

I) Format of the Technical Tender

In accordance with ITT 16.2, the documentary evidence of conformity of the Information System to the tendering documents includes (but is not restricted to):

- a) The Tenderer's Preliminary Project Plan, including, but not restricted, to the topics specified in the TDS ITT 16.2. The Preliminary Project Plan should also state the Tenderer's assessment of the major responsibilities of KEFRI and any other involved third parties in System supply and installation, as well as the Tenderer's proposed means for coordinating activities by each of the involved parties to avoid delays or interference.
- b) A written confirmation by the Tenderer that, if awarded the Contract, it shall accept responsibility for successful integration and interoperability of all the proposed Information Technologies included in the System, as further specified in the Technical Requirements.
- c) Item-by-Item Commentary on the Technical Requirements demonstrating the substantial responsiveness of the overall design of the System and the individual Information Technologies, Goods, and Services offered to those Technical Requirements.

In demonstrating the responsiveness of its tender, the Tenderer must use the Technical Responsiveness Checklist (Format). Failure to do so increases significantly the risk that the Tenderer's Technical Tender will be declared technically non-responsive. Among other things, the checklist should contain explicit cross-references to the relevant pages in supporting materials included the Tenderer's Technical Tender.

Note: The Technical Requirements are voiced as requirements of the *Supplier* and/or the *System*. The Tenderer's response must provide clear evidence for the evaluation team to assess the credibility of the response. A response of "yes" or "will do" is unlikely to convey the credibility of the response. The Tenderer should indicate *that*—and to the greatest extent practical—*how* the Tenderer would comply with the requirements if awarded the contract. Whenever the technical requirements relate to feature(s) of existing products (e.g., hardware or software), the features should be described and the relevant product literature referenced. When the technical requirements relate to professional services (e.g., analysis, configuration, integration, training, etc.) some effort should be expended to describe how they would be rendered – not just a commitment to perform the [cut-and-paste] requirement. Whenever a technical requirement is for the Supplier to provide certifications (e.g., ISO9001), copies of these certifications must be included in the Technical Tender.

Note: The Manufacture's Authorizations (and any Subcontractor Agreements) are to be included in Attachment 2 (Tenderer Qualifications), in accordance with and ITT 15.

Note: As a matter of practice, the contract cannot be awarded to a Tenderer whose Technical Tender deviates (materially) from the Technical Requirements – *on any Technical Requirement*. Such deviations include omissions (e.g., non-responses) and responses that do not meet or exceed the requirement. Extreme care must be exercised in the preparation and presentation of the responses to all the Technical Requirements.

- d) Supporting materials to underpin the Item-by-item Commentary on the Technical Requirements (e.g., product literature, white-papers, narrative descriptions of technical approaches to be employed, etc.). In the interest of timely tender evaluation and contract award, Tenderers are encouraged not to overload the supporting materials with documents that do not directly address KEFRI's requirements.
- e) Any separate and enforceable contract(s) for Recurrent Cost items which the TDSITT17.2 required Tenderers to tender.

Note: To facilitate tender evaluation and contract award, Tenderers encouraged to provide electronic copies of their Technical Tender—preferably in a format that the evaluation team can extract text from to facilitate the tender clarification process and to facilitate the preparation of the Tender Evaluation Report.

ii) Technical Responsiveness Checklist (Format)

Table 38

Tech. Require. No.	Technical Requirement: <i>[insert: abbreviated description of Requirement]</i>
Tenderer’s technical reasons supporting compliance:	
Tenderer’s cross references to supporting information in Technical Tender:	

L. Form of Tender Security-[Option 1–Demand Bank Guarantee]

Beneficiary:_____ Request forTenders No:

_____Date:_____ TENDER GUARANTEE

No.:_____

Guarantor: _

1. We have been informed that_____(here inafter called "the Applicant") has submitted or will submit to the Beneficiary its Tender (here inafter called" the Tender") for the execution of under Request for Tenders No.__(“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 or sums not exceeding in total an amount of_(
_) upon receipt by us of the Beneficiary's complying demand, supported by the Beneficiary's statement, whether in the demand itself or a separate signed document accompanying or identifying the demand, stating that either the Applicant:
 - (a) has withdrawn its Tender during the period of Tender validity set forth in the Applicant's Letter of Tender (“the Tender Validity Period”), or any extension thereto provided by the Applicant; or
 - b) having been notified of the acceptance of its Tender by the Beneficiary during the Tender Validity Period or any extension there to provided by the Applicant, (i) has failed to execute the contract agreement, or (ii) has failed to furnish the Performance.
4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) thirty days after the end of the Tender Validity Period.
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.

FORMAT OF TENDER SECURITY [Option 2–Insurance Guarantee]

TENDER GUARANTEE No.: _____

1. Whereas [*Name of the tenderer*] (hereinafter called “the tenderer”) has submitted its tender dated [*Date of submission of tender*] for the [*Name and/or description of the tender*] (hereinafter called “the Tender”) for the execution of ___ under Request for Tenders No. _____ (“the ITT”).
2. KNOW ALL PEOPLE by these presents that WE of [**Name of Insurance Company**] having our registered office at (hereinafter called “the Guarantor”), are bound unto [*Name of Procuring Entity*] (hereinafter called “the Procuring Entity”) in the sum of (Currency and guarantee amount) for which payment well and truly to be made to the said Procuring Entity, the Guarantor binds itself, its successors and assigns, jointly and severally, firmly by these presents.

Sealed with the Common Seal of the said Guarantor this ___ day of _____ 20
—.

3. NOW, THEREFORE, THE CONDITION OF THIS OBLIGATION is such that if the Applicant:
 - a) has withdrawn its Tender during the period of Tender validity set forth in the Principal's Letter of Tender (“the Tender Validity Period”), or any extension thereto provided by the Principal; or
 - b) having been notified of the acceptance of its Tender by the Procuring Entity during the Tender Validity Period or any extension thereto provided by the Principal; (i) failed to execute the Contract agreement; or (ii) has failed to furnish the Performance Security, in accordance with the Instructions to tenderers (“ITT”) of the Procuring Entity's Tendering document.

then the guarantee undertakes to immediately pay to the Procuring Entity up to the above amount upon receipt of the Procuring Entity's first written demand, without the Procuring Entity having to substantiate its demand, provided that in its demand the Procuring Entity shall state that the demand arises from the occurrence of any of the above events, specifying which event(s) has occurred.

4. This guarantee will expire: (a) if the Applicant is the successful Tenderer, upon our receipt of copies of the contract agreement signed by the Applicant and the Performance Security and, or (b) if the Applicant is

not the successful Tenderer, upon the earlier of (i) our receipt of a copy of the Beneficiary's notification to the Applicant of the results of the Tendering process; or (ii) twenty-eight 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 on or before that date.

[Date]

[Signature of the Guarantor]

[Witness]

[Seal]

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

M. Tender - Securing Declaration Form {r 46 and 155(2)}

[The Bidder shall complete this Form in accordance with the instructions indicated]

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

Tender No.: [insert number of tendering process]

To: [insert complete name of Purchaser] I/We, the undersigned,

declare that:

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

Signed:

Capacity / title (director or partner or sole proprietor, etc.)

Name:

Duly authorized to sign the bid for and on behalf of: _____ [insert complete name of Tenderer] Dated on..... day of..... [Insert date of signing]

Seal or stamp

SECTION V - REQUIREMENTS OF THE INFORMATION SYSTEM

5.1 SUPPLY DELIVERY AND INSTALLATION OF INTEGRATED DATA CENTER INFRASTRUCTURE/ SMART RACKS FOR PRIMARY DATA CENTRE, NOC, SERVERS, HA NGFW, HA CORE SWITCH

5.1.1 Summary

These specifications describe requirements for a fully integrated and intelligent Datacenter. The system will be designed to provide precision cooling, Uninterruptible Power System (UPS), Remote Monitoring solution for critical IT components inside the rack.

Design a data Centre physical Infrastructure based on the best industrial practices and standard of the data center construction and in conformity to established ICT authority standards

Supply and install a secure data center Passive and intelligent physical infrastructure with 4 Usable racks. Migration of services from the current DC to the new Data Centre.

5.1.2 Design Requirements

The proposed smart cabinet system should be a pre-fabricated factory unit. It should be floor mounted, optimized for maximum cooling capacity in a minimum footprint.

It should be specifically designed for server rooms and the system should be designed to ensure rapidly deployable solutions that cost-effectively increase efficiency, add data center capacity, and improve IT control. The proposed Intelligent Integrated Infrastructure should include following components.

- Uninterrupted Power Supply.
- Rack Cooling Unit
- 42U racks of dimensions 800mm X 1000mm

The proposed solution should have Environmental Remote Monitoring with Email alerts, Smoke detection, Water leak detection, Temperature & Humidity sensor & Door Sensors. Electrical system with inbuilt essential MCB mounted inside the cabinet, Critical systems like UPS & Cooling Unit will have N+N topology.

The Intelligent integrated infrastructure shall have min 58 U usable space distributed in 2 racks, to accommodate IT and network equipment & devices. It will have a net sensible cooling capacity rated no less than 7kW and 2X10 KVA rack mountable UPS with 60 mins of external Battery Backup on each UPS.

Submittals will be provided with the proposal and will include:

- Descriptions of equipment to be furnished
- System GA
- Detailed layouts w.r.t smart solutions positioning in the server room.
- Site Pre-requisites
- Size and weight of shipping units

Structured cabling works will include cabling of ICT offices, Data Center and NOC areas with Category 6A UTP cabling with Fiber Optic backbones from Supply Chain Management and Finance to the Data Centre to accommodate the change in switch rack as detailed below: -

5.1.3 Detailed Specification of Components

The proposed solution should have a minimum of HD series server cabinets that are ideal solution for network & server applications. The cabinet's rugged construction will offer the highest stability as well as high-load bearing capacity.

5.2 Network Operations Center (NOC)

5.2.1 Identification

The formal identification for this document is the Technical Specification for the installation and commissioning of network and system monitoring tool for the Institute. This document provides the technical requirements that shall be satisfied for the procurement of the services.

5.2.2 Purpose

The primary purpose of the project is to provide monitoring solution for servers, applications and network elements used by IT department Systems Administrator, Network Administrators and IT help desk section to monitor systems availability, performance, and health status. The solution should be able among others functions to provide network and system troubleshooting and diagnosis and future planning.

5.2.3 Scope

The scope of the project shall include but not limited to the following:

1. Design, configuration, deployment and integration of the network and system monitoring tool on KEFRI network.
2. Provide training and knowledge to KEFRI IT teams on the solution.

5.3 SMART Racks

Technical Specifications

The proposed solution should at minimum have HD series server cabinets that are ideal solution for network & server applications. The cabinet's rugged construction will offer the highest stability as well as high-load bearing capacity.

Table 39: TECHNICAL SPECIFICATIONS FOR INTEGRATED DATA CENTER INFRASTRUCTURE/ SMART RACKS FOR PRIMARY DATA CENTRE

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
The proposed solution should have the best in class IT Rack with containment, High density with 42U as standard, complete with shelf, cable manager & blanking panels with basic PDU.		
The proposed solution Smart Row Rack will be 42 U 19" mounting type with 2000 (Height) x 800 (Width) x 1000 (Depth).		
The rack design for the proposed solution be sturdy frame section, corners and be stiffened with welded MS die cast, Frame that will be bay able, scalable and modular with safe load carrying capacity of 1400 Kg on enclosure frame and 1000 Kg on 19" mounting angles.		
The proposed Rack solution should have all basic accessories like 720 mm deep component shelf, blanking panels, baying kit, sliding keyboard tray, vertical cable manager as well as horizontal cable manager, earthing copper		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
strip with insulators.		
The proposed solution should have Rack 32-amp PDU vertical mounting with IEC type socket with 12 no's of IEC C13 Sockets & 4 no's IEC C19 Socket with 2.5 m power chord with 32A MCB RAL 9005 (each rack will be having two PDU's).		
The proposed solution should have inbuilt fire detection and suppression features with alerts		

Rack Mount Cooling Units

The proposed solution should have 7 kW rack cooling Type Air-conditioning Units designed specifically for high sensible heat ratio with cooling techniques to match the low latent loads of systems to be installed in the integrated cabinet for effective and uniform distribution of cooling.

The proposed solution old air should be supplied to the cold aisle containment of the integrated cabinet and the hot air should be taken from the hot aisle containment of the proposed cabinet.

Table 40: Technical Specification Rack Colling Unit:

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
The proposed solution should have high sensible cooling unit with 100% duty cycle		
The proposed solution should have cooling capacity of 7 kW		
The proposed solution should have split indoor & Outdoor unit design		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
The proposed solution should have cooling Unit integrated in rack, 19" mountable not more than 9U		
The proposed solution should have scroll compressor for step less capacity modulation & high reliability		
The proposed solution should have scroll compressor for high reliability		
The proposed solution should have electronically commutated centrifugal evaporator fan for high energy efficiency		
The proposed solution should allow air flow suitable to rack equipment from bottom to top discharge in vertical direction		
The proposed solution should have thermal insulation on indoor unit		
It should have under voltage and Overvoltage protection for equipment safety		
The proposed solution should have high Pressure & Low-Pressure protection for safe operation		
The solution should have a washable filter with 80% efficiency down to 20-micron rating and HDPE media		
Should have a flare type Thermostatic Expansion Valve for easy serviceability		
It should have a refrigerant R407C compatible		
It should have a hydrophilic evaporator coil		
It should have individual breakers at indoor and outdoor		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
unit for protection		
The proposed solution should have ability for flexible Cu piping for easy indoor to outdoor connection at rack level		
It should have ON/OFF switch at indoor unit for emergency purpose		

Fire Detection and Extinguishing System

Fully self-contained automatic fire detection and extinguishing system.

- “Out of the box protection solution” requiring no fire engineering design; quick and easy to install and simple to operate.
- Designed around EN54-2 C&IE design standards.
- LPCB approved Apollo optical detection for reliability.
- Novec 1230 Extinguishing agent to cover xx cubic meters.
- Approved and tested bottle & valves sets, specially designed performance tested discharge nozzles, proven fire tested performance.
- Volt free contacts for connection into 3rd party equipment.
- 19” rack mounted chassis.

KVM Switch and LCD Tray

- Proposed 18.5” LCD console tray and 8 port IP KVM switch should be built in design and should occupy 1U space in 19” standard rack.
- It should have cable management arm (CMA) and the 8 port KVM switch built in at the rear side of the LCD console tray to save the U space in Rack.
- KVM switch should not have push button since it is not operable from front side in rack.
- Both LCD console tray and the built-in KVM switch should have separate power supply.
- Vendor should supply 8 number of KVM cables with VGA, USB connectors and LEDs to indicate Power status.
- Built-in KVM switch should have 8 RJ45 port to connect KVM cable/dongle with the recent in the market CAT cable extension at least upto 30Mt
- Supplied KVM cables should support Virtual media to map USB media devices to target servers remotely over TCP/IP.

- Built in KVM switch should have encryptions including 128-bit SSL, AES, DES and 3DES and they can be selected for keyboard, mouse and video signals and virtual media sessions.
- Built-in KVM switch should be cascaded with another KVM switch with max 30Mt cat cable only.
- LCD display should support brightness 250 cd /m2, contract ratio 1000:1 and 16.7million colors.
- LCD console tray and built in KVM switch should support max resolution 1600 x 1200 at 60 Hz.
- Operating temperature and Humidity of LCD console tray should be 0°C to 50°C and 10% to 80%
- LCD console tray should have 103 key keypads with numpad and touchpad.
- It should have control buttons on the front of the monitor to adjust the characteristics of the image that is displayed.
- It should have two independent USB 2.0 compliant pass-through ports at front side.
- LCD console tray should be global certified by agencies UL, CE, CCC, BSMI, C-Tick, EAC, VCCI, KCC, FCC Class A

Monitoring

Supply and installation of RDU system which, continuously collects critical information from network connected devices, temperature, humidity, door sensors and other dry contact monitoring. Based on pre-set parameters, automated email alerts are sent to the intended recipients.

Monitoring Technical Specification:

- Intelligent Rack environment remote monitoring.
- Modbus 485 Communications.
- SNMP Communication.
- Single window for monitoring all sensors.
- Data and logs of historical information of alarms and notification.
- Temperature & Humidity Sensor, with LCD display and RJ45 connector.
- Door opening sensor with RJ 45 connector.
- Water leak detection sensor with RJ45 connector.
- Smoke detection sensor with RJ45 connector.
- Alarm device with LED flash and sound option.

Access Control System

- Supply and installation of Biometric access control system provided should be controlled by access control panel.
- The IP based Access Control System shall be used to serve the objective of allowing access to authorized personnel only. The system deployed will be based on Biometric Technology. The front rack doors will be provided with magnetic locks and will operate on fail-safe principle through one common Biometric access control system. Rear doors will be operated through mechanical lock & key mechanism.

- The system would be designed and implemented to provide following functionality:
 - (i) Configurable system for user defined access
 - (ii) Built-in Real Time Clock (RTC), calendar; complete Database stored locally and shall be capable of operating offline on standalone mode
 - (iii) Record, report and archive each and every activity (permission granted and / or rejected) with log formats
 - (iv) Fail safe operation in case of no-power condition and abnormal condition such as fire, theft, intrusion, loss of access control, etc.
 - (v) At the biometric reader, user presents the finger to the biometric reader which is unique to each employee. The pattern is read and compared with stored data to grant / deny access.

Electrical System POD Device

Supply and installation of electrical distribution system.

- a. 19" rack mountable Power Output Device with essential breakers to be mounted in the rack. Consumes only 3U space of rack height.
- b. Main Incomer- 80 Amp 4 Pole MCB with suitable provision of terminal blocks for connections.
- c. UPS I/P - 2 nos. of 50 Amp 5P MCB for UPS Supply.
- d. Cooling I/P - 2 nos. of 16 Amp 4P MCB for Cooling Unit Supply.
- e. Spares -1 no. of 32 Amp MCB for spares.
- f. All input supply cables from POD unit to equipment's are connected to industrial socket (male - female) with suitable rating.

5.3.1 Uninterrupted Power Supply (UPS) – Inrack

The proposed solution should have two numbers of true online, double conversion, high efficiency, high power factor Uninterruptible Power Systems (UPS) rated at 2 x 10 KVA with battery backup support for 60 minutes on full load (N+N configuration). The backup batteries should be supplied with the necessary arrangements to mount external to the cabinet. The type of Batteries Supplied should be under the same manufacturer as the UPS. To attach battery calculation document from the manufacturer proving the runtime provided.

Scope:

- The scope shall include design, supply, installation, testing and commissioning of the complete UPS system and related accessories including:
 - All Server racks will get power feed from two independent 2 x 10 KVA UPS systems to ensure redundancy.
 - All systems should be tested in factory as per the manufactures recommended procedure for all operating parameters and the test results should be provided during the installation.
 - Delivery at site, unloading, handling, installation of complete system including interconnection from the UPS system to batteries and to input / output panels switches. All interconnections shall be done using multi-strand Flexible Copper conductor cables of appropriate sizes.

- Scope includes battery bank connections and providing safety barriers for all bus bars and cable connection leads on battery racks.
- Energizing of UPS and Battery bank commissioning.
- UPS control parameters setting and complete testing of system on load. -
- Service backup by engineer till system is fully operational and subsequently training is to be provided to the concerned persons of the Institute.
- Acceptance tests will be carried out after installation and the systems will be taken over only after successful completion of the acceptance tests.
- Any upgrade of the system hardware and associated other software during the warranty period should be supplied at free of charge.
- Operation and service manuals of the systems containing technical / Electronic drawings / circuit diagrams complete in all respects should be supplied.

Specification / features of the Each UPS system are as follows:

- The proposed solution should have widest input range. -
- The proposed solution should have double conversion and IGBT technology.
- The proposed solution should have full IGBT Rectifier / Battery charger
- The proposed solution should contain IGBT based Inverter -
- The Batteries of the proposed solution should support 60 minutes full load backup. (Extra backup with external batteries with charger)
- The proposed solution should have the facility for remote viewing
- The proposed solution should be easy to expand cost-effectively

Table 41: Technical Specification 10 KVA UPS:

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Nominal Ratings (kVA)	10/18kW	
Input parameters		
Nominal input voltage (V)	380 / 400 / 415 Vac (3Ph + N + PE)	
Voltage Range	±20 - 40% @ 70% load%	
Frequency	50 Hz / 60 Hz, ±5%	
Power Factor	0.99 @ full load (Unity Power Factor - optional)	
Harmonic Distortion	.3% @ 100%	
Output		
Nominal Voltage	380 / 400 / 415 Vac (3Ph + N + PE)	
AC Voltage Regulation	±1%	
Frequency Range	50 Hz or 60 Hz, ±2%	
Power Factor	0.9 (Unity Power Factor optional)	
Crest Factor	3:1	

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Harmonic Distortion (Linear Load) Transfer Time Waveform	.3% @ 100% load Zero Sinewave	
Efficiency		
Online Mode Eco Mode	Up to 95% Up to 98%	
Battery		
Battery Type Battery Numbers Runtime Required Warranty	UPS Manufacturer VRLA Sealed Lead Acid Maintenance Free Batteries, Nickel Cadmium Batteries ±60 blocks (Internal battery options available) 60 minutes Full Load 2 years manufacturer warranty on UPS and Batteries.	

Installation:

- I. The proposed solution shall be installed as per manufacturer's recommendations & instructions including all interconnections for supply & control circuits by a Certified Engineer from the manufacturer.
- II. All components of the proposed solution shall be clearly identified using labels including battery cells individually.
- III. Services of authorized representative or manufacturer for supervision of installation, connections, testing, & adjustments shall be provided.

Testing & Commissioning:

- (i) Under supervision of manufacturer's representative all system functions, operations, protective features shall be checked & preset to ensure compliance or specifications.
- (ii) Test the system as per recommendations & test listed below using pre-calibrated instruments.
 - Load simulation.
 - Simulation of malfunctions to verify protective device operations.

- Duration of supply on emergency. Low battery voltage alarm & shutdown, transfer & restoration of normal supply.
- Remote status & alarm tests.

In case of test any shortfalls / faults, the same shall be rectified & test procedure shall be again repeated to establish satisfactory performance.

Cleaning:

On completion of installation, testing of the system all components, cabinets etc. The proposed solution shall be cleaned & all unwanted material, debris shall be removed from site. Scratches dents if any shall be cleaned & touched up to match the original finish.

Drawings & Manuals for UPS

The proposed solutions drawings & manuals / information shall be submitted in at least THREE copies at appropriate stages & for handing over the system as per the below.

- i Manufacturer's data for product, features, components & performance along with the offer.
- ii Operation & maintenance manual with;
 1. List of recommended spares & replacement components.
 2. Detail operating instructions covering operations in normal & abnormal conditions.
 3. Shop drawings showing detail fabrication, assembly of components, internal & interconnecting wiring, dimensions, plans & views, installation details access & clearance etc. for approval.
 4. All product certificates for brought out items.
 5. Factory test certificates & Inspection report and;
 6. Field test reports.

Monitoring

Supply and installation of RDU system which, continuously collects critical information from network connected devices, temperature, humidity, door sensors and other dry contact monitoring. Based on pre-set parameters, automated email alerts are sent to the intended recipients.

Monitoring Technical Specification:

- Intelligent Rack environment remote monitoring.
- Modbus 485 Communications.
- SNMP Communication.
- Single window for monitoring all sensors.
- Data and logs of historical information of alarms and notification.
- Temperature & Humidity Sensor, with LCD display and RJ45 connector.
- Door opening sensor with RJ 45 connector.
- Water leak detection sensor with RJ45 connector.

- Smoke detection sensor with RJ45 connector.
- Alarm device with LED flash and sound option.

Electrical System POD Device

Supply and installation of electrical distribution system.

- g. 19" rack mountable Power Output Device with essential breakers to be mounted in the rack. Consumes only 3U space of rack height.
- h. Main Incomer- 80 Amp 4 Pole MCB with suitable provision of terminal blocks for connections.
- i. UPS I/P - 2 nos. of 50 Amp 5P MCB for UPS Supply.
- j. Cooling I/P - 2 nos. of 16 Amp 4P MCB for Cooling Unit Supply.
- k. Spares -1 no. of 32 Amp MCB for spares.
- l. All input supply cables from POD unit to equipment's are connected to industrial socket (male - female) with suitable rating.

Table 42: Technical Data

Description	Complied (C) / Not Complied (NC)/ Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Dimention	2 Rack Integrated System	
Capacity	20 KVA	
No. of Racks	2	
Cooling Capacity	2 X 7 KW	
Cooling Redundancy	Yes	
UPS Capacity	2 x 10 KVA	
UPS Redundancy	Yes	
Backup Time**	60 Mins on each ups	
U Space Available	58	
Monitoring	Yes	
DIMENSIONS in mm		
Width	1600	
Height	2100	
Depth	1000	

5.4 Switching

Table 43: Core Switch (Layer 3)

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
(a) Core Switch		
Proposed switch must have high wire-rate performance for switching and routing at 40 G, 10 G and gigabit speeds. Advanced services are incorporated in the operating system: QoS, access control lists (ACLs), L2/L3, VLAN stacking and IPv6		
Proposed switch must have Redundant hardware system architecture. Internal, hot swappable power supplies, fans. Front-to back and back-to-front cooling models		
Switch must have Power consumption per 10 GbE port in its class		
Proposed switch must have scalable network virtualization architecture for guaranteed SLA delivery over standard Ethernet fabric: Edge Virtual Bridging (EVB), Shortest Path Bridging (SPB) and dynamic Virtual Network Profiles (vNP)		
Proposed switch must have DCB support: Lossless Ethernet for all traffic		
Switches shall propose a linux-like CLI (cd, pwd, cp, mv, rm, vi, ls...).		
Max switching capacity 600 - 640 Gb/s and Throughput 400 - 480 Mbps		
Power consumption 150 - 200 Watts and Heat dissipation Heat dissipation		
Switch shall be fully SNMP (v1, v2 & v3) manageable and every		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
configuration item should be configurable through SNMP.		
Switch shall support the following remote access methods: FTP, SCP, SSH(v2)/SFTP, Telnet, TFTP.		
Switch shall support Multiple software images and configurations with fallback recovery. A reboot of any switch may be initiated with a time-out programmable rollback, allowing automatic fallback to a safe configuration and/or software image.		
automatic fallback to a safe configuration and/or software image.		
Switch shall support disaster recovery and upload/download image files through USB device.		
Switch shall support RMon Base, sFlow Base, Switch Logging and Syslog.		
Switch shall support Unidirectional Link Detection (UDLD) and Digital Diagnostic Monitoring (DDM), allowing real-time diagnostics of fiber connections for early detection of optical signal deterioration.		
Switch shall support 802.1AB Link Layer Discovery Protocol (LLDP) with MED extensions for automated device discovery.		
Switch shall support Multiple VLAN Registration Protocol (MVRP) for IEEE 802.1Q-compliant virtual LAN (VLAN) pruning and dynamic VLAN creation.		
Core switch shall support an auto-QoS feature for switch management traffic and traffic from IP phones.		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
Core switch shall support remote auto configuration download easing and automating provisioning of edge switches.		
Routing and Multicast		
Switch shall support a switch capacity of 160 Gb/s on the 24 Port and 200 Gb/S on the 48 port and 240 Gb/S on the 10 port		
Switch shall support a switch frame rate of 120 Mpps on the 24 Port and 160 Mpps on the 48 port and 200 Mpps on the 10 port		
Every switch shall support at least static routing and RIP (v1 & v2 for IPv4, next generation for IPv6).		
Every switch shall support at least 256 IPv4 and 128 IPv6 routes		
Every switch shall support at least 128 IPv4 and 16 IPv6 router interfaces		
Every switch shall support IGMPv1/v2/v3 snooping for optimized multicast traffic.		
Every switch shall support Multicast Listener Discovery (MLD) v1/v2 snooping.		
Every switch shall support at least 1000 multicast groups		
Every switch shall support Multicast VLAN (IPMVLAN)		
Switch Resiliency and high availability		
Every switch shall support 802.1d STP Spanning Tree Protocol.		
Spanning Tree Protocol.		
Every switch shall support 802.1w Rapid		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
Spanning Tree Protocol.		
Every switch shall support 802.1s Multiple Spanning Tree Protocol.		
Every switch shall support Per-VLAN spanning tree (PVST+)		
Every access switch shall support Dual Home Link (DHL) for link protection without Spanning Tree protocol.		
Every switch shall support Link Aggregation – Static and LACP (802.3ad).		
Every switch shall support broadcast and multicast storm control to avoid degradation in overall system performance.		
Every switch shall support TU-T G.8032/Y.1344 2010: Ethernet Ring Protection (ERPV2)		
Every switch shall support LLDP (802.1ab)		
Every switch shall support Virtual Chassis InService Software Upgrade (ISSU)		
Every switch shall support Virtual Chassis 1+N redundant supervisor manager		
Switch Security		
Every switch shall support Auto-sensing IEEE 802.1X multi-client, multi-VLAN MAC-based authentication for non-802.1X hosts.		
Every access switch shall support an embedded NAC framework for comprehensive user-policy-based network access control.		
Every access switch shall support		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
centralized RADIUS for device authentication and network access control authorization.		
Every access switch shall support Web-based authentication (Captive Portal): A customizable web portal residing on the switch that can be used for authenticating supplicants as well as non-supplicants.		
Every switch shall support Centralized RADIUS and LDAP administrator authentication.		
Every access switch shall support dynamic change of authentication (CoA) and enforcing traffic remediation or restriction for noncompliant devices.		
Every access switch shall support automated assignment of QoS and Security based on MAC address (range) or IP address (range), preferably using the concept of configurable Network Profiles holding QoS and Security parameters, and which are dynamically assigned.		
Every access switch shall support MAC address lockdown.		
Every switch shall support ARP Defense Optimization.		
Every switch shall support ARP Poisoning Detect.		
Every switch shall support IP DoS Filtering.		
Every switch shall support user-oriented features such as learned port security (LPS), port mapping, Dynamic Host Configuration Protocol (DHCP) binding		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
tables and User Network Profile (UNP)		
Every switch shall support MACSec encryption to secure the network edge: 1G/2.5G user and 10G up-link ports		
Switch shall support the deployment of comprehensive and secure BYoD services in enterprise networks such as guest management, device on-boarding, device posturing, application management and dynamic change of authentication (CoA).		
Switch Convergence		
Every PoE capable switch shall support IP phones and WLAN access points, as well as any IEEE 802.3af and IEEE 802.3at- 802.3bt compliant end devices.		
Every PoE capable switch shall allow configuring per-port PoE priority and max power for power allocation.		
Every PoE capable switch shall support dynamic PoE allocation: Delivering only the power needed by the powered devices (PD) up to the total power budget for most efficient power consumption.		
Every PoE capable switch shall support PoE power negotiation via LLDP MED TLV extensions.		
Every switch shall support eight hardware/based queues per port for flexible QoS management.		
Every switch shall support Flow-based QoS with internal and external (remarking) prioritization.		
Every switch shall support Flow-based		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
bandwidth management, ingress rate limiting; egress rate shaping per port.		
Every switch shall support Configurable scheduling algorithms, including Strict Priority Queuing (SPQ), Weighted Round Robin (WRR) and Deficit Round Robin (DRR).		
Every switch shall support Airgroup Network Services for Bonjour speaking devices provides consistent experience over wireless and wired networks		
Every switch shall support deployment with automated switch setup and		
configuration and end-to-end virtual LAN (VLAN) provisioning		
Management		
Intuitive CLI in a scriptable BASH environment via console, Telnet or Secure Shell (SSH) v2 over IPv4/IPv6		
Every switch shall support Powerful WebView Graphical Web		
Interface via HTTP and HTTPS over IPv4/IPv6		
Every switch shall support Network Automation and Programmability Abstraction		
Layer with Multivendor (NAPALM) support		
Every switch shall support Fully programmable RESTful web services interface with XML and JSON support. API enables access to CLI and individual MIB objects		
Every switch shall support File upload		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
using USB, TFTP, FTP,		
SFTP or SCP using IPv4/IPv6		
Every switch shall support File upload using USB, Trivial File Transfer Protocol (TFTP), FTP, SFTP or secure copy (SCP) over IPv4/IPv6		
Every switch shall support Human-readable ASCII-based configuration files for off-line editing, bulk configuration and out-of-the-box auto-provisioning • Fully programmable OpenFlow 1.3.1 and 1.0 agent for control of native OpenFlow and hybrid ports		
Every switch shall support Non-volatile memory for start-up configuration		
Every switch shall support Multiple microcode image support with fallback recovery		
Every switch shall support Dynamic Host Configuration Protocol (DHCP) relay for IPv4/IPv6		
Every switch shall support IEEE 802.1AB Link Layer Discover Protocol (LLDP) with Media Endpoint Discover (MED) extensions		
Every switch shall support NTP		
Every TOR switch shall support Access to the console via USB Adapter with Bluetooth technology to provide wireless management, eliminating the use of console cables		
Every switch shall support ARP poisoning detection		
Every switch shall support IP v4 & v6		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
Source Filtering as a protective and effective mechanism against ARP attacks		
Every switch shall support Bring Your Own Device (BYOD) provides on-boarding of Guest, IT/non-IT issued and silent devices. Restriction/Remediation of traffic from noncompliant devices.		
Uses RADIUS CoA to dynamically enforce User Network Profiles based on Authentication, Profiling, Posture check of devices.		
Every switch shall support Role-based authentication for routed domains		
Quality of Services		
Every switch shall support Priority queues: Eight hardware-based queues per port		
Every switch shall support Traffic prioritization: Flow-based QoS		
Every switch shall support Flow-based traffic policing and bandwidth management		
Every switch shall support 32-bit IPv4/128bit IPv6 non-contiguous mask classification		
Every switch shall support Egress traffic shaping		
Every switch shall support Lossless Virtual Output Queuing (VOQ) with configurable scheduling algorithms		
Every switch shall support DiffServ architecture		
Every switch shall support Congestion		

TECHNICAL REQUIREMENT	Complied (YES/NO)	Response Description of specifications (indicate reference document page number/section/Link/table/figure, where the specific item is addressed)
avoidance: Support for end- to-end head-offline (E2EHOL) blocking prevention, IEEE 802.1Qbb Priority-based Flow Control (PFC) and IEEE 802.3x Flow Control (FC)		

Table 44: Access Switches

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Access Switch Management		
All the switches shall use the same Network Operating System, with matching CLI commands and an embedded Web-based GUI that shall allow configuration of every configuration item.		
Switches shall propose a linux-like CLI (cd, pwd, cp, mv, rm, vi, ls...).		
Every switch shall support the following remote access methods: FTP, SCP, SSH(v2)/SFTP, Telnet, TFTP.		
Every switch shall support Multiple software images and configurations with fallback recovery. A reboot of any switch may be initiated with a time-out programmable rollback, allowing automatic fallback to a safe configuration and/or software image.		
Every switch shall support disaster recovery and upload/download image files through USB device.		
Every switch shall support RMon Base, sFlow Base, Switch Logging and Syslog.		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Every switch shall support Port Mirroring: Policy Based Mirroring - Remote Port Mirroring.		
Every switch shall support Unidirectional Link Detection (UDLD) and Digital Diagnostic Monitoring (DDM), allowing real-time diagnostics of fiber connections for early detection of optical signal deterioration.		
Every switch shall support 802.1AB Link Layer Discovery Protocol (LLDP) with MED extensions for automated device discovery.		
Every switch shall support Multiple VLAN Registration Protocol (MVRP) for IEEE 802.1Q-compliant virtual LAN (VLAN) pruning and dynamic VLAN creation.		
Every switch shall support Network Time Protocol (NTP) for network-wide time synchronization.		
Every access switch shall support an autoQoS feature for switch management traffic and traffic from IP phones.		
Every access switch shall support remote auto-configuration download easing and automating provisioning of edge switches.		
Routing and Multicast		
Every switch shall be wire-rate non-blocking for switching (latency < 4 microseconds) and routing.		
Every switch shall support 4000 VLANs and IEEE 802.1q standard.		
Every switch shall support 1500 system policies		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Every switch shall support 16k MAC Addresses.		
Every switch shall support a switch capacity of 160 Gb/s on the 24 Port and 200 Gb/S on the 48 port and 240 Gb/S on the 10 port		
Every switch shall support a switch frame rate of 120 Mpps on the 24 Port and 160 Mpps on the 48 port and 200 Mpps on the 10 port		
Every switch shall support at least static routing and RIP (v1 & v2 for IPv4, next generation for IPv6).		
Every switch shall support at least 256 IPv4 and 128 IPv6 routes		
Every switch shall support at least 128 IPv4 and 16 IPv6 router interfaces		
Access switches should support OSPF		
Every switch shall support IGMPv1/v2/v3 snooping for optimized multicast traffic.		
Every switch shall support Multicast Listener Discovery (MLD) v1/v2 snooping.		
Every switch shall support at least 1000 multicast groups		
Every switch shall support Multicast VLAN (IPMVLAN)		
Resiliency and high availability		
Every switch shall support 802.1d STP Spanning Tree Protocol.		
Every switch shall support 802.1w Rapid Spanning Tree Protocol.		
Every switch shall support 802.1s Multiple Spanning Tree Protocol.		
Every switch shall support Per-VLAN spanning tree (PVST+)		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
Every access switch shall support Dual Home Link (DHL) for link protection without Spanning Tree protocol.		
Every switch shall support Link Aggregation – Static and LACP (802.3ad).		
Every switch shall support broadcast and multicast storm control to avoid degradation in overall system performance.		
Every switch shall support TU-T G.8032/Y.1344 2010: Ethernet Ring Protection (ERPV2)		
Every switch shall support LLDP (802.1ab)		
Every switch shall support Virtual Chassis InService Software Upgrade (ISSU)		
Every switch shall support Virtual Chassis 1+N redundant supervisor manager		
Access Switch Security		
Every switch shall support Auto-sensing IEEE 802.1X multi-client, multi-VLAN MAC-based authentication for non-802.1X hosts.		
Every access switch shall support an embedded NAC framework for comprehensive user-policy-based network access control.		
Every access switch shall support centralized RADIUS for device authentication and network access control authorization.		
Every access switch shall support Web-based authentication (Captive Portal): A customizable web portal residing on the switch that can be used for authenticating supplicants as well as		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
non-suplicants.		
Every switch shall support Centralized RADIUS and LDAP administrator authentication.		
Every access switch shall support dynamic change of authentication (CoA) and enforcing traffic remediation or restriction for noncompliant devices.		
Every access switch shall support automated assignment of QoS and Security based on MAC address (range) or IP address (range), preferably using the concept of configurable Network Profiles holding QoS and Security parameters, and which are dynamically assigned.		
Every switch shall support ARP Defense Optimization.		
Every switch shall support ARP Poisoning Detect.		
Every switch shall support IP DoS Filtering.		
Every switch shall support MACSec encryption to secure the network edge: 1G/2.5G user and 10G up-link ports		
Every switch shall support user authentication with Access Guardian (IEEE 802.1x/MAC/captive portal) with Host Integrity Check (HIC) enforcement		
Every switch shall support the deployment of comprehensive and secure BYoD services in enterprise networks such as guest management, device on-boarding, device posturing, application management and dynamic change of authentication (CoA).		
Access Switch Convergence		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
1. Every PoE capable switch shall support IP phones and WLAN access points, as well as any IEEE 802.3af and IEEE 802.3at- 802.3bt compliant end devices.		
2. Every PoE capable switch shall allow configuring per-port PoE priority and max power for power allocation.		
3. Every PoE capable switch shall support dynamic PoE allocation: Delivering only the power needed by the powered devices (PD) up to the total power budget for most efficient power consumption.		
4. Every PoE capable switch shall support PoE power negotiation via LLDP MED TLV extensions.		
5. Every switch shall support eight hardwarebased queues per port for flexible QoS management.		
6. Every switch shall support Flow-based QoS with internal and external (remarking) prioritization.		
7. Every switch shall support Flow-based bandwidth management, ingress rate limiting; egress rate shaping per port.		
8. Every switch shall support Configurable scheduling algorithms, including Strict Priority Queuing (SPQ), Weighted Round Robin (WRR) and Deficit Round Robin (DRR).		
9. Every switch shall support Airgroup Network Services for Bonjour speaking devices provides consistent experience over wireless and wired networks		
10. Every switch shall support deployment with automated switch setup and		
11. configuration and end-to-end virtual LAN (VLAN) provisioning		
Management		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
1. Intuitive CLI in a scriptable BASH environment via console, Telnet or Secure Shell (SSH) v2 over IPv4/IPv6		
2. Every switch shall support Network Automation and Programmability Abstraction Layer with Multivendor (NAPALM) support		
3. Every switch shall support Fully programmable RESTful web services interface with XML and JSON support. API enables access to CLI and individual MIB objects		
4. Every switch shall support File upload using USB, Trivial File Transfer Protocol (TFTP), FTP, SFTP or secure copy (SCP) over IPv4/IPv6		
5. Every switch shall support Non-volatile memory for start-up configuration		
6. Every switch shall support Multiple microcode image support with fallback recovery		
7. Every switch shall support Dynamic Host Configuration Protocol (DHCP) relay for IPv4/IPv6		
8. Every switch shall support IEEE 802.1AB Link Layer Discover Protocol (LLDP) with Media Endpoint Discover (MED) extensions		
9. Every switch shall support NTP		
10. Every TOR switch shall support Access to the console via USB Adapter with Bluetooth technology to provide wireless management, eliminating the use of console cables		
11. Every switch shall support ARP poisoning detection.		
Quality of Service (QoS)		
1. Every switch shall support Priority queues: Eight hardware-based queues per port		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
2. Every switch shall support Traffic prioritization: Flow-based QoS		
3. Every switch shall support Flow-based traffic policing and bandwidth management		
4. Every switch shall support 32-bit IPv4/128bit IPv6 non-contiguous mask classification		
5. Every switch shall support Egress traffic shaping		
6. Every switch shall support Lossless Virtual Output Queuing (VOQ) with configurable scheduling algorithms		
7. Every switch shall support DiffServ architecture		
8. Every switch shall support Congestion avoidance: Support for end- to-end head-ofline (E2EHOL) blocking prevention, IEEE 802.1Qbb Priority-based Flow Control (PFC) and IEEE 802.3x Flow Control (FC)		
Monitoring and Troubleshooting		
1. Every switch shall support Local (on the flash) and remote server logging (Syslog): event and command logging		
2. Every switch shall support IP tools: ping and trace route		
3. Every switch shall support Dying Gasp support via SNMP and syslog messages		
4. Every switch shall support Loopback IP address support for management per service		
5. Every switch shall support Management virtual routing and forwarding (VRF) support		
6. Every switch shall support Policy- and portbased mirroring		
7. Every switch shall support Remote port mirroring		
8. Every switch shall support sFlow v5 and Remote Monitoring (RMON)		

Description	Complied (C) /Not Complied (NC)/Partially Complied (PC)	If complied Bidder's MUST provide explanation of compliance with reference to datasheet or bill of materials with the specific page number and section of the reference
9. Unidirectional Link Detection (UDLD), Digital Diagnostic Monitoring (DDM), and Time Domain Reflectometry (TDR		

Table 45: NOC Technical Description

Functionality	Requirement	Bidder shall state as: Fully (Compliant/ Not Compliant)	Describe the Capabilities with References
Discovery	Mandatory		
The Solution shall support Automated Discovery & Mapping with Layer 2/3 discovery identification of all of the devices on the network including routers, switches, servers, access points and more.			
Availability & Status	Mandatory		
The monitoring solution must support continuous monitoring and Management of Infrastructure availability/performance of infrastructure from routers, switches; monitor anything with an IP address that can be accessed with standard monitoring protocols including ICMP, SNMP, WMI and SSH.			
Performance Monitoring	Mandatory		
The Solution Must support Performance Monitoring to capture actual performance metrics like CPU and Memory utilization. For instance, the CPU utilization on a Switch is at 55%.			

Functionality	Requirement	Bidder shall state as: Fully (Compliant/ Not Compliant)	Describe the Capabilities with References
Alerting	Mandatory		
The solution must provide real-time alerts via email, text, Slack and logging. It should support an alert when a device or monitor changes state (e.g., from an up state to a down state) or when a performance threshold is exceeded – for example, when memory utilization exceeds 50 percent.			
Reporting	Mandatory		
The solution must deliver an easy-to-customize reporting environment where users can select from hundreds of out-of-the-box views or easily create drag-and-drop dashboards that provide a quick assessment of overall IT health – even detailed drill-down dashboards to isolate the root causes of performance problems.			
Inventory	Mandatory		
The Solution must support integrated inventory reporting including hardware inventory, reports on installed software and updates, warranty reports, and more.			
Advanced Monitoring (WMI, SSH, HTTPS)	Mandatory		
The Solutions must monitor anything with an IP address that can be accessed with standard monitoring protocols including ICMP, SNMP, WMI and SSH.			
Wireless Monitoring	Mandatory		
The Solution must Discover and monitor the dependencies between wired and wireless			

Functionality	Requirement	Bidder shall state as: Fully (Compliant/ Not Compliant)	Describe the Capabilities with References
networks.			
Storage Monitoring	Mandatory		
The Solution must monitor storage devices and more.			
Network Traffic Analysis	Mandatory		
The Solution must Monitor and set threshold-based alerts on network traffic, transmit netflow and bandwidth usage			
Hardware Requirements	Mandatory		
<p>The hardware to support the above software requires servers, databases storage and TV Screen for active monitoring of system and network performance.</p> <ul style="list-style-type: none"> • 1*Server (<i>Operating System: Microsoft Windows Server Server 2012 R2 (64-bit), 2016 and 2019; Processor: Quad-Core 2.6 GHz, Memory: 16 GB; Storage (installation): 64 GB; NIC: 1000 Mbps; Database: SQL Server 2017 Express included by default</i>) • 1*65" LED monitoring screens for active monitoring of network and systems elements to be mounted at the technical support center/office. • 1*PC with i7 processor, 16GB RAM, 512 GB SSD, with mouse, keyboard and monitor 			
The solution MUST be able to support MORE THAN the number of nodes indicated in the table above. The nodes indicate the minimum baseline.			

Table 46: NOC Monitoring Screens Specification

ITEM		NOC MONITORING SCREEN
	PARAMETERS	REQUIRED
1	Display Device	(OLED / LCD)LCD
2	Screen Size	(Inch)-65
3	Resolution	3840 x 2160
4	Nano Cell Display	Yes
5	IPS Panel (only for LCD series, including IPS 4K and IPS 4K Display)	Yes
6	Viewing Angle	Wide Viewing Angle
7	Panel Type	M+
8	BLU Type	Edge
9	Video (Picture Quality)	
10	True Motion / Refresh Rate	100/50 Hz
11	HDRHDR	Active with Dolby vision
12	HDR	Dolby Vision
13	HDR	HDR10Yes
14	HDR	HLG
15	Wide Color	Gamut Nano Cell Display
16	Dimming	Local Dimming
17	Dimming	(Module Spec.)6
18	Black Nano	Dot Black
19	Ultra-Luminance Ultra Luminance	Ultra-Luminance
20	Color Master Engine	Yes
21	Color Master Engine	Upscaler4K
22	Color Master Engine	True Color Accuracy
23	Color Master Engine	Active Depth Enhancer
24	Technology	SMART

5.5 Servers

SUPPLY, DELIVERY, INSTALLATION, CONFIGURATION AND COMMISSIONING OF TWO 2 NO. SERVERS

The awarded bidder must ensure that the servers supplied, installed configured and commissioned is per specification herein mentioned in the tender document;

- The Bidder to ensure that the proposed equipment / components must not be declared “End of Life” within the next 7 years from the date of purchase.
- The Bidder should have back to back arrangement with the OEM so that KEFRI will be able to log a call with the OEM directly for the contract period of 24 months.
- The Bidder should have contact center (central or location wise) in order to log the calls on 24x7x365. They should also provide onsite support on 24x7x365 basis. The contact center numbers should be provided to KEFRI along with the

escalation matrix mentioning the contact person's name, number and designation in the company.

Bidder would be responsible of operations and maintenance of the entire solution **for the contract period.**

The following services should be provided by Bidder:

- Bidder will be responsible for the generation and submission of necessary documentation required in all phases. Review and approval of KEFRI is required on all such documentation before commencement of activity.
- Bidder shall document the baseline configurations for all equipment & facilities and get it approved from department prior to commencement of installation. Bidder shall develop and implement a system to maintain these configurations and ensure adequate controls for change management process on an ongoing basis.
- The bidder will be responsible for maintaining the required performance levels for the entire infrastructure implemented during all three phases of the project.
- Bidder should ensure that all the software, hardware, peripherals, accessories, sub-components required for the functionality and completeness of the solution, including but not limited to devices, equipment, accessories, patch cords (copper/fibre), cables, software, licenses, tools, etc. should also be provisioned.
- The system software licenses shall be genuine, perpetual, full use and should provide patches, fixes, security updates directly from the OEM at no additional cost to KEFRI for the entire period of contract
- All the software licenses that the Bidder proposes should be perpetual software licenses. The software licenses should not be restricted based on location and KEFRI should have the flexibility to use the software licenses for other requirements if required.
- The Bidder shall be responsible for providing the perpetual licenses so as to maintain the solution and source code (customized / extension) to KEFRI.
- All the licenses and support should be in the name of KEFRI
- Bidder should ensure that the Annual Maintenance Support for the software and hardware components is provided for the period from date of deployment of the software and hardware component till the end of contract period. Annual Maintenance support should include patches, updates and upgrades of the software and hardware components. Bidder should ensure that there is a comprehensive onsite warranty / support arrangement for the aforementioned period with all the OEMs.
- Bidder should ensure that none of the components and sub-components is declared end-of-sale or end-of-support by the respective OEM for a period of at least two years from the time of submission of bid. If, the OEM declares any of the products / solutions end-of-sale subsequently, Bidder should ensure that the same is supported by the respective OEM from its date of deployment till the end of the contract period.
- Considering the criticality of the infrastructure, bidder is expected to undertake a detailed assessment of the site, identify the solution requirements to ensure no

single point of failure with high availability. The bidder should provide compatible ICT infrastructure to ensure high redundancy and resilience solution.

- If a product is not supported by the OEM for any reason whatsoever, from the effective date of Contract till the end of the contract period, Bidder should replace the products/solutions with an alternate that is acceptable to KEFRI at no additional cost to KEFRI and without causing any performance degradation and/or project delays
- Bidder should meet all the defined acceptance and operations criteria for each phase of the project covering the proposed solutions.
- It is expected that Bidder will provide an integrated solution after due consideration to the compatibility issues between various components and existing internal systems. If there is a problem with compatibility between components, Bidder should replace the components with an equivalent or better component that is acceptable to KEFRI at no additional costs to KEFRI and without any project delays.
- Bidder should provide minimum One hard and One soft copies of all the reports, manuals, documentation, including but not limited to, detailed operations manual, maintenance manual, administration manual, etc. for each and every equipment / component proposed as part of this tender. The documentation should be supplied for Installation, Maintenance, Servicing and operations of equipment / components.
- Bidder should arrange for desktops / workstations / laptops, printers and other peripherals and consumables for its team members deployed.
- Bidder should have to arrange for necessary tools for defect tracking, defect logging, etc. to deliver the complete software development and maintenance services.
- OEM's of all equipment / components under servers and storage, networking equipment, etc. mentioned by the bidder as per BOM, should have been in the leader's quadrant as per last two Gartner's report for that equipment / component. Evidence for the same also needs to be provided by the bidder in the bid.

Table 47: Server Technical Specifications

Item	Description of Item Requirement	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	Bidder Response/Reference
Rack Servers - Qty 2			
Form factor	Proposed Servers must be Rack mountable in a standard rack/ 1U/2U rack server		
Processors	10 th Generation Intel® Xeon® Gold Scalable processors , up to 205 W 4* CPU - 16C, 32 T 2.3 GHz per CPU		

Item	Description of Item Requirement	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	Bidder Response/Reference
Memory	128GB (DDR4 DIMM slots, 2933 MT/s; up to 12 Intel® Optane™ PMem modules (100 series), 2666 MT/s)		
Storage Capacity	10TB (2.5-inch NVMe SSDs)		
Chipset platform	Intel C622		
RAID Support	RAID 0, 1, 10, 5, 50, 6, or 60 Configured with a supercapacitor for power-off protection for the cache (optional) RAID level migration, drive roaming, self-diagnosis, and web-based remote configuration		
Network Ports	LOM: 2 x 10GE + 2 x GE ports Flexible NIC: 2 x GE, 4 x GE, 2 x 10GE, 2 x 25GE, or 1/2 x 56G FDR IB ports		
PCIe Expansion	Up to 5 PCIe 3.0 slots, including 1 for a RAID controller card and 1 for a flexible NIC		
Fan Modules	7 hot-swappable fan modules with optional N+1 redundancy		
Power Supply Units	Proposed Server must have redundant Fans and Power Supply Units, Hot Swappable. 2 hot-swappable PSUs with support for 1+1 redundancy with related accessories		

Item	Description of Item Requirement	Complied (C) /Not Complied (NC)/ Partially Complied (PC)	Bidder Response/Reference
Management	<ul style="list-style-type: none"> Must have a dedicated management GE network port to provide comprehensive management features such as fault diagnosis, automated O&M, and hardware security hardening. Must standard interfaces such as Redfish, SNMP, and IPMI 2.0; provides a remote management interface based on HTML5/VNC KVM; supports CD-free deployment and the Agentless feature, simplifying management. 		
Operating Temperature	5°C to 45°C (41°F to 113°F), and ASHRAE A3 and A4 compliant		
Certifications	CE, UL, FCC, CCC, and RoHS		
Operating System	Microsoft Windows Server 2019 Standard		
Security	Must have Power-on password, administrator password, Trusted Platform Module (TPM) 2.0, and security front panel		
Virtualization software	Support virtualization		

5.6 Structured Cabling

Structured Cabling (UTP & Fiber Optic) Requirements

Structured cabling works will include cabling of ICT offices, Data Center and NOC areas with Category 6A UTP cabling with Fiber Optic backbones from Supply Chain Management, Directors Block, Drylands Block and Finance Block to the Data Centre to accommodate the change in switch rack as detailed below: -

Table 48: Detailed Technical Specifications For Structured Cabling

Item	Specifications (MANDATORY)	Response YES/NO
1.	Horizontal cabling will consist of data cables specified up-to 500 MHz in compliance with ANSI/TIA/EIA 568-B.2.1 specification for CAT 6A Cabling Systems	
2.	Horizontal data cables would terminate on the racks located at	

Item	Specifications (MANDATORY)	Response YES/NO
	the Data Center as per site survey	
3.	Each work area outlet location shall be provided with Category 6A cables. The outlets faceplates shall be flush mounted on the metal trunking	
4.	The modular jacks shall be terminated using non-impact termination tool. The colour coding shall be consistent with T568B wiring standards	
5.	Cables shall only be coiled in the trunking or surface mount boxes if adequate space is present to house the cable coils without exceeding the manufacturers bend radius restrictions. Bend radius of the cable in the termination area shall not be less than 4 times the outside diameter of the cable	
6.	Excess slack may be neatly coiled and stored in the ceiling above each drop location when there is not enough space present in the outlet box to store cable slack	
7.	The cable shall be from an approved manufacturer for the purpose of extended warranty	
8.	Cables shall be installed in continuous lengths from the origin to the destination unless specifically addressed in this document	
9.	Cables shall be installed above any fire-sprinkler system or other sensors system. The cables shall not be attached to the system or any ancillary equipment or hardware	
10.	Cables shall not be attached to the ceiling grid or electrical supporting systems	
11.	Cable identification shall also be applied to the cables behind the faceplates on a section of the cable that can be accessed easily by removing the faceplate	
12.	The horizontal data cross-connect shall be installed within a 42U cabinet in the (MDC) server room. All equipment racks shall be augmented with horizontal and vertical cable management trays both front and rear, to properly arrange the horizontal cables and patch cords	
13.	Each panel shall be fed by an individual bundle separated and routed back to the point of cable entrance into the rack or frame	
14.	Whenever these are installed, multimode fiber links shall be tested for attenuation and length verification	
15.	The links shall be tested at 850 nm and 1300 nm according to ANSI/EIA/TIA-526-14A Method B. Each fiber strand shall be tested for attenuation with an optical power meter and a light source	
16.	Cable length shall be verified using sheath markings. If splices are used, splice attenuation shall be verified with an OTDR	
17.	The guidelines and procedures established for tier 1 /2 testing in TIA/TSB-140 shall apply. Printed test results for each fiber strand	

Item	Specifications (MANDATORY)	Response YES/NO
	shall be submitted	
18.	Wherever Fiber-optic Patch Cords are installed, backbone data patch cords shall be factory-terminated using duplex connectivity, 1 meter long, 50/125 micro meter multimode cable	
19.	The duplex cable shall have SC connectors on either side, unless specifically changed	

Table 49: Structured Cabling and Associated Accessories

Item	Parameter	No.	Unit	Response YES/NO
1.	Cat 6A 24 Port Patch Panel as Siemon	2	No.	
2.	CAT 6A indoor UTP cable Roll - Part No - 9C6M4-A5-04-R1A, UTP Cable, Copper, Category 6A, A5, 4 Pair, Solid, UTP, CM, Gray, Reel, 305 Meter, 23 AWG, 75CCat 6A cable	8	boxes	
3.	Data points	48	No.	
4.	Factory made Patch cords: Copper, Patch Cord, RJ45, RJ45, Category 6A, F/UTP, T568B, Solid, LSOH-1, Violet Cable, Clear Boot, 5 Meter, 23 AWG – (16 pcs) Copper, Patch Cord, RJ45, RJ45, Category 6A, F/UTP, T568B, Solid, CM, Gray Cable, Clear Boot, 10 Feet, 23 AWG – (8 pcs) Part No - MC6-03M-07 Copper, Patch Cord, RJ45 to RJ45, Category 6, UTP, T568A/B, Stranded, CM/LSOH-1, Green Cable, Clear Boot, 03 Meter, 26 AWG (6 pcs) Copper, Patch Cord, RJ45, RJ45, Category 6A, F/UTP, T568B, Solid, LSOH-1, Violet Cable, Clear Boot, 15 Meter, 23 AWG (2 pcs) (1M)	32	No.	
5.	Factory made Patch cords (3M)	48	No.	
6.	8 Way Fiber Connect Panels as Siemon	1	Lot	
7.	Multimode SC 10m Fiber Jumpers as Siemon	5	No.	
8.	Multimode 5m Fiber Jumpers as Siemon	5	No.	
9.	SC Simplex Fiber Pigtails as Siemon	16	No.	
10.	10G SFP+ to SFP+ 3m Direct Attach Copper Cable	16	No.	

Table 50: Price Schedule Form- Cabinet, UPS ETC

Item	Description	Quantity	Unit Price	Total	Cost
				Inclusive of All Taxes	
1	Complete Smart Racks Solution for the 2 No. Cabinets as defined	Lot			
2	24 Port Core Switch plus accessories	1			
3	24 Port Access Switches plus accessories	4			
4	48 Port Access Switches Plus accessories	2			
5	NOC Solution with its controller PC (i7, 16GB, 24" Display) and 2x 65" LED 4k screen	Lot			
6	Servers plus accessories and software	2			
7	PDUs for each Rack	LOT			
8	Installation, Configuration & Testing with Accessories	LOT			
9	Structured & Interact Cabling	LOT			
10	Migration of Equipment from Current Site to the new site and back	1			
11	Training and Technology transfer	1			
12	2 Years Support, Warranties and Maintenance with SLA	1			
Sub Total For Integrated Data Center Infrastructure/ Smart Racks For Primary Data Centre					

6.0 SUB-CONTRACTOR 1: CIVIL WORKS

Table 51: Civil Works Requirements

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>Element 01; Demolition</u>				
A	Carefully demolish the existing timber partition, make good disturbed surfaces and dispose as directed by the P.m.	Sm	9		
B	Ditto ceiling and timber brandering	Sm	42		
C	Ditto double masonry/rc wall to create a space for the window	Cm	2		
	Sub Total for demolition works				
	<u>Element 02; Floor</u>				
A	150mm high fiber-reinforced calciumsulphate panel, steel sheet bottom Raised Floor size 600 x 600 x 30.5mm, 1.0mm HPL Cover, 0.5mm Galvanized steel foil singers and screws (24 sq. Meters)	Sm	24		
B	Ditto ramp	Sm	3		
	Subtotal for floor works				

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	<p><u>Element 03; ALUMINIUM PARTITIONING</u></p> <p>- <u>Supply assemble and fix the following purpose made powder coated anodized aluminum fixed composite partitions in approved heavy duty sections complete with all frames, glazing beads and other accessories where applicable, fixed at predetermined positions, including 'snap on' glazing beads; sealing glass joints with silicone sealant building in lugs to jambs, plugging and screwing head and cill, easing and adjusting and leaving in perfect working order</u></p> <p>Fixed partition panel glazed with 6mm thick laminated glass and fixed with approved stainless steel patch fittings and joints sealed with clear silicone</p> <p>Subtotal for aluminum partitioning</p> <p><u>Element 04; Door</u> <u>Aluminum door</u></p> <p><u>Supply and fix the following; 75 x 50mm powder coated aluminum frames; 6 mm thick laminated tinted glass and glazing to aluminum doors with and including rubber glazing gaskets; decorative film to lower panel; all ironmongery (refer to architect's details)</u></p>	Sm	9		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	<p>Double leaf door; overall size 1500 x 2100mm high; in filled with 6 mm thick laminated glass; complete with aluminum frames and beadings; hinges; pair aluminum handle plates; Sliding door complete with sliding gear and track as Henderson or equal approved</p> <p>Subtotal for aluminum doors</p> <p><u>Element 05; Window</u> <u>Aluminum Window</u></p> <p><u>Supply and fix aluminum framed windows in approved powder coated aluminum framing in sections of size 75 x 50mm fixed to masonry or concrete; including glazing with 6 mm thick structured glazing solar receptive glass; secured to the framing using approved glazing strips and glazing beading including waterproofing all joints using approved silicon sealing compounds; complete with all fixing, flush lock and locking accessories; all to Architect's detail and approval. The rate includes cost of all materials, labor, scaffolding, ladders charges</u></p>	No	1		
A	<p>Window overall size 1700mm wide x 1700 mm high overall</p> <p>Subtotal for aluminum windows</p> <p><u>Element 06; Ceiling</u></p> <p>- <u>Gypsum ceiling</u> <u>Supply and fix gypsum ceiling boards to shapes and patterns in stepped form complete with and including metal studs channels and railing to be supplied and fixed in accordance with manufacturers printed instructions</u></p>	No	1		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
A	- 12mm thick gypsum ceiling boards	Sm	40		
B	- 100x30mm polyurethane cornice as supplied by classic mouldings ltd	Lm	40		
	<u>Steel Brandering</u> <u>The rate for Structural Steelwork should include shop priming, all plates, bolts, welded joints and all connections as per Engineer's detailed drawing; hoisted to a height of 3000 mm above the existing floor level; 3 coats of approved gloss oil paint; to</u>				
	-				
C	75 x 75 x 3mm RHS for framing	Lm	40		
D	50 x 50 x 3mm SHS Struts/Ties	Lm	140		
	Subtotal for ceiling works				
	<u>Element 07; Finishes</u>				
	- <u>Wall finishes</u> <u>Painting and decoration</u>				
	<u>Prepare and apply 3 coats intumescent flame retardant emulsion paint as "crown "or any other equal and approved paint to</u>				
A	- Plastered walls internally/externally	Sm	250		
B	Soffites of chipboard ceiling	Sm	40		
	<u>Floor finishes</u>				
A	Hack the existing floor screed and dispose off the debris as directed by the PM	Sm	24		

ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
B	30mm thick cement sand 1:2 backing to receive ceramic floors or terrazzo (s.m)	Sm	24		
C	Ditto in skirting	Lm	20		
D	Supply and fix 8mm thick ceramic floor tiles as "SAJ"	Sm	24		
E	Ditto 8mmx100mm in skirting	Lm	20		
	Subtotal for finishes				
ITEM	DESCRIPTION	UNIT	QTY	RATE	AMOUNT
	<u>GRAND SUMMARY</u>				
1	Sub Total for demolition works				
2	Subtotal for floor works				
3	Subtotal for aluminum partitioning				
4	Subtotal for aluminum doors				
5	Subtotal for aluminum windows				
6	Subtotal for ceiling works				
7	Subtotal for finishes				
8	Allow a provisional sum of two hundred thousand Kenya shillings for contingencies Sub Total for civil works carried to summary page				200,000.00

7.0 ELECTRICAL SUB CONTRACT WORKS

Electrical and Access Control Installation Services

7.1 SHOP DRAWINGS

Before manufacture or Fabrication is commenced the sub-contractor shall submit Two copies of detailed drawings of all control pillars, meter cubicles, medium voltage switchboards including their components showing all pertinent information including sizes, capacities, construction details, etc, as may be required to determine the suitability of the equipment for the approval of the Engineer. Approval of the detailed drawings shall not relieve the sub-contractor of the full responsibility of errors or the necessity of checking the drawings himself or of furnishing the materials and equipment and performing the work required by the plans and specifications.

7.2 RECORD DRAWINGS

These diagrams and drawings shall show the completed installation including sizes, runs and arrangements of the installation. The drawings shall be to scale not less than 1 :50 and shall include plan views and section.

The drawings shall include all the details which may be useful in the operation, maintenance or subsequent modifications or extensions to the installation.

Three sets of diagrams and drawings shall be provided, all to the approval of the Engineer.

One coloured set of line diagrams relating to operating and maintenance instructions shall be framed and, mounted in a suitable location.

7.3 REGULATIONS AND STANDARDS

All work executed by the Sub-contractor shall comply with the current edition of the “Regulations” for the Electrical Equipment of Buildings, issued by the Institution of Electrical Engineers, and with the Regulations of the Local Electricity Authority.

Where the two sets of regulations appear to conflict, they shall be clarified with the Engineers. All materials used shall comply with relevant Kenya Bureau of Standards Specification.

7.4 SETTING OUT WORK

The sub-contractor at his own expenses; is to set out works and take all measurements and dimensions required for the erection of his materials on site; making any modifications in details as may be found necessary during the progress of the works, submitting any such modifications or alterations in detail to the Engineer before proceeding and must allow in his Tender for all such modifications and for the provision of any such sketches or drawings related thereto.

7.5 POSITIONS OF ELECTRICAL PLANT AND APPARATUS

The routes of cables and approximate positions of switchboards etc, as shown on the drawings shall be assumed to be correct for purpose of Tendering, but exact positions of all electrical Equipment and routes of cables must be agreed on site with the Engineer before any work is carried out.

7.6 MCB DISTRIBUTION PANELS AND CONSUMER UNITS

All cases of MCB Panels and consumer units shall be constructed in heavy gauge sheet with hinged covers.

Removable undrilled gland plates shall be provided on the top and bottom of the cases. Miniature circuit breakers shall be enclosed in moulded plastic with the tripping mechanism and arc chambers separated and sealed from the cable terminals.

The operating dolly shall be tripfree with a positive movement in both make and break position. Clear indication of the position of the handle shall be incorporated.

The tripping mechanism shall be on inverse characteristic to prevent tripping in temporary overloads and shall not be affected by normal variation in ambient temperature.

A locking plate shall be provided for each size of breaker; A complete list of circuit details on typed cartridge paper glued to stiff cardboards and covered with a sheet of perspex, and held in position with four suitable fixings, shall be fitted to the inner face of the lids of each distribution panel. The appropriate MCB ratings shall be stated on the circuit chart against each circuit in use: Ivorine labels shall be secured to the insulation barriers in such a manner as to indicate the number of the circuits shown on the circuit chart.

Insulated barriers shall be fitted between phases, and neutrals in all boards, and to shroud live parts.

Neutral cables shall be connected to the neutral bar in the same sequence as the phase cables are connected to the MCB's. This shall also apply to earth bars when installed.

7.7 FUSED SWITCHGEAR AND ISOLATORS

All fused switchgear and isolators whether mounted on machinery, walls or industrial panels shall conform to the requirements of KS 04 – 226 PART: 1: 1985.

All contacts are to be fully shrouded and are to have a breaking capacity on manual operations as required by KS 04 – 182 : 1980.

Fuse links for fused switches are to be of high rupturing capacity cartridge type, conforming to KS04 – 183:1978.

Isolators shall be load breaking/fault making isolators.

Fused switches and isolators are to have separate metal enclosures. Mechanical interlocks are to be provided between the door and main switch operating mechanism so arranged that the door may not be opened with the switch in the 'ON' position.

Similarly; it shall not be possible to close the switch with the door open except that provision to defeat the mechanical interlock and close the switch with the door in the open position for test purposes. The 'ON' and 'OFF' positions of all switches and isolators shall be clearly indicated by a mechanical flag indicator or similar device. In T.P & N fused switch units, bolted neutral links are to be fitted.

7.8 CONDUITS AND CONDUIT RUNS

Conduit systems are to be installed so as to allow the loop-in system of wiring:

All conduits shall be black rigid super high impact heavy gauge class 'A' PVC in accordance with KS 04 – 179: 1988 and IEE Regulations. No conduit less than 20mm in diameter shall be used anywhere in this installation.

Conduit shall be installed buried in plaster work and floor screed except when run on wooden or metal surface when they will be installed surface supported with saddles every 600mm. Conduit run in chases shall be firmly held in position by means of substantial pipe hooks driven into wooden plugs.

The Sub-contractors attention is drawn to the necessity of keeping all conduits entirely separate from other piping services such as water and no circuit connections will be permitted between conduits and such pipes.

All conduits systems shall be arranged wherever possible to be self-draining to switch boxes and conduit outlet points for fittings:

The systems, when installed and before wiring shall be kept plugged with well fitting plugs and when short conduit pieces are used as plugs, they shall be doubled over and tied firmly together with steel wire; Before wiring all conduit systems shall be carried out until the particular section of the conduit installation is complete in every respect.

The sets and bends in conduit runs are to be formed on site using appropriate size bending springs and all radii of bends must not be less than 2.5 times the outside diameter of the conduit. No solid or inspection bends, tees or elbows will be used.

Conduit connections shall either be by a demountable (screwed up) assembly or adhesive fixed and water tight by solution. The tube and fittings must be clean and free of all grease before applying the adhesive. When connections are made between the conduit and switch boxes, circular or non-screwed boxes, care shall be taken that no rough edges of conduit stick out into the boxes.

Runs between draw in boxes are not to have more than two right angle bends or their equivalent. The sub-contractor may be required to demonstrate to the Engineers that wiring in any particular run is easily withdrawable and the sub-contractor may, at no extra cost to the contract; be required to install additional draw-in boxes required. If conduit is installed in straight runs in excess of 6000mm, expansion couplings as manufactured by Egatube shall be used at intervals of 6000mm.

Where conduit runs are to be concealed in pillars and beams, the approval of the Structural Engineer, shall be obtained. The sub-contractor shall be responsible for marking the accurate position of all holes, chases etc, on site, or if the Engineer so directs, shall provide the Main Contractor with dimensional drawings to enable him to mark out and form all holes and chases. Should the sub -contractor fail to inform the main contractor of any inaccuracies in this respect they shall be rectified at the sub-contractors expense.

It will be the Sub-contractors responsibility to ascertain from site, the details of reinforced concrete or structural steelwork and check from the builder's drawings the positions of walls, structural concrete and finishes. No reinforced concrete or steelwork may be drilled without first obtaining the written permission of the Structural Engineer.

The drawings provided with these specifications indicate the appropriate positions only of points and switches, and it shall be the Sub-Contractors responsibility to mark out and centre on site the accurate positions where necessary in consultation with the Architect and the Engineer. The sub-contractor alone shall be responsible for the accuracy of the final position.

7.9 CONDUIT BOXES AND ACCESSORIES

All conduit outlets and junction boxes are to be either malleable iron and of standard circular pattern of the appropriate type to suit saddles being used or super high impact PVC manufactured to KS 04 – 179 : 1983.

Small circular pattern boxes are to be used with conduits up to and including 25mm outside diameter. Rectangular pattern adaptable boxes are to be used for conduits of 32mm outside diameter and larger. For drawing in of cables in exposed runs of conduit, standard pattern through boxes are to be used:

Boxes are to be not less than 50mm deep and of such dimensions as will enable the largest appropriate number of cables for the conduit sizes to be drawn in without excessive bending.

Outlet boxes for lighting fittings are to be of the loop-in type where conduit installation is concealed and the sub-contractor shall allow one such box per fitting, except where fluorescent fittings are specified when two such boxes per fitting shall be fitted flush with ceiling and if necessary fitted with break joint rings. Pattresses shall be fitted where required to outlets on surface conduit runs.

Adaptable boxes are to of PVC or mild steel (of not less than 12swg) and black enamelled or galvanised finish according to location. They shall be of square or oblong shape location. They shall be of square or oblong shape complete with lids secured by four 2 BA brass roundhead screws; No adaptable box shall be less than 75mm x 75mm x 50mm or larger than 300mm x 300mm x 75mm and shall be adequate in depth in relation to the size of conduit entering it. Conduits shall only enter boxes by means of conduit bushes.

7.10 LABELS

Labels fitted to switches and fuse boards;-

- (i) Shall be Ivorine engraved black on white.
- (ii) Shall be secured by R.H brass screws of same manufacturing throughout.
- (iii) Shall be indicated on switches:-
 - a) Reference number of switch
 - b) Special current rating
 - c) Item of equipment controlled
- (iv) Shall indicate on MCB panels
 - a) Reference number
 - b) Type of board, i.e., lighting, sockets, etc.,
 - c) Size of cable supplying panel
 - d) where to isolate feeder cable
- (v) Shall be generally not less than 75mm x 50mm.

7.11 EARTHING

The earthing of the installation shall comply with the following requirements;-

- (i) It shall be carried out in accordance with the appropriate sections of the current edition of the Regulations, for the Electrical Equipment of Buildings issued by Institute of Electrical Engineers of Great Britain.
- (ii) At all main distribution panels and main service positions a 25mm x 3mm minimum cross sectional area Copper tape shall be provided and all equipment including the lead sheath and armouring of cables, distribution boards and metal frames shall be bonded thereto.
- (iii) The earth tape in Sub-clause (ii) shall be connected by means of a copper tape or cable of suitable cross sectional area to an earth electrode which shall be a copper earth rod (see later sub-clause).
- (iv) All tapes to be soft high conductivity copper, untinned except where otherwise specified and where run underground on or through walls, floors, etc., it shall be served with corrosion resisting tape or coated with corrosion compound and braided
- (v) Where the earth electrode is located outside the building a removable test link shall be provided inside the building as near as possible to the point of entry to the tape, for isolating the earth electrode for testing purposes.
- (vi) Earthing of sub-main equipment shall be deemed to be satisfactory where the submain cables are M.I.C.S. or conduit with separate earth wire, and installation is carried out in accordance with the figures stated in the current edition of the I.E.E Regulations.
- (vii) Where an earth rod is specified (see Sub-clause (iii)) it shall be proprietary manufacture, solid hand drawn copper of 15mm diameter driven into the ground to a minimum depth of 3.6m . It shall be made up to 1.2m sections with internal screw and socket joints and fitted with hardened steel tip and driving cap.
- (viii) Earth plates will not be permitted
- (ix) Where an earth rod is used the earth resistance shall be tested in the manner described in the current edition of the IEE Regulations, by the

Sub-Contractor in the presence of the Engineer and the Sub-Contractor shall be responsible for the supply of all test equipment.

- (x) Where copper tape is fixed to the building structure it shall be by means of purpose made non-ferrous saddles which space the conductor away from the structure a minimum distance of 20mm. Fixings, shall be made using purpose made plugs; No fixings requiring holes to be drilled through the tape will be accepted.
- (xi) Joints in copper tape shall be tinned before assembly riveted with a minimum of two copper rivets and seated solid.
- (xii) Where holes are drilled in the earth tape for connection to items of equipment the effective cross sectional area must not be less than required to comply with the IEE regulations.
- (xiii) Bolts, nuts and washers for any fixing to the earth tape must be of non-ferrous material.
- (xiv) Attention is drawn to the need for the earthing metal parts of lighting fittings and for bonding ball joint suspension in lighting fittings.

7.12 CABLES AND FLEXIBLE CORDS

All cables used in this Sub-Contract shall be manufactured in accordance with the current appropriate Kenya standard Specification which are as follows:-

P.V.C. Insulated Cables and Flexible Cords -	Ks 04-192:1988
PVC Insulated Armoured Cables -	Ks 04-194:1990
Armouring of Electric cables -	Ks 04-290:1987

The successful Sub-Contractor will, at the Engineers discretion be required to submit samples of cables for the Engineers approval; the Engineer reserves the right to call for the cables of an alternative manufacture without any extra cost being incurred.

P.V.C. insulated cables shall be 500/1000 volt grade. No cables smaller than 1.5mm² shall be used unless otherwise specified. The installation and the finish of cables shall be as detailed in later clauses. The colour of cables shall conform with the details stated in the "Cable Braid and insulation Colours" Clause.

7.13 ARMoured P.V.C. INSULATED AND SHEATHED CABLES:

Shall be 600/1000 volt grade manufactured to Ks 04-194:1988 and Ks 04-187/188 with copper stranded conductors.

The wire armour of the cable shall be used wholly as an earth continuity conductor and the resistance of the wire armour shall have a resistance not more than twice of the largest current carrying conductor of the cable.

P.V.C./S.W.A./P.V.C. cables shall be terminated using “Telecom” “B” type or approved equal or approved equal glands and a P.V.C. tapered sleeve shall be provided to shroud each gland.

Where cables rise from floor level to switchgear etc., they shall be protected by P.V.C. conduit, to a height of 600mm from finished floor level, whether the cable is run on the surface or recessed into the wall.

7.14 CABLE SUPPORTS, MARKERS AND TILES

All PVC/SWA/PVC cables run inside the building shall be fixed in rising ducts or on ceilings by means of die cast cables hooks or clamps, or appropriate size to suit cables, fixed by studs and back nuts to their channel sections.

Alternatively, fixing shall be by BICC claw type cleating system with die-cast cleats and galvanised mild steel back straps or similar approved equal method. For one or two cables run together the cleats shall be fixed a special channel section supports or backstraps described above which shall in turn be secured to walls or ceilings of ducts by rawbolts.

In excessively damp or corrosive atmospheric conditions special finishes may be required and the Sub-contractor shall apply to the Engineer for further instructions before ordering cleats and channels for such areas.

The above type of hooks and clamps and channels or cleats and backstraps shall also be used for securing cables in vertical ducts.

Cables supports shall be fixed at 600mm maximum intervals, the supports being supplied and erected under this Sub-contract. Saddles shall not be used for supporting cables nor any other type of fixing other than one of the two methods described above or other system which has received prior approval of the Engineer;

Cables are to be kept clear of all pipe work and the Sub-contractor shall work in close liaison with other services Sub-contractors.

The Sub-Contractor shall include for the provision of fixing of approved type coloured slip on cables end markers to indicate permanently the correct phase and neutral colours on all ends.

Provision shall be made for supplying and fixing approved non-corrosive metal cable markers to be attached to the outside of all PVC/SWA/PVC cables at 15mm intervals indicating cable size and distinction.

Where PVC/SWA/PVC cables are outside the building they shall be laid underground 750mm deep with protecting concrete interlocking cover tiles laid over which shall be provided and laid under this Sub-contract.

All necessary excavations and reinstatement of ground including sanding or trenches will be carried out by the Sub-Contractor, unless otherwise stated.

7.15 PVC INSULATED CABLES

Shall be of non-braided type as CMA reference 6491 x 600/1000/1000 volt grade cables, or equal approved.

PVC cables shall conform to the details of the “Cables and Flexible cords” and “Cable Braid and Insulation Colours” clauses.

7.16 HEAT RESISTING CABLES

Final connections to cookers, water heaters, etc., shall be made using butyl rubber insulated cable as CMA reference 610 butyl (Single core 600/1000 Volt).

This type of cable shall be used in all instances where a temperature exceeding 100°F, but not exceeding 150°F is likely to be experienced. Final connections to all lighting fittings (and other equipment where a temperature in excess of 150°C likely to be experienced) shall be made using silicon rubber insulated cable or equal and approved.

7.17 FLEXIBLE CORDS

Shall be in accordance with the “Cable and Flexible Cords” clause. No cord shall be less than 24/0.2mm in size unless otherwise specified. Circular white twin TRS flex shall be used for plain pendant fittings up to 100 watts. For all other types of lighting fittings the flexible cable shall be silicone rubber insulated.

No polythene insulated flexible cable shall be used in any lighting fitting or other appliance (see “Heat Resisting Cables” Clause 30).

7.18 CABLE ENDS AND PHASE COLOURS

All cable ends connected up in switchgear, MCB panels etc., shall have the insulation carefully cut back and the ends sealed with Hellerman rubber slip on cable end markers.

The markers shall be of appropriate phase colour for switch and all other live feeds to the details of the “Cable Insulation Colours” clause. Black cable with black end markers shall only be used for neutral cables.

7.19 CABLE INSULATION COLOURS

Unless otherwise stated in later clauses the insulation colours shall be in accordance with

the following table. Where other systems are installed the cable colours shall be in accordance with the details stated in the appropriate clause.

<u>SYSTEM</u>	<u>INSULATION COLOUR</u>	<u>CABLE END MARKER</u>
Main and Sub-Main		
a) Phase	Red	Red
b) Neutral	Black	Black
1) Sub-Circuits Single Phase		
a) Phase	Red	Red
b) Neutral	Black	Black

7.20 SUB-CIRCUIT WIRING

For all lighting and sockets wiring shall be carried out in the “looping in” system and there shall be no joints whatsoever. No lighting circuits shall comprise more than 20 points when protected by 10A MCB. Cables with different cross-section area of copper shall not be used in combination.

Lighting circuits P. V.C. cable 1.5mm² for all lighting circuits indicated on the drawing.

Power circuits P.V.C cable (minimum sizes).

- (i) 2.5mm² for one, two or three 5Amp sockets wired in parallel.
- (ii) 2.5mm² for one 15Amp socket.
- (iii) 2.5mm² for maximum of ten switched 13 Amp sockets wired from 30 Amp MCB.

The wiring sizes for lighting circuits and sockets are shown on the drawings. In such cases, the sizes shown on the drawings shall prevail over the sizes specified.

Wiring sizes for other appliances shall be shown on the drawing or specified in later clauses of this specification.

7.21 SPACE FACTOR

The maximum number of cables that may be accommodated in a given size of conduit or trunking or duct is not to exceed the number in Tables B.5 and B.6 or as stated in Regulation B.91, B.117 and B.118 of the I.E.E Regulations whichever is appropriate.

7.22 INSULATION

The insulation resistance to earth and between poles of the whole wiring system, fittings and lumps, shall not be less than the requirements of the latest edition of the I.E.E Regulations. Complete tests shall be made on all circuits by the Sub-contractor before the installations are handed over.

A report of all tests shall be furnished by the Sub-Contractor to the Engineer. The Engineer will then check test with his own instruments if necessary.

7.23 LIGHTING SWITCHES

These shall be mounted flush with the walls, shall be contained in steel or alloy boxes and shall be of the gangs ratings and type shown in the drawings. They shall be as manufactured by M.K. Electrical Ltd., or other equal and approved to KS 04 – 247: 1988

7.24 SOCKETS AND SWITCHED SOCKETS

These shall be flush pattern in steel/pvc box and shall be of the gangs and type specified in the drawings.

They shall be 13-Amp, 3-pin, shuttered, switched and as manufactured by “M.K. Electrical Co. Ltd.”, or other approved equal to KS 04 – 246: 1987

7.25 FUSED SPUR BOXES

These shall be flush, D.P switched as in steel/pvc box and of type and make specified in the drawings complete with pilot light and as manufactured by “M. K. Electrical Company Ltd”, or other approved equal. KS 04 – 247: 1988

7.26 CONNECTORS

Shall be specified in the drawings and appropriate rating. These shall be fitted at all conduit box lighting point outlets for jointing of looped P.V.C cables with flexible cables of specified quality.

7.27 LAMPHOLDERS

Shall be of extra heavy H.O skirted and shall be provided for every specified lighting fitting and shall be B.C., E.S., or G.E.S as required. All E.S. and G.E.S. holders shall be heavy brass type (except for plain pendants where the reinforced bakelite type shall be used). The screwed cap of the E.S and G.E.S. holders shall be connected to the neutral.

Where lampholders are supported by flexible cable, the holders shall have “cord grip” arrangements and in the case of metal shades earthing screws shall be provided on each of the holders.

The Sub-Contractor must order the appropriate type of holder when ordering lighting fittings, to ensure that the correct types of holders are provided irrespective of the type normally supplied by the manufacturers.

7.28 LAMPS

All lamps shall be suitable for normal stated supply voltage and the number and sizes of lamps detailed on the drawings shall be supplied and fixed. The Sub-Contractor must verify the actual supply voltage with the supply authority before ordering the lamps.

Tungsten filament lamps shall be manufactured in accordance with KS 04 – 112:1978 for general service lamps and KS 04 – 307:1985 for lamps other than general services. Tubular fluorescent lamps shall comply with KS 04 – 464:1982

LED lamps shall be used in all fittings unless otherwise specified.

7.29 LIGHTING FITTINGS

This Contract shall include for the provision, handling charges, taking the delivery, safe storage, wiring (including internal wiring) assembling and erecting of all lighting fittings shown on the drawings.

All fittings and pendants shall be fixed to the conduit boxes with brass R/H screws. These to be in line with metal finish of fittings. The lighting fittings are detailed for the purpose of establishing a high standard of finish and under no circumstances will substitute fittings be permitted.

In case of rectangular shaped ceiling fittings, the extreme ends of the fittings shall be secured to suitable support in addition to the central conduit box fittings. Supports shall be provided and fixed by the Sub-Contractor.

The whole of the metal work of each lighting fittings shall be effectively bonded to earth. In the case of ball and/or knuckle joints short lengths of flexible cable shall be provided, bonded to the metal work on either side of the joints. If the above provisions are not made by the manufacturers -, the Sub-contractor shall include cost of additional work necessary in his tender. See “Flexible Cords” clause for details of internal wiring of lighting fittings. Minimum size of internal wiring shall be 20/0.20mm (23/0067). Each lighting fitting shall be provided with number type and size of lamps as detailed on the drawings. It is to be noted that some fittings are suspended as shown on the drawings.

Where two or more points are shown adjacent to each other on the drawings, e.g socket outlet and telephone outlet, they shall be lined up vertically or horizontally on the centre lines of the units concerned.

Normally, the units shall be lined up on vertical centre lines, but where it is necessary to mount units at low level they shall be lined up horizontally.

7.30 POSITIONS OF POINTS AND SWITCHES

Although the approximate positions of all points are shown on the drawings, enquiry shall be made as to the exact positions of all M.C.B panels, lighting points, socket outlets etc, before work is actually commenced. The Sub-contractor must approach the Architect with regard to the final layout of all lights on the ceiling and walls.

The Sub-contractor must consult with the Engineer in liaison with the Clerk of Works, or the General Foreman on site regarding the positions of all points before fixing any conduit etc. The Sub-Contractor shall be responsible for all alterations made necessary by the noncompliance with the clause.

7.31 CURRENT OPERATED EARTH LEAKAGE CIRCUIT BREAKER

Current operated earth leakage circuit breaker shall conform to B.S.S. 4293:68 rated at 240 volts D.P. 50 cycles A.C. Mains.

The breaker shall be provided with test switch and fitted in weather proof enclosure for surface mounting. The rated load current and earth fault operating current shall be as specified in the drawings. These shall be as manufactured by Crabtree, Siemens or other equal and approved.

7.32 M.V. SWITCHBOARD AND SWITCHGEAR

The switchboard shall be manufactured in accordance with KS04-226 which co-ordinates the requirements for electrical power switchgear and associated apparatus. It is not intended that this K.S. should cover the requirements for specified apparatus for which separate Kenyan Standard exist. All equipment and material used in the switchboard shall be in accordance with the appropriate Kenya Standard.

The switchboard shall comprise the equipment shown on the drawings together with all current transformers, auxiliary fuses, labels, small wiring and interconnections necessary for the satisfactory operation of the switchboard

Switchboard shall be of the flush fronted, enclosed, metal clad type with full front or rear access as called for in the particular specifications, suitable for indoor use, sectionalized as necessary to facilitate transport and erection. The maximum height of the switchboard is to be approximately 2.0 meters. A suitable connection chamber containing all field terminals shall be provided at the top or bottom of the switchboard as appropriate.

Before manufacture, the Contractor shall submit to the consulting Engineer for approval of detailed drawings showing the layout, construction and connection of the switchboard.

All bus-bars and bus-bar connections shall consist of high conductivity copper and be provided in accordance with KS 04-226: 1985. The bus-bars shall be clearly marked with the appropriate phase and neutral colours which should be red, yellow, blue for the phases and black for neutral. The bus-bars shall be so arranged in the switchboard that the extensions to the left and right may be made in the future with ease should the need arise.

Small wiring, which will be neatly arranged and cleated, shall be executed in accordance with B.S. 158 and the insulation of the wiring shall be colored according to the phase or neutral connection.

Switches and fuse switches, shall be in strict accordance with KS04-183:1978 Class 2 switches. Means of locking the switch in the "OFF" position shall be provided.

All fuse switches shall comply with KS04-183:1978, PARTS 2 and 3 a fault rating at least equal to the fault rating of the switchboard in which they are installed. Cartridge

fuse links to KS 04-183:1978 category A.C. 46, class Q1 and fusing factor not exceeding 1.5 shall be supplied with each fused switch.

Mounting arrangements shall be such that individual complete fuse switches may be disconnected and withdrawn when necessary without extensive dismantling work. When switches are arranged in their formation all necessary horizontal and vertical barriers shall be provided to ensure segregation from adjacent units. Means of locking the switch in the "OFF" position shall be provided.

7.33 STEEL CONDUITS AND STEEL TRUNKING

Conduits shall be of heavy gauge class "B" welded to Standard specification KS 04-180:1985. In no case will conduit smaller than 20mm diameter be used on the works. Conduits installed within buildings shall be black enameled finish except where specified otherwise. Where installed externally or in damp conditions they shall be galvanised. Conduit fittings, accessories or equipment used in conjunction with galvanised conduits shall also be galvanised or otherwise as approved by the service engineer.

Metal trunking shall be fabricated from mild steel of not less than 18 swg. All sections of trunking shall be rigidly fixed together and attached to the framework or fabric or the building at intervals of not less than 1.2m. Joint trunking shall not overhang fixing points by more than 0.5m

All trunking shall be made electrically continuous by means of 25 x 3mm copper links across each joint and where the trunking is galvanised, the links shall be made by galvanised flat iron strips.

All trunking fittings (i.e. Bends, tees, etc) shall leave the main through completely clear of obstructions and continuously open except through walls and floors at which points suitable fire resisting barriers shall be provided as may be necessary. The inner edge of bends and tees shall be chamfered where cables larger than 35mm² are employed.

Where trunking passes through ceilings and walls the cover shall be solidly fixed to 150mm either side of ceilings and floors and 50mm either side of walls.

Screws and bolts securing covers to trunking or sections of covers together shall be arranged so that damage to cables cannot occur either when fixing covers or when installing cables in the trough.

Where trunking is used to connect switchgear of fuseboards, such connections shall be made by trunking fittings manufactured for this purpose and not by multiple conduit couplings.

Where vertical sections of trunking are used which exceed 4.5m in length, staggered tie off points shall be provided at 4.5m intervals to support the weight of cables.

Unless otherwise stated, all trunking systems shall be painted as for conduit.

Where a wiring system incorporates galvanized conduit and trunking, the trunking shall be deemed to be galvanized unless specified otherwise.

The number of cables to be installed in trunking shall be such as to permit easy drawing in without damage to the cables, and shall in no circumstances be such that a space factor of 45% is exceeded.

Conduit and trunking shall be mechanically and electrically continuous. Conduit shall be tightly screwed between the various lengths so that they butt at the socketed joints. The internal edges of conduit and all fittings shall be smooth, free from burrs and other defects. Oil and any other insulating substance shall be removed from the screw threads; where conduits terminate in fuse-gear, distribution boards, adaptable boxes, non-spouted switchboxes, etc., they shall, unless otherwise stated, be connected thereto by means of smooth bore male brass bushes, compression washers and sockets. All exposed threads and abrasions shall be painted using an oil paint for black enamelled tubing and galvanising paint for galvanised tubing immediately after the conduits are erected. All bends and sets shall be made cold without altering the section of the conduit. The inner radius of the bend shall not be less than four (4) times the outside diameter of the conduit. Not more than two right angle bends will be permitted without the inter-position of a draw-in-box. Where straight runs of conduit are installed, draw-in-boxes shall be provided at distances not exceeding 15m. No tees, elbows, sleeves, either of inspection or solid type, will be permitted.

Conduit shall be swabbed out prior to drawing in cables, and they shall be laid so as to drain of all condensed moisture without injury to end connections.

Conduits and trunking shall be run at least 150mm clear of hot water and steam pipes, and at least 75mm clear of cold water and other services unless otherwise approved by the services engineer.

All boxes shall conform to KS 04 – 668: 1986, to be of malleable iron, and black enamelled or galvanised according to the type of conduit specified. All accessory boxes shall have threaded brass inserts.

Box lids where required shall be heavy gauge metal, secured by means of zinc plated or cadmium plated steel screws.

All adaptable boxes and lids of the same size shall be interchangeable.

Boxes used on surface work are to be tapped or drilled to line up with the conduit fixed in distance type saddles allowing clearance between the conduit and wall without the need for setting the conduit.

Where used in conjunction with mineral insulated copper sheathed cable, galvanised boxes shall be used and painted after erection.

Draw-in boxes in the floors are generally to be avoided but where they are essential they must be grouped in positions approved by the services engineer and covered and by the suitable floor traps, with non-ferrous trays and covers.

The floor trap covers are to be recessed and filled in with a material to match the floor surface.

The Sub-contractor must take full responsibility for the filling in of all covers, but the filling in material will be supplied and the filling carried out by the main building contractor.

Where buried in the ground outside the building the whole of the buried conduit is to be painted with two coats of approved bitumastic composition before covering up.

Where run on the surface, unpainted fittings and joints shall be painted with two coats of oil bound enamel applied to rust and grease free metalwork.

7.34 TESTING ON SITE

The Sub-contractor shall conduct during and at the completion of the installation and, if required, again at the expiration of the maintenance period, tests in accordance with the relevant section of the current edition of the Regulations for the electrical equipment of buildings issued by the I.E.E of Great Britain, the Government Electrical Specification and the Electric Supply Company's By-Laws.

(a) Tests shall be carried out to prove that all single pole switches are installed in the 'live' conductor.

(b) Tests shall be carried out to prove that all socket outlets and switched socket outlets are connected to the 'live' conductor in the terminal marked as such, and that each earth pin is effectively bonded to the earth continuity system. Tests shall be carried out to verify the continuity of all conductors of each 'ring' circuit.

(c) Phase tests shall be carried out on completion of the installation to ensure that correct phase sequence is maintained throughout the installation. Triplicate copies of the results of the above tests shall be provided within 14 days of the witnessed tests and the Sub-contractor will be required to issue to the service engineer the requisite certificate upon completion as required by the regulations referred to above.

(d) Any faults, defects or omissions or faulty workmanship, incorrectly positioned or installed parts of the installation made apparently by such inspections or tests shall be rectified by the Sub-contractor at his own expense.

(e) The Sub-contractor shall provide accurate instruments and apparatus and all labour required to carry out the above tests. The instruments and apparatus shall be made available to the services engineer to enable him to carry out such tests as he may require.

The Sub-contractor shall generally attend on other contractors employed on the project and carry out such electrical tests as may be necessary.

The Sub-contractor shall test to the services engineer's approval and as specified

elsewhere in this specification or in standards and regulations already referred to, all equipment, plant and apparatus forming part of the works and before connecting to any power or other supply and setting to work.

Where such equipment, etc., forms part of or is connected to a system whether primarily or of an electrical nature or otherwise (e.g. air conditioning system) the Sub-contractor shall attend on and assist in balancing, regulating testing and commissioning, or if primarily an electrical or other system forming part of works, shall balance, regulate, test and commission the system to the service engineer's approval

Acronyms Used in the Technical Requirements

i) Acronym Table

Note: Compile a table of organizational and technical acronyms used in the Requirements. This can be done, for example, by extending the following table.

Table 52:

	Term	Explanation
	Bps	bits per second
	Cps	characters per second
	DBMS	Database Management System
	DOS	Disk Operating System
	Dpi	dots per inch
	Ethernet	IEEE 802.3 Standard LAN protocol
	GB	Gigabyte
	Hz	Hertz (cycles per second)
	IEEE	Institute of Electrical and Electronics Engineers
	ISO	International Standards Organization
	KB	Kilobyte
	kVA	Kilovolt ampere
	LAN	Local area network
	Lpi	lines per inch
	Lpm	lines per minute
	MB	Megabyte
	MTBF	Mean time between failures
	NIC	Network interface card
	NOS	Network operating system

	Term	Explanation
	ODBC	Open Database Connectivity
	OLE	Object Linking and Embedding
	OS	Operating system
	PCL	Printer Command Language
	Ppm	pages per minute
	PS	PostScript -- Adobe page description language
	RAID	Redundant array of inexpensive disks
	RAM	Random access memory
	RISC	Reduced instruction-set computer
	SCSI	Small Computer System Interface
	SNMP	Simple Network Management Protocol
	SQL	Structured Query Language
	TCP/IP	Transmission Control Protocol / Internet Protocol
	V	Volt
	WLAN	Wireless LAN

APPENDIX TO GENERAL SPECIFICATIONS OF MATERIALS AND WORKS

The electrical sub-contractor shall comply with the following: -

- 1 Government Electrical Specifications No. 1 and No. 2.
- 2 All requirements of Kenya Power Company Limited
- 3 All requirements of Energy Regulatory Commission (ERC).

BILL OF QUANTITIES

1. SITE LOCATION

The site of the proposed works is at **Muguga, Kiambu County**

2. SCOPE OF WORKS

The works to be carried out under this sub-contract comprise supply, installation, testing and commissioning of the following: -

- a. **Electrical Works**
- b. **CCTV Cameras**
- c. **Access control**

3. MATERIALS FOR THE WORKS

Materials shall be as specified in Section D, E and in the Bills of Quantities of this document which shall be read in conjunction with contract drawings. Alternative materials shall be accepted only after approval by the Project Manager.

4. BROCHURES FOR DEVICES

For consideration and qualification tenderers shall, at their own cost, provide coloured manufacturer's brochures detailing technical literature and specifications where applicable

5. REGULATION AND STANDARD

The works shall comply with the provisions of the following as necessary and relevant:

- ISO/IEC, CCK, ATM CENELEC 11801
- ANSI/EIA/TIA 56
- Latest Edition of IEE Regulation
- Kenya Bureau of Standards (KEBS)
- Institution of Electrical Engineers (LE.E) Wiring Regulations
- Current recommendation of CCITT and CC1R
- Electric Power Act and Rules made there under.

6. ELECTRICAL REQUIREMENTS

The equipment to be supplied shall be capable of being operated from 240V AC 50Hz power supply.

7. MANDATORY REQUIREMENTS

- A. All equipment and materials used shall be standard components that are regularly manufactured and used in the manufacturer's system.
- B. All systems and components shall have been thoroughly tested and proven in actual use.
- C. All systems and components shall be provided with the availability of a, 24-hour technical assistance program (TAP) from the manufacturer. The TAP shall allow for immediate technical assistance for either the dealer/installer or the end user at no charge.
- D. All systems and components shall be provided with a one-day turn around repair express and 24-hour parts replacement. The repair and parts express shall be guaranteed by the manufacturer on warranty and non-warranty items.
- E. The supplier shall be the manufacturer, or the manufacturer appointed agent (proof to be submitted).

The Offered system has been installed and commissioned by the supplier in other locations.

8. WORKING DRAWINGS

The Contractor shall submit to the Project Manager working drawings for the proposed system for approval. The drawings will show the locations of and identifiers for all cable routing and terminations, telecommunication outlets/connectors. Location of core switch and Edge switches.

**ELECTRICAL SUB CONTRACT WORKS
PART A**

IP CCTV SURVEILLANCE CAMERAS:

1.00 MINIMUM REQUIREMENTS FOR THE PROPOSED IP CCTV SYSTEM

The cameras shall have the following minimum specifications but cameras with higher specifications shall be accepted:

a) IP Dome CCTV Cameras-5MP

- 1/2.9” progressive scan RGB CMOS
- Built in Infrared 20 meters minimum
- Progressive scan RGB CMOS 1/2.5”Wide Dynamic Range – 120Db
- 3.1mm, F2.0 Horizontal field of view: 100° Vertical field of view: 54° Fixed iris, IR corrected
- Forensic WDR, Lightfinder and OptimizedIR
- Motorized Varifocal Auto Iris lens
- long-life 850 nm IR LEDs
- Day and night vision; Minimum illumination 0.1lux (colour), 0lux (B/W) IR on
- Multi-view streaming 2 individually cropped out view areas
- IP network capable
- True day and night vision capability (ICR)
- Power over Ethernet IEEE 802.3af/802.3at Type 1 Class 3 Max 12.0 W, typical 3.7 W
- HDMI output
- H.265 video compression
- Accessible edge storage with 128GB internal MicroSD card slot
- True day and night vision capability
- Tampering detection, Face detection, Audio Detection, Motion detection and event triggered alarm processing
- Masking Capability,
- IP66- and NEMA 4X-rated, IK10 impact-resistant
- ONVIF protocol Compliant
- Network NIST SP500-267 Compliant

b) IP Bullet camera – 4MP

- Mega Pixel Full HD Indoor IP Bullet Camera with Infrared
- Built in Infrared 30 meters minimum
- imaging sensor with Wide Dynamic Range
- 2.8 - 12mm motorized Lens
- Minimum illumination 0.01lux (colour)
- IP network capable
- PoE capability

- H.265,H.264,MJPEG video compression
 - Accessible edge storage with internal MicroSD card slot
 - True day and night vision capability
 - I/O - 1 Alarm in / 1 Alarm out 1 Way Audio
 - Tampering detection, Face detection, Audio Detection, Motion detection & Privacy Masking and event triggered alarm processing
 - Vandal proof IK-10 rating housing
 - Weather proof IP66 rating
 - ONVIF protocol Compliant
- (State make and type, and enclose brochures/catalogues)**

1.01 MOUNTING BRACKETS

The Brackets shall:

Be suitable for wall or ceiling mounting of a single camera.

Be at least 5.5"length

Have an auto lock facility.

1.02 CAMERA HOUSING

The camera housing shall:

Be IP66 rated with integral cable management.

Be Weatherproof and constructed from aluminum with epoxy coating.

1.03 CABLING

- a) All cables must pass through conduits or trunking.
- b) All cables and connectors shall be labelled.
- c) No distortion due to kinks, sharp bends or excessive hauling tension shall be allowed.
- d) Cables shall be run in a manner eliminating any possibility of strain on the cable itself or on the terminations.
- e) Cables shall have no joints or splices.
- f) Cables shall be kept at a minimum distance of 150mm from items liable to become hot or cold.
- g) Bending radii shall be not less than eight times the overall cable diameter.
- h) The manufacturers hauling tension shall not be exceeded.
- i) All cable ties and fixings shall be tightened to support the cable loom without distortion of the cable sheath.
- j) The STP 4 pair shall be of cat 6A grade and exceed ANSI/TIA/EIA-568-Aj and ISO/IEC 11001standards. Cat 6A structured cabling shall be used throughout the entire installation.

(State make and type, and enclose catalogues)

PART B

ACCESS CONTROL SYSTEM

1.00 ACCESS CONTROL COMPONENTS

The main components of an access control system are:

- a) Intelligent System Controller
- b) The proximity cards
- c) The magnetic locks
- d) Biometric readers

(a) PROFESSIONAL MULTI-BIOMETRIC FACE AND FINGERPRINT IP READER

Professional facial recognition and fingerprint reader is combined in this reader. It also includes an RFID Prox reader. Identify or verify people by their face, fingerprint, proximity card or PIN/password... or any combination, all in one network attached reader. Built-in infrared light source enables operation in dimly lit rooms.

- **Capacity:** Fingerprint: 4000 Face: 2,000 Card: 10,000
- **Display:** 2.8 Inch TFT-LCD Touch Screen
- **Communication:** Ethernet, RS 232, RS485, Weigand Input and Output, USB Host
- **Power :**12V DC, 3A Comes with power adapter (Can also be powered using PoE splitter)
- **Environment:** Operating Temperature: 14° F to 122° F (-10° C to 50° C)
- **Dimensions:** 7.5 x 3.3 x 4 inches
- **Supported Card Formats:** ID card 125 KHz, Optional: HID, or 13.56 MHz Mifare Card, iClass,
- **Access control:** Lock Relay Output, Alarm Output/Auxiliary Input, Exit Button/Door Sensor, Doorbell Output
- **Communication:** TCP/IP, RS485 (for slave reader) USB Host Wiegand Input/Output
- **Biometric Performance:** A high performance sensor and processor matches fingerprints or face in less than 1.5 secs.
- **Hardware:** Fingerprint Sensor 2.8 Inch TFT-LCD Touch Screen 125 kHz or 13.56 MHz

Card Reader (options)

Features

- High performance and reliable fingerprint capture and identification. Advanced facial recognition algorithm
- Live finger detection
- Multiple verification modes – Fingerprint, Facial Recognition, Credential, and Password
- Built-in Camera stores up to 4,000 snapshots Network-attached

(b) ACCESS CONTROL SYSTEM SOFTWARE

Table 53: TECHNICAL SPECIFICATIONS

Compliant Standards:

Item	Minimum Specifications	Proposed Solution
Brand	State the brand, model and attach Technical Brochure(Mandatory)	
Key Features		
	<ul style="list-style-type: none"> • The Access Software offers a map viewer, which provides a graphical representation of the premises with device control directly from the map. Monitoring modules shall also include a text based transaction module • Integrated video functionality • Visitor Management- Visitor management shall allow for the pre-authorization and first time arrival of guests to a site. • The operator shall have the following functionality via GUI: <ul style="list-style-type: none"> • Create a new visitor • Set a start and end time for the visitor • Choose the access permissions for the visitor • Generate a one-time pin (OTP) for the visitor to gain access • Send an email with information pertaining to visitors visit details • The software shall be linked via the API / integration layer in order for the visitor to be enabled in the ACS system. • All data shall be able to be reported on via the ACS software. • The ACS software shall make available the remote / mobile biometric and card units to be used in conjunction with the Visitor Management module • Threat levels – when activated, pre-selected doors shall be opened automatically or security will be increased, based upon the defined rules and depending upon the severity of the threat. • Scheduled Tours – ability to create predefined schedules for cleaning, guards or maintenance staff with online validation that defined points have been reached within a particular time frame. 	
	<ul style="list-style-type: none"> • Alarm Mode – when an intrusion or fire alarm is activated, a signal shall be received by the ACS and system configured actions shall be triggered. 	

Item	Minimum Specifications	Proposed Solution
	<ul style="list-style-type: none"> • Time Triggered Actions – specified actions may be activated at specified times with the capacity to generate 512 Time Triggered Actions per site. • Holidays - feature to define Holidays and qualify access rights accordingly. • The ACS shall provide suitable T&A hardware and facilitate integration of a T&A solution. • The facility to set a Relaxed or Strict APB status • The option of single tag use, or multiple tag use per location. • An interface for the administration of tag holders. 	
Access Modes	<ul style="list-style-type: none"> • Card only • Card with PIN (Verification PIN) • PIN or Card (Identification PIN) • Biometrics 	
Integration	<p>The ACS software supports integration options via XML format commands for one or more or all the following 3rd party systems:</p> <ul style="list-style-type: none"> • Intrusion Alarm systems • Fire alarms • Human Resources Databases • Time and Attendance Systems • ERP, SCM and CRM Systems • Student Enrolment Systems • Digital and Network Video Recording Systems • Visitor Enrolment solutions 	
Reports	<ul style="list-style-type: none"> • The Reports feature include the following; • Tag Holder report – Displays information on tag holders in the system. • Transaction Report – Displays all tag holders transactions on a specific date • Zone Occupancy – Provides APB zone occupancy information • Time Based Reports – Combines a number of time based reports • The ability to run and save customized reports. • Feature to export all reports to PDF and CSV • Contain graphical representation for ease of use in reports i.e. graphs • Allow for full audit reporting of all events and actions which take place on the ACS system. • The ACS reports facilitate customizable fields. Reports shall be filterable and columns shall be able to be configurable from a display perspective 	

Item	Minimum Specifications	Proposed Solution
Card Enrollment	USB enrollment devices AMC connected readers	
Operator Security	<ul style="list-style-type: none"> • The ACS software shall include an Operator Security module that will enable the System Administrator to define operator groups for users who will operate the various modules. • The Operator Security module shall facilitate the creation of users and passwords, as well as user groups. • The System Administrator shall be able to set up application security as well as granular security settings within each application. • The Operator Security module shall facilitate the assignment of tag holder access groups to selected operator groups. • The ACS must provide configurable security options to limit system users' activity within it. • Such operator security must be configurable on a per user group basis. 	
System Health Check Reporting	<ul style="list-style-type: none"> • The ACS system shall have a health checking or self-diagnostic capability. The Health check shall inform an administrator/system integrator of any faults or issues as well as explain any user initiated elements that are at variance with the rules of implementation. This process must be an automated process • The option of linking up to 30 access groups to a single tag. • The option of assigning access groups across multiple sites in the ACS. • The ability to configure up to 10 000 Access Groups per site • It shall be possible to administer and view the ACS sites remotely via an HTML5 compliant browser using any HTML 5 compatible device 	

C) POWER SUPPLY MODULE

Table 54: TECHNICAL SPECIFICATIONS

Compliant Standards:

Item	Minimum Specifications	Proposed Solution
Brand	State the brand, model and attach Technical Brochure(Mandatory)	
Key Features	<ul style="list-style-type: none"> • AC Power failure supervision relay • Battery failure / low battery supervision relay • DC Power failure supervision relay (EAP-5D5Q only) • Auxiliary output relay • Relays rated 3A@24VDC, 3A@120VAC • Adjustable voltage range to compensate for voltage drop • Built-in backup battery charger (battery not included) • Selectable 2.2k 9 End-of-Line (EOL) resistor for AC failure and battery failure supervision relays via DIP switch • Selectable delay timer (5 seconds, 5 minutes, 5 hours) for AC failure supervision relay via DIP switch • LED Status indicator for AC input, DC output and channel outputs 	
Power	<ul style="list-style-type: none"> • Operating Input voltage: 240 VAC • Field-selectable 12 or 24 VDC output • Total continuous output current: 5A@12VDC, 2.5A@24VDC • Individually fused power output (PTC-type fuses) rated at 1.1A, fail-safe or fail-secure modes. • AC Input fuse rated at 3.15A • Adjustable Output Voltage Range: 11~15 @ 12VDC setting, via VR switch, 23~28 @ 24VDC setting, via VR switch • Number of Outputs: 5 	
Enclosure	<ul style="list-style-type: none"> • Heavy-duty steel case with ventilation holes • Enclosure large enough to fit (>two (2) 12V/12Ah batteries) • Removable steel cover for easy access to power connections 6ft Power cord and battery leads included <p>Dimensions: (377x363x105 mm)</p>	
Warranty	Comprehensive Manufacturer's Warranty (Attach Manufacturer's Warranty Statement)	

(d). MAGNETIC LOCK

Standard: ANSI/BHMA A156.23 Grade 1 compliant

Key Feature: Electromagnetic Narrow Line (projects only 2-11/16 into the opening) EMLock, 1200 lbs/600lbs holding force and failsafe access control, Clear anodized aluminum, wire chamber and integrated PC board with wiring terminal block, dual 12/24VDC input designed to ensure trouble free interface with electronic access control systems, automatic door operators, peripheral equipment and fire life safety systems for emergency release.

Electrical Data: 300mA/540mA @ 24VDC/12VDC

Sensor: Magnetic bond sensor, Door status sensor and LED Status indicator

Measurement: 12-1/2”Lx2-1/8”Hx1-11/16”D

(e). PUSH TO EXIT BUTTON

Table 55: TECHNICAL SPECIFICATIONS Compliant Standards: NFPA Compliant

Item	Minimum Specifications	Proposed Solution
Brand	State the brand, model and attach Technical Brochure(Mandatory)	
Key Features	<ul style="list-style-type: none">• Illuminated switch button high impact resistant material• Integrated electronic timer, adj. 1-60 sec,12/24VDC, DPDT 2Amp contact• Wire Leads 6”, 20 Gauge• Stainless Steel – Standard• 1 Green LED narrow frame mount exit switch	

(f). PROXIMITY CARDS

Table 56: TECHNICAL SPECIFICATIONS

Compliant Standards: ISO/IEC 15693

Item	Minimum Specifications	Proposed Solution
Brand	State the brand, model and attach Technical Brochure(Mandatory)	
Key Features	<ul style="list-style-type: none"> • 13.56 MHz read/write contactless smart card technology provides high-speed, reliable communications with high data integrity. • Constructed with ABS shell and PVC cover label, offering durable packaging. • Available in 2k bit (256 Byte), two application area configurations only. • iCLASS technology ensures high security with mutual authentication, encrypted data transfer, and 64-bit diversified keys for read/write capabilities. • Meets ISO 15693 standard for contactless communications. • A PVC Overlay allows for on-site Photo ID production using most direct image printers. • Triple DES encryption. 	
Data Retention	<ul style="list-style-type: none"> • 10 Years 	
Write Endurance	<ul style="list-style-type: none"> • Min. 100,000 cycles 	
Memory Type	<ul style="list-style-type: none"> • EEPROM, read/write 	
Band Rate	<ul style="list-style-type: none"> • 26 Kbps 	
Transaction Time	<ul style="list-style-type: none"> • <100ms typical 	
Operating Humidity	<ul style="list-style-type: none"> • 5-95% non-condensing 	
Operating Temperature	<ul style="list-style-type: none"> • -40° to 160° F (-40° to 70° C) 	
Card Construction	<ul style="list-style-type: none"> • ABS Shell with PVC Cover Label. 	
Weight	<ul style="list-style-type: none"> • 0.24 oz (6.8 g) 	
Dimensions	<ul style="list-style-type: none"> • 2.125" x 3.375" x 0.070" max.(5.40 x 8.57 x 0.18 cm) 	
Typical Maximum Read Range	<ul style="list-style-type: none"> • R10: 1.5-2.5" (3.8-6.3 cm) • R30/RW300: 1.5-3.0" (3.8-7.6 cm) • R40/RW400: 2.5-4.5" (5.1-10.2 cm) • RK40/RWK400: 3.0-4.0" (6.3-8.9 cm) 	
Warranty	<ul style="list-style-type: none"> • Comprehensive Manufacturer's Warranty (Attach Manufacturer's Warranty Statement) 	

(g). OVERRIDE KEY SWITCH

Table 57: TECHNICAL SPECIFICATIONS

Compliant Standards:

Item	Minimum Specifications	Proposed Solution
Brand	State the brand, model and attach Technical Brochure (Mandatory)	
Key Features	Tamper Resistant, Recessed Cylinder Tamper Resistant Spanner Screws Heavy Duty All Steel Assembly Stainless Steel Faceplates of 0.25" Thickness of Aluminum Large Actuator for Positive and Consistent Activation 6 Amp @ 30 VDC Resistive 7", 22 Gauge Wire Leads Compatible with 1.0" or 1.375" Mortise Cylinder(included) Anti-Tamper Sensor, SPDT Turning the key left or right actuates and latches the contact. Contact position is maintained until the key is inserted and turned again.	

(H). ENCLOSURE

Table 58: TECHNICAL SPECIFICATIONS Compliant

Standards: UL294

Item	Minimum Specifications	Proposed Solution
Brand	State the brand, model and attach Technical Brochure (Mandatory)	
Key Features	<ul style="list-style-type: none">• Housing with pre-assembled cables Cable set - partially pre-assembled• Cable ties (short) for securing the cables• Screws and screw anchors for wall-mounting 1 DIN rail for mounting	

(i). EMERGENCY EXIT DEVICE

Table 59: TECHNICAL SPECIFICATIONS Compliant Standards: CE marked to BS E

Item	Minimum Specifications	Proposed Solution
Brand	State the brand, model and attach Technical Brochure (Mandatory)	
Key Features	<ul style="list-style-type: none"> • Suitable for push face of outward opening doors • point locking comprising • Single point central dead latch (active leaf) • 2 point upper and lower Pullman latches (inactive leaf) • Non-handed for maximum flexibility • Max. door leaf width : 900mm or 1200mm • Anti-thrust steel dead latch • Adjustable steel strike • Rods with integral cover • Complete with signage and fixing instructions • Supplied complete with adjustable flat, corner and floor strikes to suit various door frame • overlap sizes push bar and rods can be cut down to size • Suitable for timber and metal application • Signage as required by BS EN 1125 annex A19, colored green & white as detailed in BS5499 	
Warranty	• Comprehensive Manufacturer's Warranty (Attach Manufacturer's Warranty Statement)	

(j). Table 60: WORKSTATION

Item	Description	Minimum Specifications	Bidder's Specifications
A	GENERAL SPECIFICATIONS		
1	Make	Branded (Mature Brand)	
2	Model		
3	Country of Origin		
4	Manufacturer's brochure and Specifications	Must be supplied	
B	TECHNICAL SPECIFICATIONS		
5	Processor	Corei7	
6	System Memory	16GB	
7	Disk cache	64Bit	
8	Storage sub system	512 GB SDD	
		48XCD –ROM and CD-Writer	
9	Display/Graphics	24" colour LCD	
10	Keyboard	USB Enhanced keyboard	
11	Pointing Device	USB compatible optical mouse	

12	I/O Interface	1x25 Pin parallel port USB Ports 1xRJ45 jack for Ethernet 1x external VGA port HDMI Port Display Port	
13	Audio System	Multimedia Ports	
14	Communication Interface	Gigabit Ethernet, RJ 45	
15	Operating System Pre-load	Ms Windows 10 Professional 64 Bit	
16	UPS	1 KVA UPS	
17	Power sub- system	220-240V AC, 50HZ	
18	Power connectivity	Power cable compatible with CPU and UPS	
C	WARRANTY	1 year parts replacement warranty	

(k). ACCESS SYSTEM CONTROLLER

Table 61: TECHNICAL SPECIFICATIONS

Compliant Standards: • CE approved & ISO 9001

Item	Minimum Specifications	Proposed Solution
Brand	State the brand, model and attach Technical Brochure (Mandatory)	
Key Features	<ul style="list-style-type: none"> • The System Controllers shall be intelligent hardware devices with a full on-board database of tags and access data. • The System Controllers shall operate in a truly standalone mode when there is no network connection available to the ACS database engine module. • Each system controller/cluster controller shall be capable of storing up to 1000 tags, and shall be capable of buffering up to 100 thousand transactions should the connection to the ACS polling module be lost. • The ACS controller shall be capable of facilitating more tags and transactions if coupled with another master device (System Controller or Application Controller) which increases storage and processing capacity. • The System Controllers shall allow for the easy expansion of door controllers without the need to physically wire power and communications between these devices. • Supports full off-line functionality, including anti-pass 	

Item	Minimum Specifications	Proposed Solution
	<p>back, access rights, emergency and lockdown modes.</p> <ul style="list-style-type: none"> • RS485 – with connectivity speeds of 38,400 Baud • TCP/IP Ethernet connectivity – with support for up to 1000Mbps connectivity speeds • Serial BUS – with connectivity speeds of 7,600 Baud. • Database on global Microsoft SQL platform, using HTML5 • Simple integration with CCTV, intrusion and Fire alarms • Uses AES 128-bit Encryption through a Diffie Hellman key exchange to ensure secure communications • Stores all information locally on the Cluster Controller 	
Key Functions	<ul style="list-style-type: none"> • The ACS server console shall provide an auto detect function that shall poll the RS485 bus, or the LAN/WAN for any ACS controllers • The ACS controllers shall respond back with their respective factory assigned addresses which shall be automatically inserted into the ACS database. • The ACS system controllers logically addresses shall automatically be assigned to the devices without any user intervention. • The ACS System Controller shall support up to 64 physical devices connected via RS485 terminal, communications bus, TCP/IP or proprietary solutions. • Proprietary door controllers for connection of proprietary ACS readers. • 3rd Party door controllers for connection of 3rd Party door readers such as biometric devices. • Door Controllers with the following, or a combination of the following, components built in to facilitate the opening of doors and the monitoring of doors, Dry contact relays, Digital inputs, • Ports for connection to ACS readers, Communications port for 3rd Party readers, RS485 and SBUS connectivity. • Each Door Controller shall support two (2) readers. • A Software utility to upgrade Firmware while installed on-site, without removal of the Cluster Controller. 	
Performance	<ul style="list-style-type: none"> • TCP/IP, RS485 and Serial Bus Communication 	
Hardware	<ul style="list-style-type: none"> • Ethernet and RS485 communication protocols • 32-bit ARM Cortex M3 processor • Operating temperature of -25°C to +60°C • 4KB Ram 48KB Flash Memory • LED diagnostic indicators • Anti-tamper switch 	

Item	Minimum Specifications	Proposed Solution
	<ul style="list-style-type: none"> Real time clock battery backup 	
Power	<ul style="list-style-type: none"> Input voltage of 12 VDC to 15 VDC Polarity Sensitive, 140mA current, 1.7W Power, Reverse polarity and over-current protection 	
Environment Class	<ul style="list-style-type: none"> IP 20 	
Certifications	<ul style="list-style-type: none"> UL(US), CE(EU), SABS (RSA) ROHS 	
Housing	<ul style="list-style-type: none"> Plastic housing 18.6cm (l) x 7.9cm (w)x 5.7cm (h) Housing material black ABS plastic or IPS boxed solution 	
Data Transfer	<ul style="list-style-type: none"> Encrypted 	
Warranty	<ul style="list-style-type: none"> Comprehensive 3 Years Manufacturer's Warranty (Attach Manufacturer's Warranty Statement) 	

2.0 BROCHURES AND TECHNICAL LITERATURE

Tenderers must enclose together with their submitted bids brochures detailing technical literature and specifications of the active components of the access control system. The brochures shall be used to evaluate the suitability of these components. Any bid submitted without the brochures shall be considered technically non-responsive, and may subsequently be disqualified.

PART C

Table 62: ELECTRICAL LIGHT FITTING

LED PANEL LIGHT FITTING		
TECHNICAL SPECIFICATIONS		
IEC Compliant		
Item	Minimum Specifications	Proposed solution
Brand	State the brand, model and attach Technical Brochure (Mandatory)	
Operating	<ul style="list-style-type: none"> • voltage range: 130-300 V ac • frequency range: 45 -55 Hz • Power factor \geq 0.9 lagging • THD>15% • Ambient temperature range -10 to +35 °Operating • Colour Consistency \leq 5SDCM 	
Performance	<ul style="list-style-type: none"> • luminous flux - 4200 lm • System efficacy > 90lm/W • Lamp colour temperature (NW)4000K / (CW)6500K • Colour Rendering Index >80 • Median useful life \geq 30000 h • Luminaire light beam spread - 120° 	
Standards Compliance	CB/EMC/CE	
General	<ul style="list-style-type: none"> • Driver/power unit/transformer - PSU-E • Optical cover/lens type - Polystyrene bowl/cover Prismatic • Protection class IEC - Safety class II (II) 	

(A) BROCHURES FOR LED LIGHTING FITTINGS

For consideration and qualification tenderers shall, at their own cost, provide coloured manufacturer's brochures detailing technical literature and specifications where applicable.

Table 63: SCHEDULE OF CONTRACT DRAWINGS

DRAWING NO.	DRAWING TITLE
As shall be issued by the Engineer	

Table 64: SCHEDULE OF UNIT RATES

NO:	DESCRIPTION	UNIT RATE (KSHs)
1	PVC/SWA/PVC Copper Cables per Metre a) 16 mm sq 4 Core b) 4.0mm sq SINGLE Core	
2	DP Switches a) 40A b) 32A	
3	Emergency Shutdown Switch	
4	8 ways TPN Distribution Board	
5	24' LED Monitor Screen	
6	8CH Network Video Recorder	
7	24 Port Patch Panel	
8	3M Cat 6A Patch cord	
9	1M Cat 6A Patch cord	
10	Cable Trays	

Table 66: BILL NO. 2: ELECTRICAL INSTALLATION WORKS

ITEM	DESCRIPTION	Unit Kshs	Qty	Rate	Total Kshs
2.00	LIGHTING AND POWER INSTALLATION				
	(A) LIGHTING INSTALLATION				
2.01	Supply and install lighting points using 3 x 1.5mm ² PVC insulated Copper cables to be drawn in 20mm diameter PVC heavy gauge conduits concealed on the ceiling soffit and for one Way switching but excluding the fittings and switches. Conduits to be complete with saddles and all other accessories	No	8		
2.02	Supply and install 10 Amps rated moulded plate switches(white in colour) for flush mounting and as crabtree, clipsal or approved equivalent.				
	a) One gang one way	No	2		
2.03	Supply and install the following lighting fittings				
	(a) 600x600mm 40W 4200Lumen, Recessed backlit (panel)LED luminaire of full box welded monolithic seamless steel construction with post coat powder paint finish for layin installation, with acrylic microprism and dispersal diffuser combination and high efficiency LED modules and as Eatons Taliska Range Cat No.	No	8		

ITEM	DESCRIPTION	Unit Kshs	Qty	Rate	Total Kshs
	TALP66424KZ or Philips, or Thorn or Approved equivalent				
B	POWER INSTALLATION				
2.04	Supply and install 13Amps twin switched socket outlet point for using 3 x 2.5mm ² PVC insulated copper cables drawn in 25mm diameter PVC heavy gauge conduits laid concealed in the floors and walls but without the outlet plates.	No	8		
2.05	Supply and install twin mounting plates for mounting socket outlet plates on the trunking (200mm x 50 mm)	No	8		
2.06	Supply and install White 13Amps twin switched socket outlet as MK, CRABTREE/CLIPSAL or approved equivalent.	No	8		
2.07	Supply and install A/C circuits wired using 2x4mm ² +2.5mm ² ECC PVC insulated copper cables drawn in 25 mm diameter PVC heavy gauge conduits but excluding the 20 Amps DP switch.	No	4		
2.08	Supply and install flush mounted 20Amps DP switch complete with a pilot lamp and as MK,CRABTREE or approved equivalent.	No	4		
2.09	Radial Power Point wired in 5 x 35.0 mm ² SC PVC insulated CU cables drawn in 50 mm Ø HG PVC conduits concealed in building fabric complete with all the necessary accessories excluding 50A TPN Isolator for the UPS.	No	2		
2.10	5x35mm ² SC PVC insulated CU cables drawn in 50 mmØ HG PVC conduits concealed in building fabric complete with all the necessary accessories excluding 100A TPN Isolator wired to bypass the UPS.	No	1		
2.11	Provide for security door access control points using 25mm dia PVC heavy gauge conduits complete with draw wire, saddles and all other accessories (wiring to be done by others).	No	2		
2.12	Supply and install routing for the closed circuit television (CCTV) system in 25mm HG conduits and metal trunking system.	No	4		
2.13	Supply and install rectangular skirting trunking Type B of dimensions 200X50mm 2 compartment along all walls as indicated complete with bends, endcovers, fixing and all other accessories for mounting. Trunking to be powder coated and white in colour.	M	30		
D	POWER RETICULATION				
2.14	100mm HG ducts buried in the ground with a 100mm thick concrete surround, for laying the underground cables	LM	250		
2.15	70mm ² 4Core PVC/SWA/PVC Copper cables drawn in cable trench and rising duct from LV board TRANSFORMER ROOM to raw DB- to UPS and to Clean Power DB at the Data Centre	LM	250		
2.16	Supply and install cable lugs for item above	LM	250		
2.17	The following items for item 1.10 above:- a) Trenching to a depth of a minimum of 700mm b) Tiling with 'HATARI 'tiles	LM	7		

ITEM	DESCRIPTION	Unit Kshs	Qty	Rate	Total Kshs
	c) Back filling of the trenches d) Microtunnelling to a minimum depth of 700mm across the tarmacked road				
2.18	Power manhole size 600mm x 600mm x 750mm (deep) internally, consisting of 150mm solid concrete block walls and bottom in cement mortar (1:4), (600 x 600) mm medium duty cast iron cover and frame to BS 497	NO	80		
2.19	50A, TPN+E surface mounted interlocked switched 3 Phase socket outlet and complete with plug as MK for the incoming and outgoing supplies to and from the UPS.	NO	1		
2.20	100A 4-Pole, 3 position BYPASS switch for the UPS as MK	NO	1		
2.21	35mm ² 4 Core PVC/SWA/PVC copper cable for interwiring the Clean Power UPS, Manual Bypass Switch, Isolator, Clean Power DB complete with necessary cable lugs and any other necessary accessories	LM	1		
2.22	Supply and install recessed 6 way TPN distribution board incorporating an incomer MCB rated at 125A (without the MCBs) for Raw Power.The DB is to be as Merlin Gerlin / Hager or approved equivalent		13		
2.23	Supply and Install the following MCCBs 125A TPN as Schneider or approved equivalent to be installed at the LV board 10A (SP) 30A (SP) 20A (SP) Spare Ways Blanking Plates	NO	1		
2.24	Supply and install recessed 4 way TPN distribution board incorporating an incomer MCB rated at 125A (without the MCBs).The DB is to be as Schneider or approved equivalent.	NO	1		
2.25	Supply and install the following miniature circuit breakers (MCB'S) rated at 500Vac for the above Distribution boards. (a) 100A (TPN) (b) 50A (TPN) isolator (c) Spare Ways Blanking Plates	NO	2		
FIRE ALARM SYSTEM					
2.26	The stated brand of fire alarm items is for purposes of quality and any other brand may be installed as per engineers approval				
2.27	Supply and install smoke detector point wiring done using fire resistant 2x1.5mm ² PVC insulated copper cables drawn in 20mm dia PVC heavy gauge conduits but without the smoke detector.	NO	2		
2.28	Supply and install a smoke detector- photoelectric addressable type complete with the common base and as Menvier or approved equivalent.	NO	2		
2.29	Supply and install fire alarm manual call point wiring done using fire resistant 2x1.5mm ² PVC copper cables drawn in 20 mm dia PVC heavy gauge conduits but	NO	2		

ITEM	DESCRIPTION	Unit Kshs	Qty	Rate	Total Kshs
	without the manual call point.				
2.30	Supply and install a recessed resettable and addressable manual call point (Break Glass), as menvier or approved equivalent.	NO	2		
2.31	Supply and install emergency exit point wiring done using fire resistant 2x1.5mm ² PVC copper cables drawn in 20 mm dia PVC heavy gauge conduits but without the manual call point.	NO	2		
2.32	Supply and install 300mm 8w fluorescent emergency EXIT lighting luminaire with 3hour duration and as MENVIER Recessed Safe Edge Order Code RSEM (Menvier product catalogue 2001 pg 31).	NO	2		
2.33	Supply and install an addressable one loop fire alarm panel flush mounted on wall with 72 hour standby battery, complete with all accessories and as Menvier or approved equivalent.	NO	1		
2.34	Provide for integration, configuration and testing to work of the new installation to the existing fire alarm system installed in the building.	Item	1		
	LIGHTNING PROTECTION				
2.35	AIR TERMINATION				
2.36	25x3mm copper tape including copper saddles at 1500mm intervals and bonding to other metal work in the roof , all as FURSE	Lm	30		
2.37	Copper air terminations (lightning arrestors) inclusive of base clamp and all fixing materials as FURSE	NO	2		
	DOWNWARD CONDUCTOR	Lm			
2.38	Downward conductor comprising 25mm x 3 mm thick bare copper tape as FURSE	NO	10		
2.39	Copper square tape clamp for making crossing tape joints	NO	2		
	Steel conduits 32mm diam. for securing the down conductors complete with sandles	NO	10		
2.40	Test clamp as FURSE	NO	2		
	EARTHING.				
2.41	Earthing comprising of the following and any other necessary accessories:- a) 15 mm x 1800 mm earth rod as FURSE cat. No. RB 105. b) 15 mm dia. Driving stud as FURSE cat. No. ST100. c) Rod to tape clamp as FURSE. d) Concrete inspection pit as FURSE cat. No.PT005. (or a well-made 320mm x 320mm x 210 mm depth pit.) e) 25x3mm copper tape	NO	2 2 2 2 5		

Table 67: BILL NO.3: ACCESS CONTROL SYSTEM AND CCTV INSTALLATION

ITEM	DESCRIPTION	Unit	Qty	Rate	Total
3.00	DOOR ACCESS CONTROL				
3.01	TCP/IP intelligent door controller unit biometric-enabled security complete with all accessories as Suprema CoreStation or equal and approved equivalent	No	2		
3.02	A 300Kg- Force magnetic door lock c/w Door Closer, Mounting Bracket and all other necessary accessories	No	2		
3.03	IP67 IP Based Door Reader with Biometric Finger and face recognition, Proximity Card Reader, and keypad to provide comprehensive access control and time attendance features as Suprema Biolite or approved equivalent.	No	4		
3.04	Emergency Break glass	No	2		
3.05	Wire the entire access control system using 12 core 1.5mm ² fire resistant cable.	M	100		
3.06	Proximity card containing photograph of individual employees	No	10		
3.07	Web based -Access control software module c/w Access Control Alarm and Event Monitoring, Central Station Operator Controls, Photo-ID Badging Management, Intrusion Integration with CCTV system, Customized reports Generation capabilities, Staff	No	1		
3.08	Access control Power supply module with necessary lead acid batteries to support a 12 hours runtime for the access control system as described in particular specification as SECO-LARM Cat. No. EAP-5D5Q or equal and approved equivalent.	No	2		
3.09	Workstation as described in Particular specifications	No	1		
3.10	Allow for software configuration of the system to client's requirements Programming, testing and commissioning.	Item	1		
CCTV CAMERAS					
3.11	High resolution Network IR Indoor Dome Day & Night 6Megapixel Camera; Built-in motorized varifocal lens, MicroSD/SDHC/SDXC,NAS Edge Storage, PoE, IK8, Bi-directional audio support, motion detection, as Wisenet SND-7084R or equal and approved equivalent.	No	3		
3.12	4Megapixel resolution Weatherproof Network IR OUTDOOR BULLET built-in IR LEDs Camera true day and night and motion detection; as specified in the technical specifications.	No	1		
3.13	Cat 6A, UTP 4 Pair cable as Siemon or its equal and approved equivalent.	Lm	300		
3.14	Provide for software licensing, integration, configuration and testing to work of the new installation to the existing CCTV system installed in the building.	Item	1		

Table 68: PRICE SUMMARY PAGE

ITEM	DESCRIPTION	UNIT	QTY	RATE	TOTAL
	Total for Project Preliminaries installation				
	Total for Lighting and Power installation				
	Total for Access Control and CCTV installation				
	Contingency sum of Kshs.500,000.00 to be expended at the discretion of the Engineer				500,000.00
	Subtotal for electrical works carried to summary page				

TOTAL AMOUNT IN WORDS

.....

TENDERER'S NAME & STAMP.....

SIGNATURE

DATE.....

Table 69: Technical Schedule Form

NO	DESCRIPTION	MAKE	TYPE
1	Power Cables		
2	CAT 6A STP Cables		
3	Access control module		
4	Finger print biometric & card reader		
5	Door Exit Switch		
6	Override Exit Switch		
7	Proximity Cards		
8	Distribution Board		
9	CCTV Cameras		
10	Metal Trunking		
11	Lighting Switches		
12	Power Sockets		
13	PVC Conduits		

Table 70: TENDERER GRAND TOTAL BID PRICE SUMMARY

Item	Description	Unit	Qty	Rate	Amount
1	subtotal for integrated data center infrastructure/ smart racks for primary data centre				
2	Subtotal for civil works				
3	Subtotal for Electrical works				
4	Subtotal for pc & provisional and contingency sums				1,200,000.00
5	Add 16% VAT				
GRAND TOTAL TO BE CARRIED TO FORM OF TENDER					

TOTAL AMOUNT IN WORDS

.....

**TENDERER'S NAME &
STAMP.....**

SIGNATURE DATE.....

Specification

Supply and install contract to be procured through international competition, the Procuring Entity's Requirements must be drawn up to permit the widest, possible competition and, at the same time, present a clear statement of the required standards of workmanship, materials and performance of the Facilities. Only if this is done will the objectives of economy, efficiency, fairness and transparency in procurement be realized, responsiveness of Tenders be ensured and the subsequent task of Tender evaluation facilitated.

In a design, supply and install approach, the design is to be done by the Contractor. No detailed technical specification as is normal practice is developed at the pre-Tender stage. However, the Procuring Entity does and must know what it wants and must communicate its needs to the Tenderers. Hence, this section on Procuring Entity's Requirements replaces the usual Technical Specifications of a more traditional approach.

While this section of the Tendering document should endeavor to define the Procuring Entity's Requirements as precisely as possible, care must be taken to avoid over specifying details to the extent that the flexibility and potential benefits associated with a design, supply and install contract are seriously eroded or threatened.

Care must be taken when drafting the Procuring Entity's Requirements to ensure that the requirements are not restrictive. Recognized international standards should be used as much as possible for the description of goods, materials and workmanship. Where other particular standards are specified, whether national standards of Kenya other standards, it should be stated that goods, materials and workmanship meeting other authoritative standards and which promise to ensure equal or higher quality than the standards specified, will also be acceptable. Where a brand name of a product is specified it should always be qualified with the terms "or equivalent".

For a design, supply and install contract no detail drawings would generally be available at the pre-Tendering process stage. It would, however, be useful to include such conceptual drawings as are appropriate to supplement or help explain the general concept of the Procuring Entity's needs.

The Procuring Entity should specify any Environmental, Social, health, and safety requirements as appropriate.

Any sustainable procurement technical requirements shall be clearly specified. The requirements to be specified shall be specific enough to not demand evaluation based on rated criteria/ merit point system. The sustainable procurement requirements shall be specified to enable evaluation of such a requirement on a pass/ fail basis. To encourage Tenderers' innovation in addressing sustainable procurement requirements, as long as the Tender evaluation criteria specify the mechanism for monetary adjustments for the purpose of Tender comparisons, Tenderers may be invited to offer Plant that exceeds the specified minimum sustainable procurement requirements.

Where Tenderers are invited to submit alternative technical solutions for specified parts of the facilities, such parts shall be described in this Specification.

A. Functional, Architectural and Performance Requirements

i) **Legal and Regulatory Requirements to be met by the Information System**

1.1 The Information System **MUST** comply with the following laws and regulations:

- 1) *[as appropriate, summarize: each relevant legal code and regulations that govern the business processes and procedures that will be automated with the Information System;]*
- 2) **Note:** If appropriate, prepare a sub section with the relevant legal codes and regulations to be included in the Background and Informational Materials and reference these materials.

ii) **Business Function Requirements to be met by the Information System**

2.1 The Information System **MUST** support the following business functions

- 1) *[describe, at the appropriate level of detail for the Information System being supplied and installed: each specific business processes and procedures that will be automated by the Information System.]*
- 2) **Note:** *These business process descriptions may be textual as well as presented in a formal system analysis formats (e.g., process model and data model, use-case model, entity-relation diagrams, swim-lane diagrams, etc.)*

As appropriate, prepare a subsection for the Background and Informational Materials with samples of existing standardized reports, data entry forms, data formats, data coding schemes, etc. which the Information System will need to implement; reference these materials.

iii) **Architectural Requirements to be met by the Information System**

(3.1) The Information System **MUST** be supplied and configured to implement the following architecture.

- 1) Software Architecture: *[specify: features (use diagrams as appropriate)].*
- 2) Hardware Architecture: *[specify: features (use diagrams as appropriate)].*

iv) **Systems Administration and Management Functions Required to be met by the Information System**

- 1) The Information System **MUST** provide for the following management, administration, and security features at the overall System level in an integrated fashion.
- 2) Installation, Configuration and Change Management: *[specify: features].*
- 3) Operational Monitoring, Diagnostics, and Troubleshooting: *[specify: features].*
- 4) User Administration and Access Control; User and Usage Monitoring and Audit Trails: *[specify: features]*
- 5) System and Information Security and Security Policies: *[specify: features]*
- 6) Back-up and Disaster- Recovery: *[specify: features]*

v) **Performance Requirements of the Information System**

5.1 The Information System MUST reach the following performance levels.

1) *[describe, at the appropriate level of detail for the particular Information System being supplied and installed: **each relevant throughput and/or response times for specific business processes and procedures automated by the System**; also describe: in business process terms, **the relevant conditions under which the System must achieve these performance standards** (e.g., the number of concurrent users, type of transactions, type and quantity of business data that the System must process in achieving these performance standards, etc.)]*

2) *Note: Whenever feasible, business functions should be stated and used as the basis for performance specifications. Relying solely on technological requirements can in advertently restrict competition.*

B. Service Specifications– Supply& Install Items

i) System Analysis, Design and Customization/ Development

(1) The Supplier MUST perform the following Analysis and Design activities using a formal system analysis/ development methodology with the following key activities and design deliverables.

2) *Detailed Analysis: [for example, specify: **System Design Document; System Requirements Specification; Interface Requirements Specification; Software/System Test Descriptions; Software/ System Test Plan, etc.]***

3) *Physical Design: [for example, specify: **Software Design Description; Interface Design Document; Data base Design Document; etc.]***

4) *Integrated System: [for example, specify: **User's Manual; Operations Manual; Source Code; CASE Files; etc.]***

ii) **Software Customization/ Development**

(1) The Supplier MUST perform Software Customization / Development using a formal software development methodology with the following characteristics and/ or with the following technologies and/ or tools.

2)*[for example, describe: **Software Development Method** (e.g., Cascade, Rapid Application Development; and/ or **Open Standards** (e.g., Java, XML, etc.); and/ or **CASE tools, etc.]***

iii) **System Integration (to other existing systems)**

1) The Supplier MUST perform the following Integration Services *[for example, describe: **existing information systems** (as appropriate, reference the relevant subsection of the Background and Informational Materials Section containing any detailed description of existing systems); and specify: **technical and functional level of integration with the Information System.**]*

(iv) **Training and Training Materials**

(4.1) The Supplier MUST provide the following Training Services and Materials.

- 1) User: *[for example, specify: minimum curricula, modes of training, modes of testing, and training materials for: the introduction to computers, the operation of the relevant equipment incorporated in the System, as well as the operation of the Software applications incorporated in the System; as appropriate, reference the relevant subsection in the Background and Informational Material Section containing any detailed information regarding the available training facilities; etc.]*
- 2) Technical: *[for example, specify: minimum curricula, modes of training, modes of testing (e.g., certification levels), training materials and training locations for: the key technology and methodology components of the Information System; etc.]*
- 3) Management: *[for example, specify: minimum curricula, modes of training, modes of testing, training materials and training locations for: the familiarization with the functionality, technology and methodology components of the Information System, corporate management of information systems; etc.]*

v) **Data Conversion and Migration**

- 1) The Supplier MUST provide services and tools to perform the following Data Conversion and Migration Services: *[for example, specify: volume of data; type, structure, and media of data; timing of conversion; quality assurance and validation methods; etc.]*

vi) **Documentation Requirements**

(6.1) The Supplier MUST prepare and provide the following Documentation.

- 1) End-User Documents: *[for example, specify: type(s) of end-user documents; language; content; formats; quality control and revision management; medium; reproduction and distribution methods; etc.]*
- 2) Technical Documents: *[for example, specify: type(s) of technical documents; language; content; formats; quality control and revision management; medium; reproduction and distribution methods; etc.]*

vii) **Requirements of the Supplier's Technical Team**

(7.1) The Supplier MUST maintain a technical team of the following roles and skill levels during the Supply and Installation Activities under the Contract:

- 1) Project Team Leader: *[for example, specify: education/ certifications, years' experience in, demonstrated successful experience in, etc.]*
- 2) *[specify: **Business Area**]* Expert: *[for example, specify: education/ certifications, years' experience in, demonstrated successful experience in, etc.]*
- 3) System Analyst: *[for example, specify: education/certifications, years' experience in, demonstrated successful experience in, etc.]*

- 4) Database Expert: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 5) Programming Expert: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 6) System Administration / Security Expert: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 7) Computer Hardware Expert: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 8) Network and Communications Expert: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 9) Training Expert: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 10) Documentation Specialist: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 11) ...

C. Technology Specifications– Supply& Install Items

(i) General Technical Requirements

- 1) Language Support: All information technologies must provide support for the [insert: **either national or business language(s) of the end-user(s)**]. Specifically, all display technologies and software must support the ISO [insert: **character set number**] character set and perform sorting according to [insert: **appropriate standard method**].
 - 2) Electrical Power: All active (powered) equipment must operate on [specify: **voltage range and frequency range, e.g., 220v +/- 20v, 50Hz +/- 2Hz**]. All active equipment must include power plugs standard in [insert: **Procuring Entity's Country**].
 - 3) Environmental: Unless otherwise specified, all equipment must operate in environments of [specify, **temperature, humidity, and dust conditions, e.g., 10-30 degrees centigrade, 20-80 percent relative humidity, and 0-40 grams per cubic meter of dust**].
- (3) Safety:
- 4.1 Unless otherwise specified, all equipment must operate at noise levels no greater than [insert: **maximum number, e.g.,55**] decibels.
 - 4.2 All electronic equipment that emits electromagnetic energy must be certified as meeting [insert: **emission standard, e.g., USFCC class B or END 55022 and END 50082-1**], or equivalent, emission standards.

ii) Computing Hardware Specifications

2.1 Processing Unit Type 1: *[specify: name of processing unit and technical function (e.g., Central Database Server)]*:

- 1) Processing unit performance: As configured for the tender, the processing unit **MUST**, at a minimum,
 - a) Achieve *[specify: standard benchmark test or tests and minimum performance levels, for example, "SPEC CPU 2006 rating"]*
(Or, for PCs)
Achieve a minimum performance equal to a score of *[specify: score]* under the benchmark *[specify: benchmark, for example "Sylmar 2007 Rating"]*
 - b) Provide input-output performance, as follows *[specify: minimum input-output performance levels (e.g., data bus transfer rates; standard peripheral inter faces; minimum number of concurrent terminal sessions, etc.)]*
- (2) Processor expandability: *[for example, specify: minimum acceptable number of processors; minimum acceptable levels of performance; minimum acceptable degree of expandability for processors/ performance, relative to tender configuration; minimum acceptable number of internal Sub system expansions lots; etc.,]*
- (3) Process or memory and other storage: *[for example, specify: main memory; cache memory; disk storage; tape storage; optical drives; etc.]*

Note: If the upgrade requirements over the next few years for processing power, memory, etc., are reasonably well known at the time the tendering documents are to be issued, KEFRI may wish to incorporate these requirements in the Recurrent Cost Table and possibly include them in the Contract Price. This will subject them to competition and provide away contractually to control future price increases. This approach reserves for KEFRI the option of including upgrades in the Contract, even if upgrades are not needed in the end. An SCC needs to be included clarifying how upgrades will be treated in the final Contract.
- (4) Processing unit fault tolerance: *[for example, specify: error checking; failure detection, prediction, reporting, and management; redundant power supplies and other modules; "hot-swappable modules"; etc.]*
- (5) Processing unit management features: *[for example, specify: features and supported standards; local and remote management; etc.]*
- (6) Processing unit input and output devices: *[for example, specify: network interfaces and controllers; display; keyboard; mouse; bar-code, smart-card, and identification-card readers; modems; audio and video interfaces and devices; etc.]*
- (7) Other processing unit features: *[for example, specify: power-saving features; battery life for portable equipment; etc.]*

2.2 Processing Unit Type 2: *[specify: name of processing unit and technical function (e.g., General Purpose Work station)]*:

3.1.2.1 ...

ii) Network and Communications Specifications

3.1 Local Area Network:

- 1) Equipment and software: *[for example, specify: as appropriate, for each type of equipment and software: protocols supported; performance levels; expandability, fault tolerance, administration, management and security features; etc.]*
- 2) Cabling: *[for example, specify: cable type(s); topology(ies); cable protectors, channels and other installation standards (e.g., ANSI / EIA / TIA 598); cable labeling schemes, references to premises drawings; etc.]*

3.2 Wide-Area Network:

- 3) Equipment and software: *[for example, specify: protocols supported; performance levels; expandability; fault tolerance; administration, management, and security features; etc.]*
- 4) Telecommunications Services: *[for example, specify: media; capacity; protocols supported; performance levels; expandability; fault tolerance; administration, management, and security features; etc.]*

3.2 Other Communications Equipment: *[for example, specify: modems; facsimile devices; modem and facsimile servers, etc.]*

3.3 Video Conferencing/ Congress Equipment:

3.5. ...

iii) Ancillary Hardware Specifications

- 1) Shared Data Storage Devices: *[specify: disk; tape; optical storage devices, including capacities, interfaces, hardware-based administration/ diagnostics/ fail over, etc.]*
- 2) Shared Output and Input Devices:

General Requirements: Unless otherwise specified, all shared output and input devices must be capable of handling A4 standard sized paper.

Printers: *[for example, specify: high-speed, high-quality printer; standard-speed, high-quality printer; high-speed, large-format (A3) printer; color, high-quality printer, video and output devices; etc.]*

Scanners: *[for example, specify: scanner resolution; paper-/ film-handling features; speed; etc.]*

3) Power Conditioning Devices:

3.1 Uninterruptable Power Supplies: *[for example, specify: output power delivery and duration capacity, power filtering capacity, battery features, interfaces, device management diagnostics and fail over features, etc.]*

4) Specialized Furnishing/ Equipment:

4.1 Equipment Cabinets/ Racks: *[for example, specify: size, capacity, physical access and access control, ventilation and environmental control features, etc.]*

4.2 Environment Control Equipment: *[for example, specify: air conditioning units;*

humidity control equipment; etc.]

4.3 Physical Access Control Equipment: *[for example, specify: door entry controls; intrusion detection; video surveillance, etc.]*

4.4 Logical Access Control Equipment: *[for example, specify: secure identity tokens; token readers, etc.]*

iv) **Standard Software Specifications**

5 System Software and System - Management Utilities:

1) Processing unit type 1: *[for example, specify: operating system; back-up, optimization, anti-virus, and other utilities; systems administration, maintenance, and troubleshooting tools; etc.]*

2) Processing unit type 2: *[for example, specify: operating system; back-up, optimization, anti-virus, and other utilities; systems administration, maintenance, and troubleshooting tools; etc.]*

3) Etc...

5.1 Networking and Communications Software: *[for example, specify: protocols, media and equipment to be supported; network services, management and administration features; security and failure management features; etc.]*

5.2 General-Purpose Software: *[for example, specify: Office Automation Software; programming tools and libraries; etc.]*

5.3 Database Software and Development Tools: *[for example, specify: database and database management feature; development tools and environments; etc.]*

5.4 Business Application Software: *[for example, specify: specific business functions to be supported in native code; application management feature; customization options and tools; etc.]*

v) **Consumables**

6.1 Printer Ink/ Toner–PrinterType1:

vi) **Other Non-IT Goods**

6.2 Work station Desks:

6.3 Photocopiers:

6.4 Specialized Mechanical Systems–Data center *[for example, specify: raised floor system, electrical distribution subsystem, etc.]*

D. Testing and Quality Assurance Requirements

(i) Inspections

1.1 Factory Inspections: *[if any, specify: the items, criteria, and methods to be employed by KEFRI, or its agent, during factory inspections of the Information Technologies and other Goods prior to their shipment to the site(s).]*

1.2 Inspections following delivery: *[if any, specify: the items, criteria, and methods*

to be employed by KEFRI, or its agent, upon delivery and unpacking of the Information Technologies and other Goods to the Site(s).]

ii) **Pre-commissioning Tests**

- 2.1 In addition to the Supplier's standard check-out and set-up tests, the Supplier (with the assistance of KEFRI) must perform the following tests on the System and its Sub systems before Installation will be deemed to have occurred and KEFRI will issue the Installation Certificate (s) (pursuant to GCC Clause 26 and related SCC clauses).
- 2.2 *[specify: Sub system1(as defined in the Site Table[s] attached to the Implementation Schedule) specify: tests, test conditions, success criteria, etc.]*
- 2.3 *[specify: Sub system2(as defined in the Site Table{s}) specify: tests, test conditions, success criteria, etc.]*
- 2.4 the Entire System: Pre-commissioning Tests for the entire System are: *[specify: tests, test conditions, success criteria, etc.]*

iii) **Operational Acceptance Tests**

- 3.1 Pursuant to GCC Clause 27 and related SCC clauses, KEFRI (with the assistance of the Supplier) will perform the following tests on the System and its Sub systems following Installation to determine whether the System and the Sub systems meet all the requirements mandated for Operational Acceptance.
- 3.2 *[specify: Subsystem 1 (as defined in the Implementation Schedule) specify: tests, test conditions, success criteria, etc.]*
- 3.3 *[specify: Subsystem 2 (as defined in the Implementation Schedule) specify: tests, test conditions, success criteria, etc.]*
- 3.4 the Entire System: Pre-commissioning Tests for the entire System are: *[specify: tests, test conditions, success criteria, etc.]*

Note: The complexity of the Operational Acceptance Testing needed will vary in accordance with the complexity of the System being procured. For simpler Information Systems Operational Acceptance Testing may simply consist of requiring a specified period of trouble-free System or Sub system operation under normal operating conditions. For more complex Systems, Operational Acceptance testing will require extensive, clearly defined tests under either production or mock-production conditions.

E. Service Specifications–Recurrent Cost Items

i) **Warranty Defect Repair**

- 1.1 The Supplier MUST provide the following services under the Contract or, as appropriate under separate contracts (as specified in the tendering documents).
 - 1) **Warranty Defect Repair Service:** *[for example, specify: coverage period; response time and problem- resolution performance standards; modes of service, such as on-site, on-call, or return to warehouse; etc. (indicate how these may vary among hardware, software, network technologies, etc.)]*

2) ...

ii) Technical Support

2.1 The Supplier MUST provide the following services under the Contract or, as appropriate under separate contracts (as specified in the tendering documents).

- 1) User support / hot line: [for example, specify: **coverage period; response time and problem resolution performance standards; etc.**]
- 2) Technical Assistance: [for example, specify: **categories of technical staff required; anticipated tasks and objectives; response-time performance standards; etc.** (indicate how these may vary among hardware, software, network technologies, etc.)]
- 3) Post-Warranty Maintenance Services: [for example, specify: **coverage period; response time and problem-resolution performance standards; modes of service, such as on-site, on-call, or return to warehouse; etc.** (indicate how these may vary among hardware, software, network technologies, etc.)]
- 4)

iii) Requirements of the Supplier's Technical Team

3.1 The Supplier MUST provide a technical team to cover KEFRI's anticipated Post-Operational Acceptance Technical Assistance Activities Requirements (e.g., modification of the Information System to comply with changing legislation and regulations) with the roles and skill levels that are specified below. The minimum expected quantities of inputs by the Supplier's technical support team are specified in the relevant System Inventory Tables for Recurrent Cost Items.

- 1) System Analyst: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 2) Database Expert: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 3) Programming Expert: [for example, specify: **education/certifications, years' experience in, demonstrated successful experience in, etc.**]
- 4) ...

Note: The Technical Assistance Team specification may be used to develop tender prices for technical support Recurrent Costs. These may be included in the main Contract or be subject to separate contracts. In either regard, to obtain meaningful and comparable tender prices, KEFRI will need to specify the roles of the technical support team members in this section and indicate the quantities of the corresponding inputs in the Systems Inventory Tables for Recurrent Cost items.

F. Implementation Schedule

Notes on preparing the Implementation Schedule *the Implementation Schedule summarize when and where Installation, and Operational Acceptance should take place for all Sub systems and/ or major components of the System, and for the*

overall System it self—as well as any other major Contract milestones.

Note: *The delivery date is not presented in the Implementation Schedule. Under Incoterms 2010 for CIP, Delivery refers to the date when the Supplier delivers the goods to the first carrier at the port of embarkation, not to the arrival of the goods at the destination site. Delivery (shipment) date therefore varies according to the country of origin of the goods and the Supplier's chosen method of transport.*

The target dates need to be realistic and achievable in light of the capacity of both the average Supplier and KEFRI to carry out their respective contract obligations. Also, KEFRI must take care to ensure that the dates specified in the Schedule are consistent with any specified elsewhere in the tendering document, especially in the GCC/SCC (e.g., and/ or times specified for the submission and acceptance of the Agreed Project Plan). The work breakdown structure (deliverables) in the Implementation Schedule should be sufficiently detailed to facilitate careful management of the Contract - but not so detailed that it unnecessarily constrains tenderers from organizing the proposed work in the most efficient and effective manner.

To facilitate the tendering and the contract management processes, the Implementation Schedule, the System Inventory Tables and Price Schedules should be closely linked. In particular, the Implementation Schedule defines the major deliverable Subsystems. For each Subsystem there should be a corresponding System Inventory Table or Tables. These System Inventory Tables catalog the specific items (inputs) comprising the Sub system, as well as the quantities of each item required (for the supply and install cost items as well as their current cost items). For each System Inventory Table there should be a corresponding Price Schedule that closely mirrors the System Inventory Table. Careful development of these materials will greatly improve the changes of obtaining complete and comparable tenders (and ease the tender evaluation process) as well as improving the likelihood that KEFRI's and Supplier's interactions during contract execution are closely orchestrated (thus easing the burden of contract management and improving the likelihood of successful implementation of the Information System).

The sample tables comprise:

- a) An Implementation Schedule Table;*
- b) A Site Table(s); and*
- c) A Table of Holidays and other Non-Working Days.*

KEFRI should modify these tables, as required, to suit the particulars of the System (and Sub systems) to be supplied and installed. The sample text in the tables is illustrative only and should be modified or deleted as appropriate. The timings stated in the Implementation Schedule should be specified in weeks from Contract Effectiveness. This will ease the maintenance of the tendering documents during the preparation and tendering processes.

Where appropriate, the Implementation Schedule should indicate the deliverables against which Liquidated Damages maybe applied in the event of implementation delays arising from the actions of the Supplier (as governed by the SCC and GCC clause 28). These milestones should be kept to the essential minimum needed by KEFRI to ensure contract discipline by the Supplier- but not so many that they unnecessarily strain KEFRI-Supplier relationship upon which the successful

implementation of the Information System will invariably depend.

The Site Table(s) catalog the physical allocation of the site(s) where the System is to be supplied, installed, and operated. The site(s) may consist of a number of branch offices in remote regions, different departments or offices in the same city, or a combination of these. KEFRI must specify this information in sufficient detail so that Tenderers can accurately estimate costs related to:

- a) Delivery and insurance;*
- b) Installation, including cabling and inter-building communications, etc.*
- c) Perform support services, such as warranty defect repair, maintenance, and other technical support services; and*
- d) Other related Service obligations the successful Tenderer will have to perform under the Contract, including related travel and subsistence costs.*

This information will also help Tenderers identify which site(s) may warrant a site visit during the period they are preparing their tenders. If the System presents complex installation challenges, site layout drawings should be included in the Background and Informational Materials Section.

i) Implementation Schedule Table

[Specify desired installation and acceptance dates for all items in Schedule below, modifying the sample line items and sample table entries as needed.]

Table 71:

Line Item No.	Subsystem / Item	Configuration Table No.	Site / Site Code	Delivery (Tenderer to specify in the Preliminary Project Plan)	Installation (weeks from Effective Date)	Acceptance (weeks from Effective Date)	Liquidated Damages Milestone
0	Project Plan	--	--		--	W_	no
1	Subsystem 1	1	---		--	--	--
:	etc.						
x	Operational Acceptance of the System as an integrated whole	--	all sites		--	W_	yes
y	Recurrent Cost Items – Warranty Period	y	--				

Note: The System Inventory Table(s) for the specific items and components that constitute the Subsystems or item. Refer to the Site Table(s) below for details regarding the site and the site code.

-- indicates not applicable. “Indicates repetition of table entry above.

ii) SITE TABLE(S)

[Specify: the detailed information regarding the site(s) at which the System is to be operated]

Table 72:

Site Code	Site	City / Town / Region	Primary Street Address	Drawing Reference No. (if any)
HQ	Headquarters			
R1	Region 1			
R1.1	Region 1 Head Office			
R1.2	ABC Branch Office			
R1.3	DEF Branch Office			

III) TABLE OF HOLIDAYS AND OTHER NON – WORKING DAYS

[Specify: the days for each month for each year that are non-working days, due to Holidays or other business reasons (other than weekends).]

Table 73:

Month	20xy	20xy+1	20xy+2	20zz
1								
2								
3								
4								
5								
6								
7								
8								
9								
10								
11								
12								

F. System Inventory Tables

Notes on preparing the System Inventory Tables

The System Inventory Tables detail:

- a) for each Subsystem (Deliverable) indicated in the Implementation Schedule, the Information Technologies, Materials, and other Goods and Services that comprise the System to be supplied and/or performed by the Supplier;
- b) the quantities of such Information Technologies, Materials, and other Goods and Services;
- c) the sites and the location of each on a specific site (e.g., building, floor, room, department, etc.)
- d) the cross references to the relevant section of the Technical Requirements where that item is described in greater detail.

KEFRI should modify these tables, as required, to suit the particulars of the System (and Sub systems) to be supplied and installed. The sample text provided for various sections of the tables is illustrative only and should be modified or deleted as appropriate.

There are two sample formats given for the System Inventory Tables: one for the Supply and Installation cost items and the second for recurrent cost items needed (if any). The second version of the table permits KEFRI to obtain price information about items that are needed during the Warranty Period.

A. System Inventory Table (Supply and Installation Cost ITEMS) [*insert: identifying NUMBER*]

Line-item number: [*specify: relevant line-item number from the Implementation Schedule (e.g., 1.1)*]

[as necessary for the supply and installation of the System, specify: the detailed components and quantities in the System Inventory Table below for the line item specified above, modifying the sample components and sample table entries as needed. Repeat the System Inventory Table as needed to cover each and every line item in the Implementation Schedule that requires elaboration.]

Table 74:

Component No.	Component	Relevant Technical Specifications No.	Additional Site Information (e.g., building, floor, department, etc.)	Quantity
1.	Subsystem 1		--	--
1.1	_____			--
:				
2.	Subsystem 2			--
2.1	_____			--
:				

Note: -- indicates not applicable. “ indicates repetition of table entry above.

B. SYSTEM INVENTORY TABLE (RECURRENT COST ITEMS) [*INSERT: IDENTIFYING NUMBER*]

Line-item number: [*specify: relevant line-item number from the Implementation Schedule (e.g., y.1)*]

Table 75:

Component No.	Component	Relevant Technical Specifications No.	Y1	Y2	Y3
1.	Warranty Defect Repair		all items, all sites, included in the Supply and Install Price	all items, all sites, included in the Supply and Install Price	all items, all sites, included in the Supply and Install Price
2.	Software/Firmware Licenses and Updates:		all items, all sites, included in the Supply and Install Price	all items, all sites, included in the Supply and Install Price	all items, all sites, included in the Supply and Install Price
3.	Technical Services				
3.1	Sr. Systems Analyst		----days	----days	----days
3.2	Sr. Programmer		----days	----days	----days
3.3	Sr. Network Specialist, etc.		----days	----days	----days
	...				

Note: - indicates not applicable. “ indicates repetition of table entry above.

SECTION VI - GENERAL CONDITIONS OF CONTRACT

General Conditions of Contract

A. CONTRACT AND INTERPRETATION

1. Definitions

1.1 In this Contract, the following terms shall be interpreted as indicated below.

a) Contract Elements

- i) "Contract" means the Contract Agreement entered into between KEFRI and the Supplier, together with the Contract Documents referred to therein. The Contract Agreement and the Contract Documents shall constitute the Contract, and the term "the Contract" shall in all such documents be construed accordingly.
- ii) "Contract Documents" means the documents specified in Article 1.1 (Contract Documents) of the Contract Agreement (including any amendments to these Documents).
- iii) "Contract Agreement" means the agreement entered into between KEFRI and the Supplier using the form of Contract Agreement contained in the Sample Contractual Forms Section of the tender documents and any modifications to this form agreed to by KEFRI and the Supplier. The date of the Contract Agreement shall be recorded in the signed form.
- iv) "GCC" means the General Conditions of Contract.
- v) "SCC" means the Special Conditions of Contract.
- vi) "Technical Requirements" means the Technical Requirements in Section VII of the tendering documents.
- vii) "Implementation Schedule" means the Implementation Schedule in Section VII of the tendering documents.
- viii) "Contract Price" means the price or prices defined in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.
- ix) "Procurement Regulations" refers to the Regulations issued under the Public Procurement and Asset Disposal Act (2015).
- x) "tendering documents" refers to the collection of documents issued by KEFRI to instruct and inform potential suppliers of the processes for tendering, selection of the winning tender, and Contract formation, as well as the contractual conditions governing the relationship between KEFRI and the Supplier. The General and Special Conditions of Contract, the Technical Requirements, and all other documents included in the tendering documents reflect the Procurement Regulations that KEFRI is obligated to follow during procurement and administration of this Contract.

b) Entities

- i) "Procuring Entity" means the entity purchasing the Information System, as **specified in the SCC**.
- ii) "Project Manager" means the person **named as such in the SCC** or otherwise appointed by KEFRI in the manner provided in GCC Clause 18.1 (Project

- Manager) to perform the duties delegated by KEFRI.
- iii) “Supplier” means the firm or Joint Venture whose tender to perform the Contract has been accepted by KEFRI and is named as such in the Contract Agreement.
 - iv) “Supplier's Representative” means any person nominated by the Supplier and named as such in the Contract Agreement or otherwise approved by KEFRI in the manner provided in GCC Clause 18.2 (Supplier's Representative) to perform the duties delegated by the Supplier.
 - v) “Subcontractor” means any firm to whom any of the obligations of the Supplier, including preparation of any design or supply of any Information Technologies or other Goods or Services, is sub contracted directly or indirectly by the Supplier.
 - vi) “Adjudicator” means the person named in Appendix 2 of the Contract Agreement, appointed by agreement between KEFRI and the Supplier to make a decision on or to settle any Dispute between KEFRI and the Supplier referred to him or her by the parties, pursuant to GCC Clause 43.1 (Adjudication).

C. Scope

- i) “Information System,” also called “the System,” means all the Information Technologies, Materials, and other Goods to be supplied, installed, integrated, and made operational (exclusive of the Supplier's Equipment), together with the Services to be carried out by the Supplier under the Contract.
 - ii) “Subsystem” means any subset of the System identified as such in the Contract that may be supplied, installed, tested, and commissioned individually before Commissioning of the entire System.
 - iii) “Information Technologies” means all information processing and communications-related hardware, Software, supplies, and consumable items that the Supplier is required to supply and install under the Contract.
- “Goods” means all equipment, machinery, furnishings, Materials, and other tangible items that the Supplier is required to supply or supply and install under the Contract, including, without limitation, the Information Technologies and Materials, but excluding the Supplier's Equipment.
- vii) “Services” means all technical, logistical, management, and any other Services to be provided by the Supplier under the Contract to supply, install, customize, integrate, and make operational the System. Such Services may include, but are not restricted to, activity management and quality assurance, design, development, customization, documentation, transportation, insurance, inspection, expediting, site preparation, installation, integration, training, data migration, Pre- commissioning, Commissioning, maintenance, and technical support.
 - viii) “The Project Plan” means the document to be developed by the Supplier and approved by KEFRI, pursuant to GCC Clause 19, based on the requirements of the Contract and the Preliminary Project Plan included in the Supplier's tender. The “Agreed Project Plan” is the version of the Project Plan approved by KEFRI, in accordance with GCC Clause 19.2. Should the Project Plan conflict with the Contract in any way, the relevant provisions of the Contract, including any amendments, shall prevail.
 - ix) “Software” means that part of the System which are instructions that cause information processing Sub systems to perform in a specific manner or execute specific operations.

- x) “System Software” means Software that provides the operating and management instructions for the underlying hardware and other components, and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Systems Software. Such System Software includes, but is not restricted to, micro-code embedded in hardware (i.e., “firmware”), operating systems, communications, system and network management, and utility software.
- xi) “General-Purpose Software” means Software that supports general-purpose office and software development activities and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be General-Purpose Software. Such General-Purpose Software may include, but is not restricted to, word processing, spreadsheet, generic database management, and application development software.
- xii) “Application Software” means Software formulated to perform specific business or technical functions and interface with the business or technical users of the System and is identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Application Software.
- xiii) “Standard Software” means Software identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Standard Software.
- xiv) “Custom Software” means Software identified as such in Appendix 4 of the Contract Agreement and such other Software as the parties may agree in writing to be Custom Software.
- xv) “Source Code” means the database structures, dictionaries, definitions, program source files, and any other symbolic representations necessary for the compilation, execution, and subsequent maintenance of the Software (typically, but not exclusively, required for Custom Software).
- xvi) “Materials” means all documentation in printed or printable form and all instructional and informational aides in any form (including audio, video, and text) and on any medium, provided to KEFRI under the Contract.
- xvii) “Standard Materials” means all Materials not specified as Custom Materials.
- xviii) “Custom Materials” means Materials developed by the Supplier at KEFRI's expense under the Contract and identified as such in Appendix 5 of the Contract Agreement and such other Materials as the parties may agree in writing to be Custom Materials. Custom Materials includes Materials created from Standard Materials.
- xix) “Intellectual Property Rights” means any and all copyright, moral rights, trademark, patent, and other intellectual and proprietary rights, title and interests worldwide, whether vested, contingent, or future, including without limitation all economic rights and all exclusive rights to reproduce, fix, adapt, modify, translate, create derivative works from, extractor re-utilize data from, manufacture, introduce into circulation, publish, distribute, sell, license, sub license, transfer, rent, lease, transmit or provide access electronically, broadcast, display, enter in to computer memory, or otherwise use any portion or copy, in whole or in part, in any form, directly or indirectly, or to authorize or assign others to do so.
- xx) “Supplier's Equipment” means all equipment, tools, apparatus, or things of every kind required in or for installation, completion and maintenance of the System that are to be provided by the Supplier, but excluding the Information Technologies, or other items forming part of the System.

c) **Activities**

- i) “Delivery” means the transfer of the Goods from the Supplier to KEFRI in accordance with the current edition Incoterms specified in the Contract.
- ii) “Installation” means that the System or a Subsystem as specified in the Contract is ready for Commissioning as provided in GCC Clause 26 (Installation).
- iii) “Pre-commissioning” means the testing, checking, and any other required activity that may be specified in the Technical Requirements that are to be carried out by the Supplier in preparation for Commissioning of the System as provided in GCC Clause 26 (Installation).
- iv) “Commissioning” means operation of the System or any Subsystem by the Supplier following Installation, which operation is to be carried out by the Supplier as provided in GCC Clause 27.1 (Commissioning), for the purpose of carrying out Operational Acceptance Test (s).
- v) “Operational Acceptance Tests” means the tests specified in the Technical Requirements and Agreed Project Plan to be carried out to ascertain whether the System, or a specified Sub system, is able to attain the functional and performance requirements specified in the Technical Requirements and Agreed Project Plan, in accordance with the provisions of GCC Clause 27.2 (Operational Acceptance Test).
- vi) “Operational Acceptance” means the acceptance by KEFRI of the System (or any Subsystem(s) where the Contract provides for acceptance of the System in parts), in accordance with GCC Clause 27.3 (Operational Acceptance).

d) **Place and Time**

- i) “Supplier's Country” is the country in which the Supplier is legally organized, as named in the Contract Agreement.
- ii) **Unless otherwise specified in the SCC** “Project Site (s)” means the place (s) in the Site Table in the Technical Requirements Section for the supply and installation of the System.
- iii) “Eligible Country” means the countries and territories eligible for participation in procurements.
- iv) “Day” means calendar day of the Gregorian Calendar.
- v) “Week” means seven (7) consecutive Days, beginning the day of the week as is customary in Kenya.
- vi) “Month” means calendar month of the Gregorian Calendar.
- vii) “Year” means twelve (12) consecutive Months.
- viii) “Effective Date” means the date of fulfillment of all conditions specified in Article 3 (Effective Date for Determining Time for Achieving Operational Acceptance) of the Contract Agreement, for the purpose of determining the Delivery, Installation, and Operational Acceptance dates for the System or Sub system(s).
- ix) “Contract Period” is the time period during which this Contract governs the relations and obligations of KEFRI and Supplier in relation to the System, as **unless otherwise specified in the SCC**, the Contract shall continue in force until the Information System and all the Services have been provided, unless the Contract is terminated earlier in accordance with the terms set out in the Contract.
- x) “Defect Liability Period” (also referred to as the “Warranty Period”) means the period of validity of the warranties given by the Supplier commencing at date of the Operational Acceptance Certificate of the System or Sub system(s), during

which the Supplier is responsible for defects with respect to the System (or the relevant Sub-system[s]) as provided in GCC Clause 29 (Defect Liability).

- xi) “The Coverage Period” means the Days of the Week and the hours of those Days during which maintenance, operational, and/ or technical support services (if any) must be available.
- xii) The Post-Warranty Services Period” means the number of years **defined in the SCC** (if any), following the expiration of the Warranty Period during which the Supplier may be obligated to provide Software licenses, maintenance, and/ or technical support services for the System, either under this Contractor under separate contract(s).

2. Contract Documents

2.1 Subject to Article 1.2 (Order of Precedence) of the Contract Agreement, all documents forming part of the Contract (and all parts of these documents) are intended to be correlative, complementary, and mutually explanatory. The Contract shall be read as a whole.

3. Interpretation

3.1 Governing Language

3.1.1 All Contract Documents and related correspondence exchanged between Procuring Entity and Supplier shall be written in **the English Language** of these tendering documents, and the Contract shall be construed and interpreted in accordance with that language.

3.1.2 If any of the Contract Documents or related correspondence are prepared in a language other than the English Language under GCC Clause 3.1.1 above, the translation of such documents into the **English** language shall prevail in matters of interpretation. The originating party, with respect to such documents shall bear the costs and risks of such translation.

3.2 Singular and Plural The singular shall include the plural and the plural the singular, except where the context otherwise requires.

3.3 Headings

The headings and marginal notes in the GCC are included for ease of reference and shall neither constitute a part of the Contract nor affect its interpretation.

3.4 Persons

Words importing persons or parties shall include firms, corporations, and government entities.

3.5 Incoterms

Unless inconsistent with any provision of the Contract, the meaning of any trade term and the rights and obligations of parties thereunder shall be as prescribed by the Incoterms.

Incoterms means international rules for interpreting trade terms published by the International Chamber of Commerce (latest edition), 38 Cours Albert 1^{er}, 75008 Paris, France.

3.6 Entire Agreement

The Contract constitutes the entire agreement between KEFRI and Supplier with respect to the subject matter of Contract and supersedes all communications, negotiations, and agreements (whether written or oral) of parties with respect to the subject matter of the Contract made prior to the date of Contract.

3.7 Amendment

No amendment or other variation of the Contract shall be effective unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party to the Contract.

3.8 Independent Supplier

The Supplier shall be an independent contractor performing the Contract. The Contract does not create any agency, partnership, joint venture, or other joint relationship between the parties to the Contract.

Subject to the provisions of the Contract, the Supplier shall be solely responsible for the manner in which the Contract is performed. All employees, representatives, or Sub contractors engaged by the Supplier in connection with the performance of the Contract shall be under the complete control of the Supplier and shall not be deemed to be employees of KEFRI, and nothing contained in the Contractor in any sub contract awarded by the Supplier shall be construed to create any contractual relationship between any such employees, representatives, or Sub contractors and KEFRI.

3.9 Joint Venture

If the Supplier is a Joint Venture of two or more firms, all such firms shall be jointly and severally bound to KEFRI for the fulfillment of the provisions of the Contract and shall designate one of such firms to act as a leader with authority to bind the Joint Venture. The composition or constitution of the Joint Venture shall not be altered without the prior consent of KEFRI.

3.10 Non-waiver

3.10.1 Subject to GCC Clause 3.10.2 below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contractor the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, nor shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract.

3.10.2 Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, must be dated and signed by an authorized representative of the party granting such waiver, and must specify the right and the extent to which it is being waived.

3.11 Severability

If any provision or condition of the Contract is prohibited or rendered invalid or unenforceable, such prohibition, invalidity, or unenforceability shall not affect the validity or enforceability of any other provisions and conditions of the Contract.

3.12 Country of Origin

“Origin” means the place where the Information Technologies, Materials, and other Goods for the System were produced or from which the Services are supplied. Goods are produced when, through manufacturing, processing, Software development, or substantial and major assembly or integration of components, a commercially recognized product results that is substantially different in basic characteristics or in purpose or utility from its components. The Origin of Goods and Services is distinct from the nationality of the Supplier and may be different.

4. Notices

4.1 Unless otherwise stated in the Contract, all notices to be given under the Contract shall be in writing and shall be sent, pursuant to GCC Clause 4.3 below, by personal delivery, air mail post, special courier, facsimile, electronic mail, or Electronic Data Interchange (EDI),

with the following provisions.

- 4.1.1 Any notice sent by facsimile, electronic mail, or EDI shall be confirmed within two (2) days after dispatch by notice sent by air mail post or special courier, except as otherwise specified in the Contract.
- 4.1.2 Any notice sent by air mail post or special courier shall be deemed (in the absence of evidence of earlier receipt) to have been delivered ten (10) days after dispatch. In proving the fact of dispatch, it shall be sufficient to show that the envelope containing such notice was properly addressed, stamped, and conveyed to the postal authorities or courier service for transmission by air mail or special courier.
- 4.1.3 Any notice delivered personally or sent by facsimile, electronic mail, or EDI shall be deemed to have been delivered on the date of its dispatch.
- 4.1.4 Either party may change its postal, facsimile, electronic mail, or EDI addresses for receipt of such notices by ten (10) days' notice to the other party in writing.
- 4.2 Notices shall be deemed to include any approvals, consents, instructions, orders, certificates, information and other communication to be given under the Contract.
- 4.3 Pursuant to GCC Clause 18, notices from/to KEFRI are normally given by, or addressed to, the Project Manager, while notices from/to the Supplier are normally given by, or addressed to, the Supplier's Representative, or in its absence its deputy if any. If there is no appointed Project Manager or Supplier's Representative (or deputy), or if their related authority is limited by the SCC for GCC Clauses 18.1 or 18.2.2, or for any other reason, KEFRI or Supplier may give and receive notices at their fall back addresses. The address of the Project Manager and the fall back address of KEFRI are as **specified in the SCC** or as subsequently established/ amended. The address of the Supplier's Representative and the fall back address of the Supplier are as specified in Appendix 1 of the Contract Agreement or as subsequently established/amended.

5. Governing Law

- 5.1 The Contract shall be governed by and interpreted in accordance with the laws of Kenya.
- 5.2 Throughout the execution of the Contract, the Supplier shall comply with the import of goods and services prohibitions in Kenya 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.

6 Fraud and Corruption

- 6.1 KEFRI requires compliance with the laws of Kenya on Anti-Corruption Guidelines and its prevailing sanctions policies and procedures as set forth in its statutes.
- 6.2 KEFRI requires the Suppliers 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 tendering 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. SUBJECT MATTER OF CONTRACT

7 Scope of the System

- 7.1 Unless otherwise expressly **limited in the SCC** or Technical Requirements, the Supplier's obligations cover the provision of Information Technologies, Materials and other Goods as well as the performance of all Services required for the design, development, and implementation (including procurement, quality assurance, assembly, associated site preparation, Delivery, Pre-commissioning, Installation, Testing, and Commissioning) of the System, in accordance with the plans, procedures, specifications, drawings, codes, and any other documents specified in the Contract and the Agreed Project Plan.
- 7.2 The Supplier shall, unless specifically excluded in the Contract, perform all such work and/or supply all such items and Materials not specifically mentioned in the Contract but that can be reasonably inferred from the Contract as being required for attaining Operational Acceptance of the System as if such work and/or items and Materials were expressly mentioned in the Contract.
- 7.3 The Supplier's obligations (if any) to provide Goods and Services as implied by the Recurrent Cost tables of the Supplier's tender, such as consumables, spare parts, and technical services (e.g., maintenance, technical assistance, and operational support), areas **specified in the SCC**, including the relevant terms, characteristics, and timings.

8 Time for Commencement and Operational Acceptance

- 8.1 The Supplier shall commence work on the System within the period **specified in the SCC**, and without prejudice to GCC Clause 28.2, the Supplier shall thereafter proceed with the System in accordance with the time schedule specified in the Implementation Schedule and any refinements made in the Agreed Project Plan.
- 8.2 The Supplier shall achieve Operational Acceptance of the System (or Subsystem(s) where a separate time for Operational Acceptance of such Sub system (s) is specified in the Contract) in accordance with the time schedule specified in the Implementation Schedule and any refinements made in the Agreed Project Plan, or within such extended time to which the Supplier shall be entitled under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).

9 Supplier's Responsibilities

- 9.1 The Supplier shall conduct all activities with due care and diligence, in accordance with the Contract and with the skill and care expected of a competent provider of information technologies, information systems, support, maintenance, training, and other related services, or in accordance with best industry practices. In particular, the Supplier shall provide and employ only technical personnel who are skilled and experienced in the respective callings and supervisory staff who are competent to adequately supervise the work at hand.
- 9.2 The Supplier confirms that it has entered into this Contract on the basis of a proper examination of the data relating to the System provided by KEFRI and on the basis of information that the Supplier could have obtained from a visual inspection of the site (if access to the site was available) and of other data readily available to the Supplier relating to the System as at the date twenty-eight (28) days prior to tender submission. The Supplier acknowledges that any failure to acquaint itself with all such data and information shall not relieve its responsibility for properly estimating the difficulty or cost of successfully performing the Contract.
- 9.3 The Supplier shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach a mutually Agreed Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation

Schedule. Failure to provide such resources, information, and decision-making may constitute grounds for termination pursuant to GCC Clause 41.2.

- 9.4 The Supplier shall acquire in its name all permits, approvals, and/or licenses from all local, state, or national government authorities or public service undertakings in Kenya that are necessary for the performance of the Contract, including, without limitation, visas for the Supplier's and Subcontractor's personnel and entry permits for all imported Supplier's Equipment. The Supplier shall acquire all other permits, approvals, and/or licenses that are not the responsibility of KEFRI under GCC Clause 10.4 and that are necessary for the performance of the Contract.
- 9.5 The Supplier shall comply with all laws in force in Kenya. The laws will include all national, provincial, municipal, or other laws that affect the performance of the Contract and are binding upon the Supplier. The Supplier shall indemnify and hold harmless KEFRI from and against any and all liabilities, damages, claims, fines, penalties, and expenses of whatever nature arising or resulting from the violation of such laws by the Supplier or its personnel, including the Sub contractors and their personnel, but without prejudice to GCC Clause 10.1. The Supplier shall not indemnify KEFRI to the extent that such liability, damage, claims, fines, penalties, and expenses were caused or contributed to by a fault of KEFRI.
- 9.6 The Supplier shall, in all dealings with its labor and the labor of its Subcontractors currently employed on or connected with the Contract, pay due regard to all recognized festivals, official holidays, religious or other customs, and all local laws and regulations pertaining to the employment of labor.
- 9.7 Any Information Technologies or other Goods and Services that will be incorporated in or be required for the System and other supplies shall have their Origin, as defined in GCC Clause 3.12, in a country that shall be an Eligible Country, as defined in GCC Clause 1.1 (e) (iv).
- 9.8 Pursuant to paragraph 2.2e. of Appendix B to the General Conditions the Supplier shall permit and shall cause its subcontractors and sub-consultants to permit, the PPRA and/or persons appointed by the PPRA 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 PPRA if requested by the PPRA. The Supplier's and its Sub contractors' and sub-consultants' attention is drawn to Sub-Clause 6.1 which provides, inter alia, that acts intended to materially impede the exercise of the PPRA's inspection and audit rights constitute a prohibited practice subject to contract termination (as well as to a determination of ineligibility pursuant to the PPRA's prevailing sanctions procedures).
- 9.9 The Supplier shall conform to the sustainable procurement contractual provisions, if and as **specified in the SCC**.
- 9.10 **Unless otherwise specified in the SCC** the Supplier shall have no other Supplier responsibilities.

10 Procuring Entity's Responsibilities

- 10.1 KEFRI shall ensure the accuracy of all information and/or data to be supplied by KEFRI to the Supplier, except when otherwise expressly stated in the Contract.
- 10.2 KEFRI shall be responsible for timely provision of all resources, information, and decision making under its control that are necessary to reach an Agreed Project Plan (pursuant to GCC Clause 19.2) within the time schedule specified in the Implementation Schedule. Failure to provide such resources, information, and decision making may constitute grounds for Termination pursuant to GCC Clause 41.3.1(b).
- 10.3 KEFRI shall be responsible for acquiring and providing legal and physical possession of the site and access to it, and for providing possession of and access to all other are as

reasonably required for the proper execution of the Contract.

- 10.4 If requested by the Supplier, KEFRI shall use its best endeavors to assist the Supplier in obtaining in a timely and expeditious manner all permits, approvals, and/or licenses necessary for the execution of the Contract from all local, state, or national government authorities or public service undertakings that such authorities or under takings require the Supplier or Sub contractors or the personnel of the Supplier or Sub contractors, as the case may be, to obtain.
- 10.5 In such cases where the responsibilities of specifying and acquiring or upgrading telecommunications and/or electric power services falls to the Supplier, as specified in the Technical Requirements, SCC, Agreed Project Plan, or other parts of the Contract, KEFRI shall use its best endeavors to assist the Supplier in obtaining such services in a timely and expeditious manner.
- 10.6 KEFRI shall be responsible for timely provision of all resources, access, and information necessary for the Installation and Operational Acceptance of the System (including, but not limited to, any required telecommunications or electric power services), as identified in the Agreed Project Plan, except where provision of such items is explicitly identified in the Contract as being the responsibility of the Supplier. Delay by KEFRI may result in an appropriate extension of the Time for Operational Acceptance, at the Supplier's discretion.
- 10.7 Unless otherwise specified in the Contractor agreed upon by KEFRI and the Supplier, KEFRI shall provide sufficient, properly qualified operating and technical personnel, as required by the Supplier to properly carry out Delivery, Pre-commissioning, Installation, Commissioning, and Operational Acceptance, at or before the time specified in the Implementation Schedule and the Agreed Project Plan.
- 10.8 KEFRI will designate appropriate staff for the training courses to be given by the Supplier and shall make all appropriate logistical arrangements for such training as specified in the Technical Requirements, SCC, the Agreed Project Plan, or other parts of the Contract.
- 10.9 KEFRI assumes primary responsibility for the Operational Acceptance Test (s) for the System, in accordance with GCC Clause 27.2, and shall be responsible for the continued operation of the System after Operational Acceptance. However, this shall not limit in anyway the Supplier's responsibilities after the date of Operational Acceptance otherwise specified in the Contract.
- 10.10 KEFRI is responsible for performing and safely storing timely and regular backups of its data and Software in accordance with accepted data management principles, except where such responsibility is clearly assigned to the Supplier elsewhere in the Contract.
- 10.11 All costs and expenses involved in the performance of the obligations under this GCC Clause 10 shall be the responsibility of KEFRI, save those to be incurred by the Supplier with respect to the performance of the Operational Acceptance Test (s), in accordance with GCC Clause 27.2.
- 10.12 **Unless otherwise specified in the SCC** KEFRI shall have no other Procuring Entity responsibilities.

C. Payment

11 Contract Price

- 11.1 The Contract Price shall be as specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement.
- 11.2 Unless an adjustment clause is **provided for in the SCC**, the Contract Price shall be a firm lump sum not subject to any alteration, except in the event of a Change in the System pursuant to GCC Clause 39 or to other clauses in the Contract;
- 11.3 The Supplier shall be deemed to have satisfied itself as to the correctness and sufficiency of the Contract Price, which shall, except as otherwise provided for in the Contract, cover all its obligations under the Contract.
- 11.4 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: $(\text{corrected tender price} - \text{tender price}) / \text{tender price} \times 100$.

12 Terms of Payment

- 12.1 The Supplier's request for payment shall be made to KEFRI in writing, accompanied by an invoice describing, as appropriate, the System or Subsystem(s), Delivered, Pre-commissioned, Installed, and Operationally Accepted, and by documents submitted pursuant to GCC Clause 22.5 and upon fulfillment of other obligations stipulated in the Contract. The Contract Price shall be paid as **specified in the SCC**.
- 12.2 No payment made by KEFRI herein shall be deemed to constitute acceptance by KEFRI of the System or any Sub system (s).
- 12.3 Payments shall be made promptly by KEFRI, but in no case later than (sixty (60) days after submission of a valid invoice and upon satisfactorily performance of the contractual obligations by the Supplier. In the event that KEFRI fails to make any payment by its respective due date or within the period set forth in the Contract, KEFRI shall pay to the Supplier interest on the amount of such delayed payment at the rate (s) **specified in the SCC** for the period of delay until payment has been made in full, whether before or after judgment or arbitration award.
- 12.4 Payments shall be made in the currency (ies) specified in the Contract Agreement, pursuant to GCC Clause 11. For Goods and Services supplied locally, payments shall be made **as specified in the SCC**.
- 12.5 **Unless otherwise specified in the SCC**, payment of the foreign currency portion of the Contract Price for Goods supplied from outside Kenya shall be made to the Supplier through an irrevocable Form of credit opened by an authorized bank in the Supplier's Country and will be payable on presentation of the appropriate documents. It is agreed that the Form of credit will be subject to Article 10 of the latest revision of *Uniform Customs and Practice for Documentary Credits*, published by the International Chamber of Commerce, Paris.

13 Securities

13.1 Issuance of Securities

The Supplier shall provide the securities specified below in favor of KEFRI at the times and in the amount, manner, and form specified below.

13.2 Advance Payment Security

- a) Unless otherwise specified in the SCC, the Supplier shall provide within twenty-eight (28) days of the notification of Contract award an Advance Payment Security in the amount and currency of the Advance Payment specified in SCC for GCC Clause 12.1 above and valid until the System is Operationally Accepted.
- b) The security shall be in the form provided in the tendering documents or in another form acceptable to KEFRI. The amount of the security shall be reduced in proportion to the value of the System executed by and paid to the Supplier from time to time and shall automatically become null and void when the full amount of the advance payment has been recovered by KEFRI. **Unless otherwise specified in the SCC**, the reduction in value and expiration of the Advance Payment Security are calculated as follows:

$P*a/(100-a)$, where “P” is the sum of all payments effected so far to the Supplier (excluding the Advance Payment), and “a” is the Advance Payment expressed as a percentage of the Contract Price pursuant to the SCC for GCC Clause 12.1.

The security shall be returned to the Supplier immediately after its expiration.

13.3 Performance Security

- 13.3.1 The Supplier shall, within twenty-eight (28) days of the notification of Contract award, provide a security for the due performance of the Contract in the amount and currency **specified in the SCC**.
- 13.3.2 The security shall be a bank guarantee in the form provided in the Sample Contractual Forms Section of the tendering documents, or it shall be in another form acceptable to KEFRI.
- 13.3.3 The security shall automatically become null and void once all the obligations of the Supplier under the Contract have been fulfilled, including, but not limited to, any obligations during the Warranty Period and any extensions to the period. The security shall be returned to the Supplier no later than twenty-eight (28) days after its expiration.
- 13.3.4 Upon Operational Acceptance of the entire System, the security shall be reduced to the amount specified in the SCC, on the date of the Operational Acceptance, so that the reduced security would only cover the remaining warranty obligations of the Supplier.

14 Taxes and Duties

- 14.1 For Goods or Services supplied from outside and inside Kenya, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside Kenya and inside Kenya, and these duties or taxes shall be made part of the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to, in which case the duties and taxes will be the Supplier's responsibility.
- 14.2 For Goods or Services supplied locally, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods or Services to KEFRI. The only exception are taxes or duties, such as value-added or sales tax or stamp duty as apply to, or are clearly identifiable, on the invoices and provided they apply in

Kenya, and only if these taxes, levies and/or duties are also excluded from the Contract Price in Article 2 of the Contract Agreement and the Price Schedule it refers to.

- 14.3 If any tax exemptions, reductions, allowances, or privileges may be available to the Supplier in Kenya, KEFRI shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.
- 14.4 For the purpose of the Contract, it is agreed that the Contract Price specified in Article 2 (Contract Price and Terms of Payment) of the Contract Agreement is based on the taxes, duties, levies, and charges prevailing at the date twenty-eight (28) days prior to the date of tender submission in Kenya (also called "Tax" in this GCC Clause 14.4). If any Tax rates are increased or decreased, a new Tax is introduced, an existing Tax is abolished, or any change in interpretation or application of any Tax occurs in the course of the performance of the Contract, which was or will be assessed on the Supplier, its Sub contractors, or their employees in connection with performance of the Contract, an equitable adjustment to the Contract Price shall be made to fully take into account any such change by addition to or reduction from the Contract Price, as the case may be.

D. Intellectual Property

15 Copyright

- 15.1 The Intellectual Property Rights in all Standard Software and Standard Materials shall remain vested in the owner of such rights.
- 15.2 KEFRI agrees to restrict use, copying, or duplication of the Standard Software and Standard Materials in accordance with GCC Clause 16, except that additional copies of Standard Materials may be made by KEFRI for use within the scope of the project of which the System is apart, in the event that the Supplier does not deliver copies within thirty (30) days from receipt of a request for such Standard Materials.
- 15.3 KEFRI's contractual rights to use the Standard Software or elements of the Standard Software may not be assigned, licensed, or otherwise transferred voluntarily except in accordance with the relevant license agreement or **unless otherwise specified in the SCC** to a legally constituted successor organization (e.g., a reorganization of a public entity formally authorized by the government or through a merger or acquisition of a private entity).
- 15.4 **Unless otherwise specified in the SCC**, the Intellectual Property Rights in all Custom Software and Custom Materials specified in Appendices 4 and 5 of the Contract Agreement (if any) shall, at the date of this Contractor on creation of the rights (if later than the date of this Contract), vest in KEFRI. The Supplier shall do and execute or arrange for the doing and executing of each necessary act, document, and thing that KEFRI may consider necessary or desirable to perfect the right, title, and interest of KEFRI in and to those rights. In respect of such Custom Software and Custom Materials, the Supplier shall ensure that the holder of an or a right in such an item does not assert it, and the Supplier shall, if requested to do so by KEFRI and where permitted by applicable law, ensure that the holder of such a moral right waives it.
- 15.5 **Unless otherwise specified in the SCC**, escrow arrangements shall NOT be required.

16 Software License Agreements

- 16.1 Except to the extent that the Intellectual Property Rights in the Software vest in KEFRI, the Supplier hereby grants to KEFRI license to access and use the Software, including all inventions, designs, and marks embodied in the Software. Such license to access and use the Software shall:

- a) be:
 - i. non-exclusive;
 - ii. fully paid up and irrevocable (except that it shall terminate if the Contract terminates under GCC Clauses 41.1 or 41.3);
 - iii. **unless otherwise specified in the SCC** valid throughout Kenya;
 - iv. **unless otherwise specified in the SCC** subject to NO additional restrictions.
- b) Permit the Software to be:
 - i. used or copied for use on or with the computer(s) for which it was acquired (if specified in the Technical Requirements and/or the Supplier's tender), plus a backup computer(s) of the same or similar capacity, if the primary is (are) in operative, and during a reasonable transitional period when use is being transferred between primary and back up;
 - ii. used or copied for use on or transferred to are placement computer (s), (and use on the original and replacement computer(s) may be simultaneous during a reasonable transitional period) provided that, if the Technical Requirements and/or the Supplier's tender specifies a class of computer to which the license is restricted, the replacement computer (s) is (are) within that class;
 - iii. if the nature of the System is such as to permit such access, accessed from other computers connected to the primary and/or back up computer (s) by means of a local or wide-area network or similar arrangement, and used on or copied for use on those other computers to the extent necessary to that access;
 - iv. reproduced for safe keeping or back up purposes;
 - v. customized, adapted, or combined with other computer software for use by KEFRI, provided that derivative software incorporating any substantial part of the delivered, restricted Software shall be subject to same restrictions as a reset forth in this Contract;
 - vi. **unless otherwise specified in the SCC**, disclosed to, and reproduced for use by, support service suppliers and their sub-contractors, (and KEFRI may sub-license such persons to use and copy for use the Software) to the extent reasonably necessary to the performance of their support service contracts, subject to the same restrictions as a reset forth in this Contract; and
 - vii. **unless otherwise specified in the SCC** disclosed to, and reproduced for use by, NO other parties.

16.2 The Supplier has the right to audit the Standard Software to verify compliance with the above license agreements.

Unless otherwise specified in the SCC, KEFRI will make available to the Supplier, within seven (7) days of a written request, accurate and up-to-date records of the number and location of copies, the number of authorized users, or any other relevant data required to demonstrate use of the Standard Software as per the license agreement. If and only if, expressly agreed in writing between KEFRI and the Supplier, Procuring Entity will allow, under a pre-specified agreed procedure, the execution of embedded software functions under Supplier's control, and unencumbered transmission of resulting information on software usage.

17 Confidential Information

17.1 **Unless otherwise specified in the SCC**, the "Receiving Party" (either KEFRI or the Supplier) shall keep confidential and shall not, without the written consent of the other party to this Contract ("the Disclosing Party"), divulge to any third party any documents, data, or other information of a confidential nature ("Confidential Information") connected with this Contract, and furnished directly or indirectly by the Disclosing Party prior to or during performance, or following termination, of this Contract.

17.2 For the purposes of GCC Clause 17.1, the Supplier is also deemed to be the Receiving Party of Confidential Information generated by the Supplier itself in the course of the

performance of its obligations under the Contract and relating to the businesses, finances, suppliers, employees, or other contacts of KEFRI or KEFRI's use of the System.

17.3 Notwithstanding GCC Clauses 17.1 and 17.2:

- a) the Supplier may furnish to its Subcontractor Confidential Information of KEFRI to the extent reasonably required for the Subcontractor to perform its work under the Contract; and
- b) KEFRI may furnish Confidential Information of the Supplier: (i) to its support service suppliers and their subcontractors to the extent reasonably required for them to perform their work under their support service contracts; and (ii) to its affiliates and subsidiaries, in which event the Receiving Party shall ensure that the person to whom it furnishes Confidential Information of the Disclosing Party is aware of and a tenderer by the Receiving Party's obligations under this GCC Clause 17 as if that person were party to the Contract in place of the Receiving Party.

17.4 KEFRI shall not, without the Supplier's prior written consent, use any Confidential Information received from the Supplier for any purpose other than the operation, maintenance and further development of the System. Similarly, the Supplier shall not, without KEFRI's prior written consent, use any Confidential Information received from KEFRI for any purpose other than those that are required for the performance of the Contract.

17.5 The obligation of a party under GCC Clauses 17.1 through 17.4 above, however, shall not apply to that information which:

- a) Now or hereafter enters the public domain through no fault of the Receiving Party;
- b) can be proven to have been possessed by the Receiving Party at the time of disclosure and that was not previously obtained, directly or indirectly, from the Disclosing Party;
- c) otherwise lawfully becomes available to the Receiving Party from a third party that has no obligation of confidentiality.

17.6 The above provisions of this GCC Clause 17 shall not in any way modify any undertaking of confidentiality given by either of the parties to this Contract prior to the date of the Contract in respect of the System or any part thereof.

17.7 **Unless otherwise specified in the SCC**, the provisions of this GCC Clause 17 shall survive the termination, for whatever reason, of the Contract for three (3) years.

E. Supply, Installation, Testing, Commissioning, and Acceptance of the System

18 Representatives

18.1 Project Manager

If the Project Manager is not named in the Contract, then within fourteen (14) days of the Effective Date, KEFRI shall appoint and notify the Supplier in writing of the name of the Project Manager. The Procuring Entity may from time to time appoint some other person as the Project Manager in place of the person previously so appointed and shall give a notice of the name of such other person to the Supplier without delay. No such appointment shall be made at such a time or in such a manner as to impede the progress of work on the System. Such appointment shall take effect only upon receipt of such notice by the Supplier. **Unless otherwise specified in the SCC** (if any), the Project Manager shall have the authority to represent KEFRI on all day-to-day matters relating to the System or arising from the Contract, and shall normally be the person giving or receiving notices on behalf of KEFRI pursuant to GCC Clause 4.

18.2 Supplier's Representative

18.2.1 If the Supplier's Representative is not named in the Contract, then within fourteen (14) days of the Effective Date, the Supplier shall appoint the Supplier's Representative and shall request KEFRI in writing to approve the person so appointed. The request must be accompanied by a detailed curriculum vitae for the nominee, as well as a description of any other System or non-System responsibilities the nominee would retain while performing the duties of the Supplier's Representative. If KEFRI does not object to the appointment within fourteen (14) days, the Supplier's Representative shall be deemed to have been approved. If KEFRI objects to the appointment within fourteen (14) days giving the reason therefor, then the Supplier shall appoint a replacement within fourteen (14) days of such objection in accordance with this GCC Clause 18.2.1.

18.2.2 **Unless otherwise specified in the SCC** (if any), the Supplier's Representative shall have the authority to represent the Supplier on all day-to-day matters relating to the System or arising from the Contract, and shall normally be the person giving or receiving notices on behalf of the Supplier pursuant to GCC Clause 4.

18.2.3 The Supplier shall not revoke the appointment of the Supplier's Representative without KEFRI's prior written consent, which shall not be unreasonably withheld. If KEFRI consents to such an action, the Supplier shall appoint another person of equal or superior qualifications as the Supplier's Representative, pursuant to the procedure set out in GCC Clause 18.2.1.

18.2.4 The Supplier's Representative and staff are obliged to work closely with KEFRI's Project Manager and staff, act within their own authority, and a tenderer by directives issued by KEFRI that are consistent with the terms of the Contract. The Supplier's Representative is responsible for managing the activities of its personnel and any subcontracted personnel.

18.2.5 The Supplier's Representative may, subject to the approval of KEFRI (which shall not be unreasonably withheld), at any time delegate to any person any of the powers, functions, and authorities vested in him or her. Any such delegation may be revoked at any time. Any such delegation or revocation shall be subject to a prior notice signed by the Supplier's Representative and shall specify the powers, functions, and authorities there by delegated or revoked. No such delegation or revocation shall take effect unless and until the notice of it has been delivered.

18.2.6 Any act or exercise by any person of powers, functions and authorities so delegated to him or her in accordance with GCC Clause 18.2.5 shall be deemed to be an act or exercise by the Supplier's Representative.

18.3 Objections and Removals

18.3.1 KEFRI may by notice to the Supplier object to any representative or person employed by the Supplier in the execution of the Contract who, in the reasonable opinion of KEFRI, may have behaved inappropriately, be incompetent, or be negligent. KEFRI shall provide evidence of the same, where upon the Supplier shall remove such person from work on the System.

18.3.2 If any representative or person employed by the Supplier is removed in accordance with GCC Clause 18.3.1, the Supplier shall, where required, promptly appoint a replacement.

19 Project Plan

- 19.1 In close cooperation with KEFRI and based on the Preliminary Project Plan included in the Supplier's tender, the Supplier shall develop a Project Plan encompassing the activities specified in the Contract. The contents of the Project Plan shall be as **specified in the SCC** and/ or Technical Requirements.
- 19.2 **Unless otherwise specified in the SCC**, within thirty (30) days from the Effective Date of the Contract, the Supplier shall present a Project Plan to KEFRI. KEFRI shall, within fourteen (14) days of receipt of the Project Plan, notify the Supplier of any respects in which it considers that the Project Plan does not adequately ensure that the proposed program of work, proposed methods, and/or proposed Information Technologies will satisfy the Technical Requirements and/or the SCC (in this Clause 19.2 called "non-conformities" below). The Supplier shall, within five (5) days of receipt of such notification, correct the Project Plan and resubmit to KEFRI. KEFRI shall, within five (5) days of resubmission of the Project Plan, notify the Supplier of any remaining non-conformities. This procedure shall be repeated as necessary until the Project Plan is free from non-conformities. When the Project Plan is free from non-conformities, KEFRI shall provide confirmation in writing to the Supplier. This approved Project Plan ("the Agreed Project Plan") shall be contractually binding on KEFRI and the Supplier.
- 19.3 If required, the impact on the Implementation Schedule of modifications agreed during finalization of the Agreed Project Plan shall be incorporated in the Contract by amendment, in accordance with GCC Clauses 39 and 40.
- 19.4 The Supplier shall undertake to supply, install, test, and commission the System in accordance with the Agreed Project Plan and the Contract.
- 19.5 **Unless otherwise specified in the SCC**, the Supplier shall submit to KEFRI Monthly Progress Reports summarizing:
- i) Results accomplished during the prior period;
 - ii) cumulative deviations to date from schedule of progress milestones as specified in the Agreed Project Plan;
 - iii) corrective actions to be taken to return to planned schedule of progress; proposed revisions to planned schedule;
 - iv) other issues and outstanding problems; proposed actions to be taken;
 - v) resources that the Supplier expects to be provided by KEFRI and/ or actions to be taken by KEFRI in the next reporting period;
 - vi) other issues or potential problems the Supplier foresees that could impact on project progress and/or effectiveness.
- 19.6 The Supplier shall submit to KEFRI other (periodic) reports **as specified in the SCC**.

20 Sub-contracting

- 20.1 Appendix 3 (List of Approved Subcontractors) to the Contract Agreement specifies critical items of supply or services and a list of Subcontractors for each item that are considered acceptable by KEFRI. If no Subcontractors are listed for an item, the Supplier shall prepare a list of Subcontractors it considers qualified and wishes to be added to the list for such items. The Supplier may from time to time propose additions to or deletions from any such list. The Supplier shall submit any such list or any modification to the list to KEFRI for its approval insufficient time so as not to impede the progress of work on the System. KEFRI shall not withhold such approval unreasonably. Such approval by KEFRI of a Subcontractor (s) shall not relieve the Supplier from any of its obligations, duties, or responsibilities under the Contract.

- 20.2 The Supplier may, at its discretion, select and employ Subcontractors for such critical items from those Subcontractors listed pursuant to GCC Clause 20.1. If the Supplier wishes to employ a Subcontractor not so listed, or subcontract an item not so listed, it must seek KEFRI's prior approval under GCC Clause 20.3.
- 20.3 For items for which pre-approved Subcontractor lists have not been specified in Appendix 3 to the Contract Agreement, the Supplier may employ such Subcontractors as it may select, provided: (i) the Supplier notifies KEFRI in writing at least twenty-eight (28) days prior to the proposed mobilization date for such Subcontractor; and (ii) by the end of this period either KEFRI has granted its approval in writing or fails to respond. The Supplier shall not engage any Subcontractor to which KEFRI has objected in writing prior to the end of the notice period. The absence of a written objection by KEFRI during the above specified period shall constitute formal acceptance of the proposed Subcontractor. Except to the extent that it permits the deemed approval of KEFRI of Subcontractors not listed in the Contract Agreement, nothing in this Clause, however, shall limit the rights and obligations of either KEFRI or Supplier as they are specified in GCC Clauses 20.1 and 20.2, or in Appendix 3 of the Contract Agreement.

21 Design and Engineering

21.1 Technical Specifications and Drawings

- 21.1.1 The Supplier shall execute the basic and detailed design and the implementation activities necessary for successful installation of the System in compliance with the provisions of the Contract, where not so specified, in accordance with good industry practice.

The Supplier shall be responsible for any discrepancies, errors or omissions in the specifications, drawings, and other technical documents that it has prepared, whether such specifications, drawings, and other documents have been approved by the Project Manager or not, provided that such discrepancies, errors, or omissions are not because of inaccurate information furnished in writing to the Supplier by or on behalf of KEFRI.

- 21.1.2 The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification, or other document, or any modification of such design, drawings, specification, or other documents provided or designated by or on behalf of KEFRI, by giving a notice of such disclaimer to the Project Manager.

21.2 Codes and Standards

Wherever references are made in the Contract to codes and standards in accordance with which the Contract shall be executed, the edition or the revised version of such codes and standards current at the date twenty-eight (28) days prior to date of tender submission shall apply. During Contract execution, any changes in such codes and standards shall be applied after approval by KEFRI and shall be treated in accordance with GCC Clause 39.3.

21.3 Approval/ Review of Controlling Technical Documents by the Project Manager

- 21.3.2 **Unless otherwise specified in the SCC**, there will NO Controlling Technical Documents required. However, **if the SCC specifies** Controlling Technical Documents, the Supplier shall prepare and furnish such documents for the Project Manager's approval or review.

Any part of the System covered by or related to the documents to be approved by the Project Manager shall be executed only after the Project Manager's approval of these documents.

GCC Clauses 21.3.2 through 21.3.7 shall apply to those documents requiring the Project Manager's approval, but not to those furnished to the Project Manager for its review only.

- 21.3.3 Within fourteen (14) days after receipt by the Project Manager of any document requiring the Project Manager's approval in accordance with GCC Clause 21.3.1, the Project Manager shall either return one copy of the document to the Supplier with its approval endorsed on the document or shall notify the Supplier in writing of its

disapproval of the document and the reasons for disapproval and the modifications that the Project Manager proposes. If the Project Manager fails to take such action within the fourteen (14) days, then the document shall be deemed to have been approved by the Project Manager.

- 21.3.4 The Project Manager shall not disapprove any document except on the grounds that the document does not comply with some specified provision of the Contract or that it is contrary to good industry practice.
- 21.3.5 If the Project Manager disapproves the document, the Supplier shall modify the document and resubmit it for the Project Manager's approval in accordance with GCC Clause 21.3.2. If the Project Manager approves the document subject to modification(s), the Supplier shall make the required modification(s), and the document shall then be deemed to have been approved, subject to GCC Clause 21.3.5. The procedure set out in GCC Clauses 21.3.2 through 21.3.4 shall be repeated, as appropriate, until the Project Manager approves such documents.
- 21.3.6 If any dispute occurs between KEFRI and the Supplier in connection with or arising out of the disapproval by the Project Manager of any document and/ or any modification (s) to a document that cannot be settled between the parties within a reasonable period, then, in case the Contract Agreement includes and names an Adjudicator, such dispute may be referred to the Adjudicator for determination in accordance with GCC Clause 43.1 (Adjudication). If such dispute is referred to an Adjudicator, the Project Manager shall give instructions as to whether and if so, how, performance of the Contract is to proceed. The Supplier shall proceed with the Contract in accordance with the Project Manager's instructions, provided that if the Adjudicator upholds the Supplier's view on the dispute and if KEFRI has not given notice under GCC Clause 43.1.2, then the Supplier shall be reimbursed by KEFRI for any additional costs incurred by reason of such instructions and shall be relieved of such responsibility or liability in connection with the dispute and the execution of the instructions as the Adjudicator shall decide, and the Time for Achieving Operational Acceptance shall be extended accordingly.
- 21.3.7 The Project Manager's approval, with or without modification of the document furnished by the Supplier, shall not relieve the Supplier of any responsibility or liability imposed upon it by any provisions of the Contract except to the extent that any subsequent failure results from modifications required by the Project Manager or inaccurate information furnished in writing to the Supplier by or on behalf of KEFRI.
- 21.3.8 The Supplier shall not depart from any approved document unless the Supplier has first submitted to the Project Manager an amended document and obtained the Project Manager's approval of the document, pursuant to the provisions of this GCC Clause 21.3. If the Project Manager requests any change in any already approved document and/or in any document based on such an approved document, the provisions of GCC Clause 39 (Changes to the System) shall apply to such request.

22 Procurement, Delivery, and Transport

- 22.1 Subject to related Procuring Entity's responsibilities pursuant to GCC Clauses 10 and 14, the Supplier shall manufacture or procure and transport all the Information Technologies, Materials, and other Goods in an expeditious and orderly manner to the Project Site.
- 22.2 Delivery of the Information Technologies, Materials, and other Goods shall be made by the Supplier in accordance with the Technical Requirements.
- 22.3 Early or partial deliveries require the explicit written consent of KEFRI; which consent shall not be unreasonably withheld.
- 22.4 Packaging and Transportation

22.4.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during shipment. The packing, marking, and documentation within and outside the packages shall comply strictly with KEFRI's instructions to the Supplier.

22.4.2 The Supplier will bear responsibility for and cost of transport to the Project Sites in accordance with the terms and conditions used in the specification of prices in the Price Schedules, including the terms and conditions of the associated Inco terms.

22.4.3 **Unless otherwise specified in the SCC**, the Supplier shall be free to use transportation through carriers registered in any eligible country and to obtain insurance from any eligible source country.

Unless otherwise specified in the SCC, the Supplier will provide KEFRI with shipping and other documents, as specified below:

22.4.4 For Goods supplied from outside Kenya:

Upon shipment, the Supplier shall notify KEFRI and the insurance company contracted by the Supplier to provide cargo insurance by cable, facsimile, electronic mail, or EDI with the full details of the shipment. The Supplier shall promptly send the following documents to KEFRI by mail or courier, as appropriate, with a copy to the cargo insurance company:

- a Two copies of the Supplier's invoice showing the description of the Goods, quantity, unit price, and total amount;
- b usual transportation documents;
- c insurance certificate;
- d certificate (s) of origin; and
- e estimated time and point of arrival in Kenya and at the site.

25.5.2 For Goods supplied locally (i.e., from within Kenya):

Upon shipment, the Supplier shall notify KEFRI by cable, facsimile, electronic mail, or EDI with the full details of the shipment. The Supplier shall promptly send the following documents to KEFRI by mail or courier, as appropriate:

- a Two copies of the Supplier's invoice showing the Goods' description, quantity, unit price, and total amount;
- b Delivery note, railway receipt, or truck receipt;
- c certificate of insurance;
- d certificate (s) of origin; and
- e estimated time of arrival at the site.

25.6 Customs Clearance

- a) KEFRI will bear responsibility for, and cost of, customs clearance into Kenya in accordance with the particular Incoterm(s) used for Goods supplied from outside Kenya in the Price Schedules referred to by Article 2 of the Contract Agreement.
- b) At the request of KEFRI, the Supplier will make available a representative or agent during the process of customs clearance in Kenya for goods supplied from outside Kenya. In the event of delays in customs clearance that are not the fault of the Supplier:
 - i) the Supplier shall be entitled to an extension in the Time for Achieving Operational Acceptance, pursuant to GCC Clause 40;
 - ii) the Contract Price shall be adjusted to compensate the Supplier for any additional storage charges that the Supplier may incur as a result of the delay.

23 Product Upgrades

- 23.1 At any point during performance of the Contract, should technological advances be introduced by the Supplier for Information Technologies originally offered by the Supplier in its tender and still to be delivered, the Supplier shall be obligated to offer to KEFRI the latest versions of the available Information Technologies having equal or better performance or functionality at the same or lesser unit prices, pursuant to GCC Clause39 (Changes to the System).
- 23.2 At any point during performance of the Contract, for Information Technologies still to be delivered, the Supplier will also pass on to KEFRI any cost reductions and additional and/or improved support and facilities that it offers to other clients of the Supplier in Kenya, pursuant to GCC Clause39 (Changes to the System).
- 23.3 During performance of the Contract, the Supplier shall offer to KEFRI all new versions, releases, and updates of Standard Software, as well as related documentation and technical support services, within thirty (30) days of their availability from the Supplier to other clients of the Supplier in Kenya, and no later than twelve (12) months after they are released in the country of origin. In no case will the prices for these Software exceed those quoted by the Supplier in the Recurrent Costs tables in its tender.
- 23.4 **Unless otherwise specified in the SCC**, during the Warranty Period, the Supplier will provide at no additional cost to KEFRI all new versions, releases, and updates for all Standard Software that are used in the System, within thirty (30) days of their availability from the Supplier to other clients of the Supplier in Kenya, and no later than twelve (12) months after they are released in the country of origin of the Software.
- 23.5 KEFRI shall introduce all new versions, releases or updates of the Software within eighteen (18) months of receipt of a production-ready copy of the new version, release, or update, provided that the new version, release, or update does not adversely affect System operation or performance or require extensive reworking of the System. In cases where the new version, release, or update adversely affects System operation or performance, or requires extensive reworking of the System, the Supplier shall continue to support and maintain the version or release previously in operation for as long as necessary to allow introduction of the new version, release, or update. In no case shall the Supplier stop supporting or maintaining a version or release of the Software less than twenty-four (24) months after KEFRI receives a production-ready copy of a subsequent version, release, or update. KEFRI shall use all reasonable endeavors to implement any new version, release, or update as soon as practicable, subject to the twenty-four-month-long stop date.

24 Implementation, Installation, and Other Services

- 24.1 The Supplier shall provide all Services specified in the Contract and Agreed Project Plan in accordance with the highest standards of professional competence and integrity.
- 24.2 Prices charged by the Supplier for Services, if not included in the Contract, shall be agreed upon in advance by the parties (including, but not restricted to, any prices submitted by the Supplier in the Recurrent Cost Schedules of its Tender) and shall not exceed the prevailing rates charged by the Supplier to other Procuring Entity's in Kenya for similar services.

25 Inspections and Tests

- 25.1 KEFRI or its representative shall have the right to inspect and/or test any components of the System, as specified in the Technical Requirements, to confirm their good working order and/ or conformity to the Contract at the point of delivery and/ or at the Project Site.
- 25.2 KEFRI or its representative shall be entitled to attend any such inspections and/or tests of

the components, provided that KEFRI shall bear all costs and expenses incurred in connection with such attendance, including but not limited to all inspection agent fees, travel, and related expenses.

25.3 Should the inspected or tested components fail to conform to the Contract, KEFRI may reject the component (s), and the Supplier shall either replace the rejected component (s), or make alterations as necessary so that it meets the Contract requirements free of cost to KEFRI.

25.4 The Project Manager may require the Supplier to carry out any inspection and/or test not specified in the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such inspection and/ or test shall be added to the Contract Price. Further, if such inspection and/ or test impedes the progress of work on the System and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Time for Achieving Operational Acceptance and the other obligations so affected.

25.5 If any dispute shall arise between the parties in connection with or caused by an inspection and/ or with regard to any component to be incorporated in the System that cannot be settled amicably between the parties within a reasonable period of time, either party may invoke the process pursuant to GCC Clause 43 (Settlement of Disputes), starting with referral of the matter to the Adjudicator in case an Adjudicator is included and named in the Contract Agreement.

26 Installation of the System

26.1 As soon as the System, or any Subsystem, has, in the opinion of the Supplier, been delivered, Pre- commissioned, and made ready for Commissioning and Operational Acceptance Testing in accordance with the Technical Requirements, the SCC and the Agreed Project Plan, the Supplier shall so notify KEFRI in writing.

26.2 The Project Manager shall, within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 26.1, either issue an Installation Certificate in the form specified in the Sample Contractual Forms Section in the tendering documents, stating that the System, or major component or Subsystem (if Acceptance by major component or Sub system is specified pursuant to the SCC for GCC Clause 27.2.1), has achieved Installation by the date of the Supplier's notice under GCC Clause 26.1, or notify the Supplier in writing of any defects and/or deficiencies, including, but not limited to, defects or deficiencies in the interoperability or integration of the various components and/or Subsystems making up the System. The Supplier shall use all reasonable endeavors to promptly remedy any defect and/ or deficiencies that the Project Manager has notified the Supplier of. The Supplier shall then promptly carry out retesting of the System or Sub system and, when in the Supplier's opinion the System or Sub system is ready for Commissioning and Operational Acceptance Testing, notify KEFRI in writing, in accordance with GCC Clause 26.1. The procedure set out in this GCC Clause shall be repeated, as necessary, until an Installation Certificate is issued.

26.3 If the Project Manager fails to issue the Installation Certificate and fails to inform the Supplier of any defects and/or deficiencies within fourteen (14) days after receipt of the Supplier's notice under GCC Clause 26.1, or if KEFRI puts the System or a Subsystem in to production operation, then the System (or Subsystem) shall be deemed to have achieved successful Installation as of the date of the Supplier's notice or repeated notice, or when KEFRI put the System in to production operation, as the case may be.

27 Commissioning and Operational Acceptance

27.1 Commissioning

27.1.1 Commissioning of the System (or Subsystem if specified pursuant to the SCC for GCC Clause 27.2.1) shall be commenced by the Supplier:

- a) immediately after the Installation Certificate is issued by the Project Manager, pursuant to GCC Clause 26.2; or
- b) as otherwise specified in the Technical Requirement or the Agreed Project Plan; or
- c) immediately after Installation is deemed to have occurred, under GCC Clause 26.3.

27.1.2 KEFRI shall supply the operating and technical personnel and all materials and information reasonably required to enable the Supplier to carry out its obligations with respect to Commissioning. Production use of the System or Subsystem(s) shall not commence prior to the start of formal Operational Acceptance Testing.

27.2 Operational Acceptance Tests

27.2.1 The Operational Acceptance Tests (and repeats of such tests) shall be the primary responsibility of KEFRI (in accordance with GCC Clause 10.9), but shall be conducted with the full cooperation of the Supplier during Commissioning of the System (or major components or Subsystem[s]), to ascertain whether the System (or major component or Subsystem[s]) conforms to the Technical Requirements and meets the standard of performance quoted in the Supplier's tender, including, but not restricted to, the functional and technical performance requirements. **Unless otherwise specified in the SCC**, the Operational Acceptance Tests during Commissioning will be conducted as specified in the Technical Requirements and/ or the Agreed Project Plan. At KEFRI's discretion, Operational Acceptance Tests may also be performed on replacement Goods, upgrades and new version releases, and Goods that are added or field-modified after Operational Acceptance of the System.

27.2.2 If for reasons attributable to KEFRI, the Operational Acceptance Test of the System (or Subsystem[s] or major components, pursuant to the SCC for GCC Clause 27.2.1) cannot be successfully completed within ninety (90) days from the date of Installation or any other period agreed upon in writing by KEFRI and the Supplier, the Supplier shall be deemed to have fulfilled its obligations with respect to the technical and functional aspects of the Technical Specifications, SCC and/ or the Agreed Project Plan, and GCC Clause 28.2 and 28.3 shall not apply.

27.3 Operational Acceptance

27.3.1 Subject to GCC Clause 27.4 (Partial Acceptance) below, Operational Acceptance shall occur in respect of the System, when

- a) the Operational Acceptance Tests, as specified in the Technical Requirements, and/or SCC and/or the Agreed Project Plan have been successfully completed; or
- b) the Operational Acceptance Tests have not been successfully completed or have not been carried out for reasons that are attributable to KEFRI within the period from the date of Installation or any other agreed-upon period as specified in GCC Clause 27.2.2 above; or
- c) KEFRI has put the System into production or use for sixty (60) consecutive days. If the System is put into production or use in this manner, the Supplier shall notify KEFRI and document such use.

27.3.2 At any time after any of the events set out in GCC Clause 27.3.1 have occurred, the

Supplier may give a notice to the Project Manager requesting the issue of an Operational Acceptance Certificate.

- 27.3.3 After consultation with KEFRI, and within fourteen (14) days after receipt of the Supplier's notice, the Project Manager shall:
- a Issue an Operational Acceptance Certificate; or
 - b Notify the Supplier in writing of any defect or deficiencies or other reason for the failure of the Operational Acceptance Tests; or
 - c Issue the Operational Acceptance Certificate, if the situation covered by GCC Clause 27.3.1 (b) arises.

27.3.4 The Supplier shall use all reasonable endeavors to promptly remedy any defect and/or deficiencies and/or other reasons for the failure of the Operational Acceptance Test that the Project Manager has notified the Supplier of. Once such remedies have been made by the Supplier, the Supplier shall notify KEFRI, and KEFRI, with the full cooperation of the Supplier, shall use all reasonable endeavors to promptly carry out retesting of the System or Sub system. Upon the successful conclusion of the Operational Acceptance Tests, the Supplier shall notify KEFRI of its request for Operational Acceptance Certification, in accordance with GCC Clause 27.3.3. KEFRI shall then issue to the Supplier the Operational Acceptance Certification in accordance with GCC Clause 27.3.3 (a), or shall notify the Supplier of further defects, deficiencies, or other reasons for the failure of the Operational Acceptance Test. The procedure set out in this GCC Clause 27.3.4 shall be repeated, as necessary, until an Operational Acceptance Certificate is issued.

- 27.3.5 If the System or Subsystem fails to pass the Operational Acceptance Test(s) in accordance with GCC Clause 27.2, the neither:
- a KEFRI may consider terminating the Contract, pursuant to GCC Clause 41.2.2; or
 - b If the failure to achieve Operational Acceptance within the specified time period is a result of the failure of KEFRI to fulfill its obligations under the Contract, then the Supplier shall be deemed to have fulfilled its obligations with respect to the relevant technical and functional aspects of the Contract, and GCC Clauses 30.3 and 30.4 shall not apply.

27.3.6 If within fourteen (14) days after receipt of the Supplier's notice the Project Manager fails to issue the Operational Acceptance Certificate or fails to inform the Supplier in writing of the justifiable reasons why the Project Manager has not issued the Operational Acceptance Certificate, the System or Subsystem shall be deemed to have been accepted as of the date of the Supplier's said notice.

27.4 Partial Acceptance

27.4.1 If so specified in the SCC for GCC Clause 27.2.1, Installation and Commissioning shall be carried out individually for each identified major component or Subsystem (s) of the System. In this event, the provisions in the Contract relating to Installation and Commissioning, including the Operational Acceptance Test, shall apply to each such major component or Subsystem individually, and Operational Acceptance Certificate (s) shall be issued accordingly for each such major component or Subsystem of the System, subject to the limitations contained in GCC Clause 27.4.2.

27.4.2 The issuance of Operational Acceptance Certificates for individual major components or Subsystems pursuant to GCC Clause 27.4.1 shall not relieve the Supplier of its obligation to obtain an Operational Acceptance Certificate for the System as an integrated whole (if so specified in the SCC for GCC Clauses 12.1 and 27.2.1) once all major components and Subsystems have been supplied, installed, tested, and commissioned.

27.4.3 In the case of minor components for the System that by their nature do not require Commissioning or an Operational Acceptance Test (e.g., minor fittings, furnishings or site works, etc.), the Project Manager shall issue an Operational Acceptance Certificate within fourteen (14) days after the fittings and/or furnishings have been delivered and/or installed or the site works have been completed. The Supplier shall, however, use all reasonable endeavors to promptly remedy any defects or deficiencies in such minor components detected by KEFRI or Supplier.

F. Guarantees and Liabilities

28 Operational Acceptance Time Guarantee

28.1 The Supplier guarantees that it shall complete the supply, Installation, Commissioning, and achieve Operational Acceptance of the System (or Subsystems, pursuant to the SCC for GCC Clause 27.2.1) within the time periods specified in the Implementation Schedule and/or the Agreed Project Plan pursuant to GCC Clause 8.2, or within such extended time to which the Supplier shall be entitled under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).

28.2 **Unless otherwise specified in the SCC**, if the Supplier fails to supply, install, commission, and achieve Operational Acceptance of the System (or Subsystems pursuant to the SCC for GCC Clause 27.2.1) within the time for achieving Operational Acceptance specified in the Implementation Schedule or the Agreed Project Plan, or any extension of the time for achieving Operational Acceptance previously granted under GCC Clause 40 (Extension of Time for Achieving Operational Acceptance), the Supplier shall pay to KEFRI liquidated damages at the rate of one half of one percent per week as a percentage of the Contract Price (exclusive of Recurrent Costs if any), or the relevant part of the Contract Price if a Subsystem has not achieved Operational Acceptance. The aggregate amount of such liquidated damages shall in no event exceed the amount often (10) percent of the Contract Price (exclusive of Recurrent Costs if any). Once the Maximum is reached, KEFRI may consider termination of the Contract, pursuant to GCC Clause 41.2.2.

28.3 **Unless otherwise specified in the SCC**, liquidated damages payable under GCC Clause 28.2 shall apply only to the failure to achieve Operational Acceptance of the System (and Subsystems) as specified in the Implementation Schedule and/or Agreed Project Plan. This Clause 28.3 shall not limit, however, any other rights or remedies KEFRI may have under the Contract for other delays.

28.4 If liquidated damages are claimed by KEFRI for the System (or Subsystem), the Supplier shall have no further liability whatsoever to KEFRI in respect to the Operational Acceptance time guarantee for the System (or Subsystem). However, the payment of liquidated damages shall not in any way relieve the Supplier from any of its obligations to complete the System or from any other of its obligations and liabilities under the Contract.

29 Defect Liability

29.1 The Supplier warrants that the System, including all Information Technologies, Materials, and other Goods supplied and Services provided, shall be free from defects in the design, engineering, Materials, and workmanship that prevent the System and/or any of its components from fulfilling the Technical Requirements or that limit in a material fashion the performance, reliability, or extensibility of the System and/or Subsystems. **Unless otherwise specified in the SCC**, there will be NO exceptions and/or limitations to this warranty with respect to Software (or categories of Software). Commercial warranty provisions of products supplied under the Contract shall apply to the extent that they do not conflict with the provisions of this Contract.

29.2 The Supplier also warrants that the Information Technologies, Materials, and other Goods

supplied under the Contract are new, unused, and incorporate all recent improvements in design that materially affect the System's or Subsystem's ability to fulfill the Technical Requirements.

- 29.3 **Unless otherwise specified in the SCC**, the Supplier warrants that :(i) all Goods components to be incorporated into the System form part of the Supplier's and/or Subcontractor's current product lines, and (ii) they have been previously released to the market.
- 29.4 **Unless otherwise specified in the SCC**, the Warranty Period shall commence from the date of Operational Acceptance of the System (or of any major component or Subsystem for which separate Operational Acceptance is provided for in the Contract) and shall extend for thirty-six (36) months.
- 29.5 If during the Warranty Period any defect as described in GCC Clause 29.1 should be found in the design, engineering, Materials, and workmanship of the Information Technologies and other Goods supplied or of the Services provided by the Supplier, the Supplier shall promptly, in consultation and agreement with KEFRI regarding appropriate remedying of the defects, and at its sole cost, repair, replace, or otherwise make good (as the Supplier shall, at its discretion, determine) such defect as well as any damage to the System caused by such defect. Any defective Information Technologies or other Goods that have been replaced by the Supplier shall remain the property of the Supplier.
- 29.6 The Supplier shall not be responsible for the repair, replacement, or making good of any defect, or of any damage to the System arising out of or resulting from any of the following causes:
- a) Improper operation or maintenance of the System by KEFRI;
 - b) Normal wear and tear;
 - c) use of the System with items not supplied by the Supplier, unless otherwise identified in the Technical Requirements, or approved by the Supplier; or
 - d) modifications made to the System by KEFRI, or a third party, not approved by the Supplier.
- 29.7 The Supplier's obligations under this GCC Clause 29 shall not apply to:
- a) any materials that are normally consumed in operation or have a normal life shorter than the Warranty Period; or
 - b) any designs, specifications, or other data designed, supplied, or specified by or on behalf of KEFRI or any matters for which the Supplier has disclaimed responsibility, in accordance with GCC Clause 21.1.2.
- 29.8 KEFRI shall give the Supplier a notice promptly following the discovery of such defect, stating the nature of any such defect together with all available evidence. KEFRI shall afford all reasonable opportunity for the Supplier to inspect any such defect. KEFRI shall afford the Supplier all necessary access to the System and the site to enable the Supplier to perform its obligations under this GCC Clause 29.
- 29.9 The Supplier may, with the consent of KEFRI, remove from the site any Information Technologies and other Goods that are defective, if the nature of the defect, and/or any damage to the System caused by the defect, is such that repairs cannot be expeditiously carried out at the site. If the repair, replacement, or making good is of such a character that it may affect the efficiency of the System, KEFRI may give the Supplier notice requiring that tests of the defective part be made by the Supplier immediately upon completion of such remedial work, where upon the Supplier shall carry out such tests.

If such part fails the tests, the Supplier shall carry out further repair, replacement, or making good (as the case maybe) until that part of the System passes such tests. The tests

shall be agreed upon by KEFRI and the Supplier.

29.10 **Unless otherwise specified in the SCC**, the response times and repair/replacement times for Warranty Defect Repair are specified in the Technical Requirements. Nevertheless, if the Supplier fails to commence the work necessary to remedy such defect or any damage to the System caused by such defect within two weeks KEFRI may, following notice to the Supplier, proceed to do such work or contract a third party (or parties) to do such work, and the reasonable costs incurred by KEFRI in connection with such work shall be paid to KEFRI by the Supplier or may be deducted by KEFRI from any monies due the Supplier or claimed under the Performance Security.

29.11 If the System or Subsystem cannot be used by reason of such defect and/or making good of such defect, the Warranty Period for the System shall be extended by a period equal to the period during which the System or Subsystem could not be used by KEFRI because of such defect and/or making good of such defect.

29.12 Items substituted for defective parts of the System during the Warranty Period shall be covered by the Defect Liability Warranty for the remainder of the Warranty Period applicable for the part replaced or three (3) months, whichever is greater. For reasons of information security, KEFRI may choose to retain physical possession of any replaced defective information storage devices.

29.13 At the request of KEFRI and without prejudice to any other rights and remedies that KEFRI may have against the Supplier under the Contract, the Supplier will offer all possible assistance to KEFRI to seek warranty services or remedial action from any subcontracted third-party producers or licensor of Goods included in the System, including without limitation assignment or transfer in favor of KEFRI of the benefit of any warranties given by such producers or licensors to the Supplier.

30 Functional Guarantees

30.1 The Supplier guarantees that, once the Operational Acceptance Certificate(s) has been issued, the System represents a complete, integrated solution to KEFRI's requirements set forth in the Technical Requirements and it conforms to all other aspects of the Contract. The Supplier acknowledges that GCC Clause 27 regarding Commissioning and Operational Acceptance govern show technical conformance of the System to the Contract requirements will be determined.

30.2 If, for reasons attributable to the Supplier, the System does not conform to the Technical Requirements or does not conform to all other aspects of the Contract, the Supplier shall at its cost and expense make such changes, modifications, and/or additions to the System as may be necessary to conform to the Technical Requirements and meet all functional and performance standards. The Supplier shall notify KEFRI upon completion of the necessary changes, modifications, and/or additions and shall request KEFRI to repeat the Operational Acceptance Tests until the System achieves Operational Acceptance.

30.3 If the System (or Subsystem[s]) fails to achieve Operational Acceptance, KEFRI may consider termination of the Contract, pursuant to GCC Clause 41.2.2, and forfeiture of the Supplier's Performance Security in accordance with GCC Clause 13.3 in compensation for the extra costs and delays likely to result from this failure.

31 Intellectual Property Rights Warranty

31.1 The Supplier here by represents and warrants that:

- a) The System as supplied, installed, tested, and accepted;
- b) Use of the System in accordance with the Contract; and

- c) Copying of the Software and Materials provided to KEFRI in accordance with the Contract do not and will not infringe any Intellectual Property Rights held by any third party and that it has all necessary rights or at its sole expense shall have secured in writing all transfer so frights and other consents necessary to make the assignments, licenses, and other transfers of Intellectual Property Rights and the warranties set forth in the Contract, and for KEFRI to own or exercise all Intellectual Property Rights as provided in the Contract. Without limitation, the Supplier shall secure all necessary written agreements, consents, and transfers of rights from its employees and other persons or entities whose services are used for development of the System.

32 Intellectual Property Rights Indemnity

- 32.1 The Supplier shall indemnify and hold harmless KEFRI and its employees and officers from and against any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability), that KEFRI or its employees or officers may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights by reason of:
- a) Installation of the System by the Supplier or the use of the System, including the Materials, in the country where the site is located;
 - b) copying of the Software and Materials provided by the Supplier in accordance with the Agreement; and
 - c) sale of the products produced by the System in any country, except to the extent that such losses, liabilities, and costs a rise as a result of KEFRI's breach of GCC Clause 32.2.
- 32.2 Such indemnity shall not cover any use of the System, including the Materials, other than for the purpose indicated by or to be reasonably inferred from the Contract, any infringement resulting from the use of the System, or any products of the System produced there by in association or combination with any other goods or services not supplied by the Supplier, where the infringement arises because of such association or combination and not because of use of the System in its own right.
- 32.3 Such indemnities shall also not apply if any claim of infringement:
- a) Is asserted by apparent, subsidiary, or affiliate of KEFRI's organization;
 - b) Is a direct result of a design mandated by KEFRI's Technical Requirements and the possibility of such infringement was duly noted in the Supplier's Tender; or
 - c) Results from the alteration of the System, including the Materials, by KEFRI or any persons other than the Supplier or a person authorized by the Supplier.
- 32.4 If any proceedings are brought or any claim is made against KEFRI arising out of the matters referred to in GCC Clause 32.1, KEFRI shall promptly give the Supplier notice of such proceedings or claims, and the Supplier may at its own expense and in KEFRI's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.

If the Supplier fails to notify KEFRI within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then KEFRI shall be free to conduct the same on its own behalf. Unless the Supplier has so failed to notify KEFRI within the twenty-eight (28) days, KEFRI shall make no admission that may be prejudicial to the defense of any such proceedings or claim. KEFRI shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.

- 32.5 KEFRI shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Supplier

or its employees, officers, or Subcontractors may suffer as a result of any infringement or alleged infringement of any Intellectual Property Rights arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided to the Supplier in connection with this Contract by KEFRI or any persons (other than the Supplier) contracted by KEFRI, except to the extent that such losses, liabilities, and costs arise as a result of the Supplier's breach of GCC Clause 32.8.

32.6 Such indemnity shall not cover

- a) any use of the design, data, drawing, specification, or other documents or materials, other than for the purpose indicated by or to be reasonably inferred from the Contract;
- b) any infringement resulting from the use of the design, data, drawing, specification, or other documents or materials, or any products produced thereby, in association or combination with any other Goods or Services not provided by KEFRI or any other person contracted by KEFRI, where the infringement arises because of such association or combination and not because of the use of the design, data, drawing, specification, or other documents or materials in its own right.

32.7 Such indemnities shall also not apply:

- a) If any claim of infringement is asserted by apparent, subsidiary, or affiliate of the Supplier's organization;
- b) to the extent that any claim of infringement is caused by the alteration, by the Supplier, or any persons contracted by the Supplier, of the design, data, drawing, specification, or other documents or materials provided to the Supplier by KEFRI or any persons contracted by KEFRI.

32.8 If any proceedings are brought or any claim is made against the Supplier arising out of the matters referred to in GCC Clause 32.5, the Supplier shall promptly give KEFRI notice of such proceedings or claims, and KEFRI may at its own expense and in the Supplier's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If KEFRI fails to notify the Supplier within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Supplier shall be free to conduct the same on its own behalf. Unless KEFRI has so failed to notify the Supplier within the twenty-eight (28) days, the Supplier shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Supplier shall, at KEFRI's request, afford all available assistance to KEFRI in conducting such proceedings or claim and shall be reimbursed by KEFRI for all reasonable expenses incurred in so doing.

33 Limitation of Liability

33.1 Provided the following does not exclude or limit any liabilities of either party in ways not permitted by applicable law:

- a) the Supplier shall not be liable to KEFRI, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to KEFRI; and
- b) the aggregate liability of the Supplier to KEFRI, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to any obligation of the Supplier to indemnify KEFRI with respect to intellectual property rights infringement.

G. Risk Distribution

34 Transfer of Ownership

- 34.1 With the exception of Software and Materials, the ownership of the Information Technologies and other Goods shall be transferred to KEFRI at the time of Delivery or otherwise under terms that may be agreed upon and specified in the Contract Agreement.
- 34.2 Ownership and the terms of usage of the Software and Materials supplied under the Contract shall be governed by GCC Clause 15 (Copyright) and any elaboration in the Technical Requirements.
- 34.3 Ownership of the Supplier's Equipment used by the Supplier and its Subcontractors in connection with the Contract shall remain with the Supplier or its Subcontractors.

35 Care of the System

- 35.1 KEFRI shall be come responsible for the care and custody of the System or Subsystems upon their Delivery. KEFRI shall make good at its own cost any loss or damage that may occur to the System or Subsystems from any cause from the date of Delivery until the date of Operational Acceptance of the System or Subsystems, pursuant to GCC Clause 27 (Commissioning and Operational Acceptance), except such loss or damage arising from acts or omissions of the Supplier, its employees, or subcontractors.
- 35.2 If any loss or damage occurs to the System or any part of the System by reason of:
- a) (in so far as they relate to the country where the Project Site is located) nuclear reaction, nuclear radiation, radioactive contamination, a pressure wave caused by aircraft or other aerial objects, or any other occurrences that an experienced contractor could not reasonably foresee, or if reasonably foreseeable could not reasonably make provision for or insure against, in so far as such risks are not normally insurable on the insurance market and are mentioned in the general exclusions of the policy of insurance taken out under GCC Clause 37;
 - b) Any use not in accordance with the Contract, by KEFRI or any third party;
 - c) Any use of or reliance upon any design, data, or specification provided or designated by or on behalf of KEFRI, or any such matter for which the Supplier has disclaimed responsibility in accordance with GCC Clause 21.1.2, KEFRI shall pay to the Supplier all sums payable in respect of the System or Subsystems that have achieved Operational Acceptance, notwithstanding that the same be lost, destroyed, or damaged. If KEFRI requests the Supplier in writing to make good any loss or damage to the System thereby occasioned, the Supplier shall make good the same at the cost of KEFRI in accordance with GCC Clause 39. If KEFRI does not request the Supplier in writing to make good any loss or damage to the System there by occasioned, KEFRI shall either request a change in accordance with GCC Clause 39, excluding the performance of that part of the System there by lost, destroyed, or damaged, or, where the loss or damage affects a substantial part of the System, KEFRI shall terminate the Contract pursuant to GCC Clause 41.1.
- 35.3 KEFRI shall be liable for any loss of or damage to any Supplier's Equipment which KEFRI has authorized to locate within KEFRI's premises for use in fulfillment of Supplier's obligations under the Contract, except where such loss or damage arises from acts or omissions of the Supplier, its employees, or subcontractors.

36 Loss of or Damage to Property; Accident or Injury to Workers; Indemnification

- 36.1 The Supplier and each and every Subcontractor shall abide by the job safety, insurance, customs, and immigration measures prevalent and laws in force in Kenya.

- 36.2 Subject to GCC Clause 36.3, the Supplier shall indemnify and hold harmless KEFRI and its employees and officers from and against any and all losses, liabilities and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that KEFRI or its employees or officers may suffer as a result of the death or injury of any person or loss of or damage to any property (other than the System, whether accepted or not) arising in connection with the supply, installation, testing, and Commissioning of the System and by reason of the negligence of the Supplier or its Subcontractors, or their employees, officers or agents, except any injury, death, or property damage caused by the negligence of KEFRI, its contractors, employees, officers, or agents.
- 36.3 If any proceedings are brought or any claim is made against KEFRI that might subject the Supplier to liability under GCC Clause 36.2, KEFRI shall promptly give the Supplier notice of such proceedings or claims, and the Supplier may at its own expense and in KEFRI's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If the Supplier fails to notify KEFRI within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then KEFRI shall be free to conduct the same on its own behalf. Unless the Supplier has so failed to notify KEFRI within the twenty-eight (28) day period, KEFRI shall make no admission that may be prejudicial to the defense of any such proceedings or claim. KEFRI shall, at the Supplier's request, afford all available assistance to the Supplier in conducting such proceedings or claim and shall be reimbursed by the Supplier for all reasonable expenses incurred in so doing.
- 36.4 KEFRI shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from any and all losses, liabilities, and costs (including losses, liabilities, and costs incurred in defending a claim alleging such a liability) that the Supplier or its employees, officers, or Subcontractors may suffer as a result of the death or personal injury of any person or loss of or damage to property of KEFRI, other than the System not yet achieving Operational Acceptance, that is caused by fire, explosion, or any other perils, in excess of the amount recoverable from insurances procured under GCC Clause 37 (Insurances), provided that such fire, explosion, or other perils were not caused by any act or failure of the Supplier.
- 36.5 If any proceedings are brought or any claim is made against the Supplier that might subject KEFRI to liability under GCC Clause 36.4, the Supplier shall promptly give KEFRI notice of such proceedings or claims, and KEFRI may at its own expense and in the Supplier's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. If KEFRI fails to notify the Supplier within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Supplier shall be free to conduct the same on its own behalf. Unless KEFRI has so failed to notify the Supplier within the twenty-eight (28) days, the Supplier shall make no admission that may be prejudicial to the defense of any such proceedings or claim. The Supplier shall, at KEFRI's request, afford all available assistance to KEFRI in conducting such proceedings or claim and shall be reimbursed by KEFRI for all reasonable expenses incurred in so doing.
- 36.6 The party entitled to the benefit of an indemnity under this GCC Clause 36 shall take all reasonable measures to mitigate any loss or damage that has occurred. If the party fails to take such measures, the other party's liabilities shall be correspondingly reduced.

37 Insurances

- 37.1 The Supplier shall at its expense take out and maintain in effect, or cause to be taken out and maintained in effect, during the performance of the Contract, the insurance set forth below. The identity of the insurers and the form of the policies shall be subject to the approval of KEFRI, who should not unreasonably withhold such approval.

- a) Cargo Insurance During Transport
as applicable, 110 percent of the price of the Information Technologies and other Goods in a freely convertible currency, covering the Goods from physical loss or damage during shipment through receipt at the Project Site.
- b) Installation “All Risks” Insurance
as applicable, 110 percent of the price of the Information Technologies and other Goods covering the Goods at the site from all risks of physical loss or damage (excluding only perils commonly excluded under “all risks” insurance policies of this type by reputable insurers) occurring prior to Operational Acceptance of the System.
- c) Third-Party Liability Insurance
On terms as **specified in the SCC**, covering bodily injury or death suffered by third parties (including KEFRI's personnel) and loss of or damage to property (including KEFRI's property and any Subsystems that have been accepted by KEFRI) occurring in connection with the supply and installation of the Information System.
- d) Automobile Liability Insurance
In accordance with the statutory requirements prevailing in Kenya, covering use of all vehicles used by the Supplier or its Subcontractors (whether or not owned by them) in connection with the execution of the Contract.
- e) Other Insurance (if any), as **specified in the SCC**.

37.2 KEFRI shall be named as co-insured under all insurance policies taken out by the Supplier pursuant to GCC Clause 37.1, except for the Third-Party Liability, and the Supplier's Subcontractors shall be named as co-insured under all insurance policies taken out by the Supplier pursuant to GCC Clause 37.1 except for Cargo Insurance During Transport. All insurer's rights of subrogation against such co-insured for losses or claims arising out of the performance of the Contract shall be waived under such policies.

37.3 The Supplier shall deliver to KEFRI certificates of insurance (or copies of the insurance policies) as evidence that the required policies are in full force and effect.

37.4 The Supplier shall ensure that, where applicable, its Subcontractor(s) shall take out and maintain in effect adequate insurance policies for their personnel and vehicles and for work executed by them under the Contract, unless such Subcontractors are covered by the policies taken out by the Supplier.

37.5 If the Supplier fails to take out and/or maintain in effect the insurance referred to in GCC Clause 37.1, KEFRI may take out and maintain in effect any such insurance and may from time to time deduct from any amount due to the Supplier under the Contract any premium that KEFRI shall have paid to the insurer or may otherwise recover such amount as a debt due from the Supplier.

37.6 Unless otherwise provided in the Contract, the Supplier shall prepare and conduct all and any claims made under the policies affected by it pursuant to this GCC Clause 37, and all monies payable by any insurers shall be paid to the Supplier. KEFRI shall give to the Supplier all such reasonable assistance as may be required by the Supplier in connection with any claim under the relevant insurance policies. With respect to insurance claims in which KEFRI's interest is involved, the Supplier shall not give any release or make any compromise with the insurer without the prior written consent of KEFRI. With respect to insurance claims in which the Supplier's interest is involved, KEFRI shall not give any release or make any compromise with the insurer without the prior written consent of the Supplier.

38 Force Majeure

38.1 "Force Majeure" shall mean any event beyond the reasonable control of KEFRI or of the Supplier, as the case may be, and which is unavoidable notwithstanding the reasonable care of the party affected and shall include, without limitation, the following:

- a) war, hostilities, or war like operations (whether a state of war be declared or not), invasion, act of foreign enemy, and civil war;
- b) rebellion, revolution, insurrection, mutiny, usurpation of civil or military government, conspiracy, riot, civil commotion, and terrorist acts;
- c) confiscation, nationalization, mobilization, commandeering or requisition by or under the order of any government or de jure or de facto authority or ruler, or any other act or failure to act of any local state or national government authority;
- d) strike, sabotage, lockout, embargo, import restriction, port congestion, lack of usual means of public transportation and communication, industrial dispute, shipwreck, shortage or restriction of power supply, epidemics, quarantine, and plague;
- e) earthquake, landslide, volcanic activity, fire, flood or inundation, tidal wave, typhoon or cyclone, hurricane, storm, lightning, or other inclement weather condition, nuclear and pressure waves, or other natural or physical disaster;
- f) failure, by the Supplier, to obtain the necessary export permit (s) from the governments of the Country(s) of Origin of the Information Technologies or other Goods, or Supplier's Equipment provided that the Supplier has made all reasonable efforts to obtain the required export permit(s), including the exercise of due diligence in determining the eligibility of the System and all of its components for receipt of the necessary export permits.

38.2 If either party is prevented, hindered, or delayed from or in performing any of its obligations under the Contract by an event of Force Majeure, then it shall notify the other in writing of the occurrence of such event and the circumstances of the event of Force Majeure within fourteen (14) days after the occurrence of such event.

38.3 The party who has given such notice shall be excused from the performance or punctual performance of its obligations under the Contract for so long as the relevant event of Force Majeure continues and to the extent that such party's performance is prevented, hindered, or delayed. The Time for Achieving Operational Acceptance shall be extended in accordance with GCC Clause 40 (Extension of Time for Achieving Operational Acceptance).

38.4 The party or parties affected by the event of Force Majeure shall use reasonable efforts to mitigate the effect of the event of Force Majeure upon its or their performance of the Contract and to fulfill its or their obligations under the Contract, but without prejudice to either party's right to terminate the Contract under GCC Clause 38.6.

38.5 No delay or nonperformance by either party to this Contract caused by the occurrence of any event of Force Majeure shall:

- a) Constitute a default or breach of the Contract;
- b) (subject to GCC Clauses 35.2, 38.3, and 38.4) give rise to any claim for damages or additional cost or expense occasioned by the delay or nonperformance, if, and to the extent that, such delay or non-performance is caused by the occurrence of an event of Force Majeure.

38.6 If the performance of the Contract is substantially prevented, hindered, or delayed for a single period of more than sixty (60) days or an aggregate period of more than one hundred and twenty (120) days on account of one or more events of Force Majeure during the time period covered by the Contract, the parties will attempt to develop a mutually

satisfactory solution, failing which, either party may terminate the Contract by giving a notice to the other.

38.7 In the event of termination pursuant to GCC Clause 38.6, the rights and obligations of KEFRI and the Supplier shall be as specified in GCC Clauses 41.1.2 and 41.1.3.

38.8 Notwithstanding GCC Clause 38.5, Force Majeure shall not apply to any obligation of KEFRI to make payments to the Supplier under this Contract.

H. Change in Contract Elements

39 Changes to the System

39.1 Introducing a Change

39.1.1 Subject to GCC Clauses 39.2.5 and 39.2.7, KEFRI shall have the right to propose, and subsequently require, the Project Manager to order the Supplier from time to time during the performance of the Contract to make any change, modification, addition, or deletion to, in, or from the System (interchangeably called “Change”), provided that such Change falls within the general scope of the System, does not constitute unrelated work, and is technically practicable, taking into account both the state of advancement of the System and the technical compatibility of the Change envisaged with the nature of the System as originally specified in the Contract.

39.1.2 A Change may involve, but is not restricted to, the substitution of updated Information Technologies and related Services in accordance with GCC Clause 23 (Product Upgrades).

39.1.3 The Supplier may from time to time during its performance of the Contract propose to KEFRI (with a copy to the Project Manager) any Change that the Supplier considers necessary or desirable to improve the quality or efficiency of the System. KEFRI may at its discretion approve or reject any Change proposed by the Supplier.

39.1.4 Notwithstanding GCC Clauses 39.1.1 and 39.1.2, no change made necessary because of any default of the Supplier in the performance of its obligations under the Contract shall be deemed to be a Change, and such change shall not result in any adjustment of the Contract Price or the Time for Achieving Operational Acceptance.

39.1.5 The procedure on how to proceed with and execute Changes is specified in GCC Clauses 39.2 and 39.3, and further details and sample forms are provided in the Sample Contractual Forms Section in the tendering documents.

39.1.6 Moreover, KEFRI and Supplier will agree, during development of the Project Plan, to a date prior to the scheduled date for Operational Acceptance, after which the Technical Requirements for the System shall be “frozen.” Any Change initiated after this time will be dealt with after Operational Acceptance.

39.2 Changes Originating from Procuring Entity

39.2.4 If KEFRI proposes a Change pursuant to GCC Clauses 39.1.1, it shall send to the Supplier a “Request for Change Proposal,” requiring the Supplier to prepare and furnish to the Project Manager as soon as reasonably practicable a “Change Proposal,” which shall include the following:

- a Brief description of the Change;
- b Impact on the Time for Achieving Operational Acceptance;
- c Detailed estimated cost of the Change;

- d Effect on Functional Guarantees (if any);
- e Effect on any other provisions of the Contract.

39.2.5 Prior to preparing and submitting the "Change Proposal," the Supplier shall submit to the Project Manager a "Change Estimate Proposal," which shall be an estimate of the cost of preparing the Change Proposal, plus a first approximation of the suggested approach and cost for implementing the changes. Upon receipt of the Supplier's Change Estimate Proposal, KEFRI shall do one of the following:

- a accept the Supplier's estimate with instructions to the Supplier to proceed with the preparation of the Change Proposal;
- b advise the Supplier of any part of its Change Estimate Proposal that is unacceptable and request the Supplier to review its estimate;
- c advise the Supplier that KEFRI does not intend to proceed with the Change.

39.2.6 Upon receipt of KEFRI's instruction to proceed under GCC Clause 39.2.2 (a), the Supplier shall, with proper expedition, proceed with the preparation of the Change Proposal, in accordance with GCC Clause 39.2.1. The Supplier, at its discretion, may specify a validity period for the Change Proposal, after which if KEFRI and Supplier has not reached agreement in accordance with GCC Clause 39.2.6, then GCC Clause 39.2.7 shall apply.

39.2.7 The pricing of any Change shall, as far as practicable, be calculated in accordance with the rates and prices included in the Contract. If the nature of the Change is such that the Contract rates and prices are inequitable, the parties to the Contract shall agree on other specific rates to be used for valuing the Change.

39.2.8 If before or during the preparation of the Change Proposal it becomes apparent that the aggregate impact of compliance with the Request for Change Proposal and with all other Change Orders that have already become binding upon the Supplier under this GCC Clause 39 would be to increase or decrease the Contract Price as originally set forth in Article 2 (Contract Price) of the Contract Agreement by more than fifteen (15) percent, the Supplier may give a written notice of objection to this Request for Change Proposal prior to furnishing the Change Proposal. If KEFRI accepts the Supplier's objection, KEFRI shall withdraw the proposed Change and shall notify the Supplier in writing of its acceptance.

The Supplier's failure to so object to a Request for Change Proposal shall neither affect its right to object to any subsequent requested Changes or Change Orders, nor affect its right to take into account, when making such subsequent objection, the percentage increase or decrease in the Contract Price that any Change not objected to by the Supplier represents.

39.2.9 Upon receipt of the Change Proposal, KEFRI and the Supplier shall mutually agree upon all matters contained in the Change Proposal. Within fourteen (14) days after such agreement, KEFRI shall, if it intends to proceed with the Change, issue the Supplier a Change Order. If KEFRI is unable to reach a decision within fourteen (14) days, it shall notify the Supplier with details of when the Supplier can expect a decision. If KEFRI decides not to proceed with the Change for whatever reason, it shall, within the said period of fourteen (14) days, notify the Supplier accordingly. Under such circumstances, the Supplier shall be entitled to reimbursement of all costs reasonably incurred by it in the preparation of the Change Proposal, provided that these do not exceed the amount given by the Supplier in its Change Estimate Proposal submitted in accordance with GCC Clause 39.2.2.

39.2.10 If KEFRI and the Supplier cannot reach agreement on the price for the Change, an equitable adjustment to the Time for Achieving Operational Acceptance, or any other matters identified in the Change Proposal, the Change will not be implemented. However, this provision does not limit the rights of either party under GCC Clause 6 (Settlement of Disputes).

39.3 Changes Originating from Supplier

If the Supplier proposes a Change pursuant to GCC Clause 39.1.2, the Supplier shall submit to the Project Manager a written "Application for Change Proposal," giving reasons for the proposed Change and including the information specified in GCC Clause 39.2.1. Upon receipt of the Application for Change Proposal, the parties shall follow the procedures outlined in GCC Clauses 39.2.6 and 39.2.7. However, should KEFRI choose not to proceed or KEFRI and the Supplier cannot come to agreement on the change during any validity period that the Supplier may specify in its Application for Change Proposal, the Supplier shall not be entitled to recover the costs of preparing the Application for Change Proposal, unless subject to an agreement between KEFRI and the Supplier to the contrary.

39.4 Value engineering. The Supplier may prepare, at its own cost, a value engineering proposal at any time during the performance of the Contract.

39.4.1 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) KEFRI may incur in implementing the value engineering proposal; and
- (c) a description of any effect(s) of the change on performance/ functionality.

39.4.2 KEFRI may accept the value engineering proposal if the proposal demonstrates benefits that:

- a) accelerates the delivery period; or
- b) reduces the Contract Price or the life cycle costs to KEFRI; or
- c) improves the quality, efficiency, safety or sustainability of the systems; or
- d) yields any other benefits to KEFRI, without compromising the necessary functions of the systems.

39.4.3 If the value engineering proposal is approved by KEFRI and results in:

- a) a reduction of the Contract Price; the amount to be paid to the Supplier 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 Supplier shall be the full increase in the Contract Price.

40 Extension of Time for Achieving Operational Acceptance

40.1 The time(s) for achieving Operational Acceptance specified in the Schedule of Implementation shall be extended if the Supplier is delayed or impeded in the performance of any of its obligations under the Contract by reason of any of the following:

- a) Any Change in the System as provided in GCC Clause 39 (Change in the Information System);
- b) Any occurrence of Force Majeure as provided in GCC Clause 38 (Force Majeure);
- c) Default of KEFRI; or
- d) Any other matter specifically mentioned in the Contract; by such period as shall be fair and reasonable in all the circumstances and as shall fairly reflect the delay or impediment sustained by the Supplier.

40.2 Except where otherwise specifically provided in the Contract, the Supplier shall submit to the Project Manager a notice of a claim for an extension of the time for achieving Operational Acceptance, together with particulars of the event or circumstance justifying such extension as soon as reasonably practicable after the commencement of such event or circumstance. As soon as reasonably practicable after receipt of such notice and supporting particulars of the claim, KEFRI and the Supplier shall agree upon the period of such extension. In the event that the Supplier does not accept KEFRI's estimate of a fair and reasonable time extension, the Supplier shall be entitled to refer the matter to the provisions for the Settlement of Disputes pursuant to GCC Clause 43.

40.3 The Supplier shall at all times use its reasonable efforts to minimize any delay in the performance of its obligations under the Contract.

41 Termination

41.1 Termination for Procuring Entity's Convenience

41.1.1 KEFRI may at any time terminate the Contract for any reason by giving the Supplier a notice of termination that refers to this GCC Clause 41.1.

41.1.2 Upon receipt of the notice of termination under GCC Clause 41.1.1, the Supplier shall either as soon as reasonably practical or upon the date specified in the notice of termination

- a) cease all further work, except for such work as KEFRI may specify in the notice of termination for the sole purpose of protecting that part of the System already executed, or any work required to leave the site in a clean and safe condition;
- b) terminate all subcontracts, except those to be assigned to KEFRI pursuant to GCC Clause (d) (ii) below;
- c) Remove all Supplier's Equipment from the site, repatriate the Supplier's and its Subcontractors' personnel from the site, remove from the site any wreckage, rubbish, and debris of any kind;
- d) In addition, the Supplier, subject to the payment specified in GCC Clause 41.1.3, shall
 - i) deliver to KEFRI the parts of the System executed by the Supplier up to the date of termination;
 - ii) to the extent legally possible, assign to KEFRI all right, title, and benefit of the Supplier to the System, or Subsystem, as at the date of termination, and, as may be required by KEFRI, in any subcontracts concluded between the Supplier and its Subcontractors;
 - iii) deliver to KEFRI all nonproprietary drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as of the date of termination in connection with the System.

41.1.3 In the event of termination of the Contract under GCC Clause 41.1.1, KEFRI shall pay to the Supplier the following amounts:

- a) The Contract Price, properly attributable to the parts of the System executed by the Supplier as of the date of termination;
- b) The costs reasonably incurred by the Supplier in the removal of the Supplier's Equipment from the site and in the repatriation of the Supplier's and its Subcontractors' personnel;
- c) any amount to be paid by the Supplier to its Subcontractors in connection with the termination of any subcontracts, including any cancellation charges;
- d) costs incurred by the Supplier in protecting the System and leaving the site in a clean

and safe condition pursuant to GCC Clause 41.1.2(a); and

- e) the cost of satisfying all other obligations, commitments, and claims that the Supplier may in good faith have undertaken with third parties in connection with the Contract and that are not covered by GCC Clauses 41.1.3 (a) through (d) above.

41.2 Termination for Supplier's Default

41.2.1 KEFRI, without prejudice to any other rights or remedies it may possess, may terminate the Contract forth within the following circumstances by giving a notice of termination and its reasons there for to the Supplier, referring to this GCC Clause 41.2:

- a) If the Supplier becomes bankrupt or in solvent, has a receiving order issued against it, compounds with its creditors, or, if the Supplier is a corporation, a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if the Supplier takes or suffers any other analogous action in consequence of debt;
- b) If the Supplier assigns or transfers the Contractor any right or interest, there in in violation of the provision of GCC Clause 42 (Assignment); or
- c) If the Supplier, in the judgment of KEFRI has engaged in Fraud and Corruption, as defined in paragraph 2.2a. of the Appendix to the GCC, in competing for or in executing the Contract, including but Not limited to willful misrepresentation of facts concerning ownership of Intellectual Property Rights in, or proper authorization and/or licenses from the owner to offer, the hardware, software, or materials provided under this Contract.

41.2.2 If the Supplier:

- d) Has abandoned or repudiated the Contract;
- e) Has without valid reason failed to commence work on the System promptly;
- f) Persistently fails to execute the Contract in accordance with the Contract or persistently neglects to carry out its obligations under the Contract without just cause;
- g) Refuses or is unable to provide sufficient Materials, Services, or labor to execute and complete the System in the manner specified in the Agreed Project Plan furnished under GCC Clause 19 at rates of progress that give reasonable assurance to KEFRI that the Supplier can attain Operational Acceptance of the System by the Time for Achieving Operational Acceptance as extended; then KEFRI may, without prejudice to any other rights it may possess under the Contract, give a notice to the Supplier stating the nature of the default and requiring the Supplier to remedy the same. If the Supplier fails to remedy or to take steps to remedy the same within fourteen (14) days of its receipt of such notice, then KEFRI may terminate the Contract forthwith by giving a notice of termination to the Supplier that refers to this GCC Clause 41.2.

41.2.3 Upon receipt of the notice of termination under GCC Clauses 41.2.1 or 41.2.2, the Supplier shall, either immediately or upon such date as is specified in the notice of termination:

- h) cease all further work, except for such work as KEFRI may specify in the notice of termination for the sole purpose of protecting that part of the System already executed or any work required to leave the site in a clean and safe condition;
- i) terminate all subcontracts, except those to be assigned to KEFRI pursuant to GCC Clause (d) below;
- j) deliver to KEFRI the parts of the System executed by the Supplier up to the date of termination;

- k) to the extent legally possible, assign to KEFRI all right, title and benefit of the Supplier to the System or Subsystems as at the date of termination, and, as may be required by KEFRI, in any subcontracts concluded between the Supplier and its Subcontractors;
- l) deliver to KEFRI all drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as at the date of termination in connection with the System.

41.2.4 KEFRI may enter upon the site, expel the Supplier, and complete the System itself or by employing any third party. Upon completion of the System or at such earlier date as KEFRI thinks appropriate, KEFRI shall give notice to the Supplier that such Supplier's Equipment will be returned to the Supplier at or near the site and shall return such Supplier's Equipment to the Supplier in accordance with such notice. The Supplier shall thereafter without delay and at its cost remove or arrange removal of the same from the site.

41.2.5 Subject to GCC Clause 41.2.6, the Supplier shall be entitled to be paid the Contract Price attributable to the portion of the System executed as at the date of termination and the costs, if any, incurred in protecting the System and in leaving the site in a clean and safe condition pursuant to GCC Clause 41.2.3 (a). Any sums due KEFRI from the Supplier accruing prior to the date of termination shall be deducted from the amount to be paid to the Supplier under this Contract.

41.2.6 If KEFRI completes the System, the cost of completing the System by KEFRI shall be determined. If the sum that the Supplier is entitled to be paid, pursuant to GCC Clause 41.2.5, plus the reasonable costs incurred by KEFRI in completing the System, exceeds the Contract Price, the Supplier shall be liable for such excess. If such excess is greater than the sums due the Supplier under GCC Clause 41.2.5, the Supplier shall pay the balance to KEFRI, and if such excess is less than the sums due the Supplier under GCC Clause 41.2.5, KEFRI shall pay the balance to the Supplier. KEFRI and the Supplier shall agree, in writing, on the computation described above and the manner in which any sums shall be paid.

41.3 Termination by Supplier

41.3.1 If:

- a) KEFRI has failed to pay the Supplier any sum due under the Contract within the specified period, has failed to approve any invoice or supporting documents without just cause **pursuant to the SCC**, or commits a substantial breach of the Contract, the Supplier may give a notice to KEFRI that requires payment of such sum, with interest on this sum as stipulated in GCC Clause 12.3, requires approval of such invoice or supporting documents, or specifies the breach and requires KEFRI to remedy the same, as the case may be. If KEFRI fails to pay such sum together with such interest, fails to approve such invoice or supporting documents or give its reasons for withholding such approval, fails to remedy the breach or take steps to remedy the breach within fourteen (14) days after receipt of the Supplier's notice; or
- b) the Supplier is unable to carry out any of its obligations under the Contract for any reason attributable to KEFRI, including but not limited to KEFRI's failure to provide possession of or access to the site or other areas or failure to obtain any governmental permit necessary for the execution and/or completion of the System; then the Supplier may give a notice to KEFRI of such events, and if KEFRI has failed to pay the outstanding sum, to approve the invoice or supporting documents, to give its reasons for withholding such approval, or to remedy the breach within twenty-eight (28) days of such notice, or if the Supplier is still unable to carry out any of its obligations under the Contract for any reason attributable to KEFRI within twenty-eight (28) days of the said notice, the Supplier may by a further notice to KEFRI referring to this GCC Clause 41.3.1, forth with terminate the Contract.

41.3.2 The Supplier may terminate the Contract immediately by giving a notice to KEFRI to that effect, referring to this GCC Clause 41.3.2, if KEFRI becomes bankrupt or insolvent, has a receiving order issued against it, compounds with its creditors, or, being a corporation, if a resolution is passed or order is made for its winding up (other than a voluntary liquidation for the purposes of amalgamation or reconstruction), a receiver is appointed over any part of its undertaking or assets, or if KEFRI takes or suffers any other analogous action in consequence of debt.

41.3.3 If the Contract is terminated under GCC Clauses 41.3.1 or 41.3.2, then the Supplier shall immediately:

- c) Cease all further work, except for such work as may be necessary for the purpose of protecting that part of the System already executed, or any work required to leave the site in a clean and safe condition;
- d) Terminate all subcontracts, except those to be assigned to KEFRI pursuant to Clause 41.3.3
 - (d) (ii);
- e) remove all Supplier's Equipment from the site and repatriate the Supplier's and its Subcontractor's personnel from the site.
- f) In addition, the Supplier, subject to the payment specified in GCC Clause 41.3.4, shall:
 - i) deliver to KEFRI the parts of the System executed by the Supplier up to the date of termination;
 - ii) to the extent legally possible, assign to KEFRI all right, title, and benefit of the Supplier to the System, or Subsystems, as of the date of termination, and, as may be required by KEFRI, in any subcontracts concluded between the Supplier and its Subcontractors;
 - iii) to the extent legally possible, deliver to KEFRI all drawings, specifications, and other documents prepared by the Supplier or its Subcontractors as of the date of termination in connection with the System.

41.3.4 If the Contract is terminated under GCC Clauses 41.3.1 or 41.3.2, KEFRI shall pay to the Supplier all payments specified in GCC Clause 41.1.3 and reasonable compensation for all loss, except for loss of profit, or damage sustained by the Supplier arising out of, in connection with, or in consequence of such termination.

41.3.5 Termination by the Supplier pursuant to this GCC Clause 41.3 is without prejudice to any other rights or remedies of the Supplier that may be exercised in lieu of or in addition to rights conferred by GCC Clause 41.3.

41.4 In this GCC Clause 41, the expression "portion of the System executed" shall include all work executed, Services provided, and all Information Technologies, or other Goods acquired (or subject to a legally binding Obligation to purchase) by the Supplier and used or intended to be used for the purpose of the System, up to and including the date of termination.

41.5 In this GCC Clause 41, in calculating any monies due from KEFRI to the Supplier, account shall be taken of any sum previously paid by KEFRI to the Supplier under the Contract, including any advance payment paid **pursuant to the SCC**.

42 Assignment

42.1 Neither KEFRI nor the Supplier shall, without the express prior written consent of the other, assign to any third party the Contractor any part thereof, or any right, benefit, obligation, or interest there in or there under, except that the Supplier shall be entitled to assign either absolutely or by way of charge any monies due and payable to it or that may become due and payable to it under the Contract.

I. Settlement of Disputes

43 Settlement of Disputes

43.1 Adjudication

43.1.1 If any dispute of any kind what so ever shall arise between KEFRI and the Supplier in connection with or arising out of the Contract, including without prejudice to the generality of the foregoing, any question regarding its existence, validity, or termination, or the operation of the System (whether during the progress of implementation or after its achieving Operational Acceptance and whether before or after the termination, abandonment, or breach of the Contract), the parties shall seek to resolve any such dispute **by mutual consultation**. If the parties fail to resolve such a dispute by mutual consultation within fourteen (14) days after one party has notified the other in writing of the dispute, then, if the Contract Agreement in Appendix2 includes and names an Adjudicator, the dispute shall, within another fourteen (14) days, be referred in writing by either party to the Adjudicator, with a copy to the other party. If there is no Adjudicator specified in the Contract Agreement, the mutual consultation period stated above shall last twenty-eight (28) days (instead of fourteen), upon expiry of which either party may move to the notification of arbitration pursuant to GCC Clause43.2.1.

43.1.2 The Adjudicator shall give his or her decision in writing to both parties within twenty-eight (28) days of the dispute being referred to the Adjudicator. If the Adjudicator has done so, and no notice of intention to commence arbitration has been given by either KEFRI or the Supplier within fifty-six (56) days of such reference, the decision shall become final and binding upon KEFRI and the Supplier. Any decision that has become final and binding shall be implemented by the parties forth with.

43.1.3 The Adjudicator shall be paid an hourly fee at the rate specified in the Contract Agreement plus reasonable expenditures incurred in the execution of duties as Adjudicator, and these costs shall be divided equally between KEFRI and the Supplier.

43.1.4 Should the Adjudicator resign or die, or should KEFRI and the Supplier agree that the Adjudicator is not fulfilling his or her functions in accordance with the provisions of the Contract, a new Adjudicator shall be jointly appointed by KEFRI and the Supplier. Failing agreement between the two within twenty-eight (28) days, the new Adjudicator shall be appointed at the request of either party by the Appointing Authority **specified in the SCC**, or, if no Appointing Authority is **specified in SCC**, the Contract shall, from this point onward and until the parties may otherwise agree on an Adjudicator or an Appointing Authority, be implemented as if there is no Adjudicator.

43.2 Arbitration

43.2.1 If

- a) KEFRI or the Supplier is dissatisfied with the Adjudicator's decision and acts before this decision has become final and binding pursuant to GCC Clause 43.1.2, or
- b) the Adjudicator fails to give a decision within the allotted time from referral of the dispute pursuant to GCC Clause 43.1.2, and KEFRI or the Supplier acts within the following fourteen (14) days, or
- c) in the absence of an Adjudicator from the Contract Agreement, the mutual consultation pursuant to GCC Clause 43.1.1 expires without resolution of the dispute and KEFRI or the Supplier acts within the following fourteen (14) days, then either KEFRI or the Supplier may act to give notice to the other party, with a copy for information to the Adjudicator incase an Adjudicator had been involved, of its intention to commence arbitration, as provided below, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is

given.

43.2.2 Any dispute in respect of which a notice of intention to commence arbitration has been given, in accordance with GCC Clause 43.2.1, shall be finally settled by arbitration. Arbitration may be commenced prior to or after Installation of the Information System.

43.2.3 Arbitration proceedings shall be conducted in accordance with the rules of procedure specified in the SCC.

43.3 Notwithstanding any reference to the Adjudicator or arbitration in this clause,

- a) The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree;
- b) KEFRI shall pay the Supplier any monies due the Supplier.

SECTION VII - SPECIAL CONDITIONS OF CONTRACT

Special Conditions of Contract

The following Special Conditions of Contract (SCC) shall supplement or amend the General Conditions of Contract (GCC). Whenever there is a conflict, the provisions of the SCC shall prevail over those in the General Conditions of Contract. For the purposes of clarity, any referenced GCC clause numbers are indicated in the left column of the SCC.

A. Contract and Interpretation

1. Definitions (GCC Clause1)

GCC 1.1 (b) (i)	Procuring Entry is: <i>Kenya Forestry Research Institute</i>
GCC 1.1 (b) (ii)	The Project Manager is: <i>Head of ICT</i>
GCC 1.1 (e) (ix)	<i>There are no Special Conditions associated with GCC 1.1 (e) (x).</i> <i>[Note: The GCC default specifies the Contract Period as when all the Supplier's obligations are completed. If there is a reason to set a hard-and-fast calendar date for the Contract Period to end, then specify here]</i>
GCC 1.1 (e) (xii)	The Post-Warranty Services Period is <i>[insert: number of months]</i> starting with the completion of the Warranty Period.

2. Notices (GCC Clause 4)

GCC 4.3	Address of the Project Manager: Kenya Forestry Research Institute, P.O.Box 20412-00200 Nairobi. Email: director@kefri.org Telephone: 0724259781/2
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B. Subject Matter of Contract

3. Scope of the System (GCC Clause 7)

GCC 7.3	The Supplier's obligations under the Contract will include the following recurrent cost items, as identified in the Recurrent Cost tables in the Supplier's Tender: <i>If KEFRI expects that wear and tear on System components will necessitate routine replacement of such components, and if Procuring Entity technical staff will perform these repair and replacement tasks, KEFRI may wish to consider adding the following clause to the SCC that obligates the Supplier to stock and/or provide certain spare parts.]</i> The Supplier agrees to supply spare parts required for the operation
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	<p>and maintenance of the System, as stated below, for <i>[insert: number of years]</i> years beginning with Operational Acceptance. Moreover, the price of such spare parts shall be those specified in the spare parts price schedule submitted by the Supplier as part of its Tender. These prices shall include the purchase price for such spare parts and other costs and expenses (including the Supplier’s fees) relating to the supply of spare parts.</p> <p><i>[list the spare parts needs, or reference the line items in the Spare Parts Price Schedule in the Supplier’s Tender, if the Supplier is the source of the identity of the spares, i.e., reflecting its own understanding of its own technologies.]</i></p> <p>[Note: <i>The need to ensure the availability of spare parts sources, above and beyond those the Supplier would routinely and implicitly need to perform under its defect liability and/or maintenance responsibilities, generally is not a major issue for the Information Technologies available in the market today. A System is likely to become obsolete long before it begins to develop physical defects.]</i></p>
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4. Time for Commencement and Operational Acceptance (GCC Clause 8)

GCC 8.1	The Supplier shall commence work on the System within: <i>[insert: number of days]</i> days from the Effective Date of the Contract.
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5. Supplier’s Responsibilities (GCC Clause 9)

C. PAYMENT

6. Contract Price (GCC Clause 11)

GCC 11.2	<p>There shall be no price adjustments to the contract price.</p> <p>Adjustments to the Contract Price shall be as follows: <i>[state: “not applicable” or specify: the items, adjustment formula or formulas, and the relevant price indices].</i></p> <p>[Note: <i>Price adjustment is not generally associated with Information System procurements. Price adjustment may be appropriate when: (i) performance of the Contract is expected to last more than eighteen months; (ii) the cost of an important input, such as labor, is subject to inflation (or deflation); and (iii) meaningful price indices are readily available and well accepted. Thus, for example, if the Contract provides a substantial number of recurrent cost items following Operational Acceptance, would the inclusion of an SCC to permit adjustment be appropriate. In such cases, adjustment should be limited to those items only and use appropriate indices that accurately mirror the relevant price trends.]</i></p>
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7. Terms of Payment (GCC Clause 12)

GCC 12.1	<p>Subject to the provisions of GCC Clause 12 (Terms of Payment), KEFRI shall pay the Contract Price to the Supplier according to the categories and in the manner specified below. Only the categories Advance Payment and Complete System Integration relate to the entire Contract Price. In other payment categories, the term "total Contract Price" means the total cost of goods or services under the specific payment category. Within each such category, the Contract Implementation Schedule may trigger pro-rata payments for the portion of the total Contract Price for the category corresponding to the goods or services actually Delivered, Installed, or Operationally Accepted, at unit prices and in the currencies specified in the Price Schedules of the Contract Agreement.</p> <p>(a) Advance Payment</p> <p>twenty percent (20%) of the entire Contract Price, exclusive of all Recurrent Costs, shall be paid against receipt of a claim accompanied by the Advance Payment Security specified in GCC Clause 13.2.</p> <p><i>[Note: The advance payment may be higher than 10% in cases where Supplier's mobilization costs (i.e., costs between Contract effectiveness and the first scheduled Contract payment) are likely to be much larger than the advance payment, resulting in substantial negative cash flow for the Supplier. This happens primarily in projects where the Supplier must acquire expensive highly-specialized equipment to customize and configure a solution system prior to the first scheduled payment milestone. In these cases, the entire schedule of payments below obviously needs to be adjusted accordingly.]</i></p> <p>(b) Information Technologies, Materials, and other Goods, with the exception of Custom Software and Custom Materials:</p> <p>sixty percent (60%) of the total or pro-rata Contract Price for this category against Delivery</p> <p>ten percent (10%) of the same price against Installation</p> <p>ten percent (10%) of the same price against Operational Acceptance.</p> <p>(c) Custom Software and Custom Materials:</p> <p>sixty percent (60%) of the total or pro-rata Contract Price for this category against Installation</p> <p>twenty percent (20%) of the same price against Operational Acceptance.</p> <p><i>[Note: Large custom software development or system integration contracts (e.g., those taking longer than six months from Contract Effectiveness to Operational Acceptance of the Application Software subsystem) are usually paid in increments against Procuring Entity's acceptance of major intermediate deliverables defined in the implementation schedule as key milestones (e.g. a sequence of major system design documents, such as: software requirements specifications, software design document, development of a prototype for a major subsystem,</i></p>
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delivery of a pilot implementation of the software for a subsystem or the entire system, etc.). In those cases, the above payment terms should be modified accordingly and refer to the milestones in the Implementation Schedule. The payment terms should allow the Supplier an adequate cash flow vis-à-vis the steps need to achieve an operational Information System.]

(d) Services other than Training:

eighty percent (80%) of the pro-rata Contract Price for services performed will be paid monthly in arrears, on submission and Procuring Entity's approval of invoices:

[Note: Some Contracts may involve considerable "Services other than Training" (and services other than software customization). For instance, there could be the digitization of maps using the procured Geographical Information System (GIS), or the scanning, indexing and conversion of paper documents, or the conversion or migration of existing electronic data sets. In these cases, payment may be keyed to acceptance of intermediate deliverables or completion of service delivery phases defined in the project implementation schedule, rather than merely to the passage of time, as illustrated. In designing this type of payment terms, KEFRI has an obligation to balance and ensure consistency between its own interest to pay only against value received, the supplier's need for a reasonable cash flow, the design of the project implementation schedule, the specification of service milestones and even the process for acceptance testing of intermediate deliverables (when milestones completion would be subject to such testing).]

(e) Training

thirty percent (30%) of the total Contract Price for training services at the start of the full training program

fifty percent (50%) of the pro-rata Contract Price for training services performed will be paid monthly in arrears, on submission and approval of appropriate invoices.

(f) Complete System Integration

ten percent (10%) of the entire Contract Price, exclusive of all Recurrent Costs, as final payment against Operational Acceptance of the System as an integrated whole.

(g) Recurrent Costs

one hundred percent (100%) of the price of the services actually delivered will be paid quarterly in arrears, on submission and Procuring Entity's approval of invoices.

[Note: If a separate Operational Acceptance for the System as an integrated whole is not required, increase by 10% points the final payment percentages of all other goods and services above.]

GCC 12.3

KEFRI shall pay to the Supplier interest on the delayed payments at a rate of: [*insert: "% per annum*].

GCC 12.4	The Supplier will invoice KEFRI in the currency used in the Contract Agreement and the Price Schedules .
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8. Securities (GCC Clause 13)

GCC 13.3.1	<p>The Performance Security shall be denominated in Kshs for an amount not more than 10% percent of the Contract Price, excluding any Recurrent Costs .</p> <p><i>[Note: The general rule is that the Performance Security is denominated in the currency or currencies of the contract or in a freely convertible currency acceptable to KEFRI. It should be set as no more than ten (10) percent of the Contract Price, including Recurrent Costs during the Warranty Period. Provision of the Performance Security increases the transaction costs incurred by the successful Tenderer, which it can recover only by increasing its price. Therefore, for a simple/moderate system, Performance Security in an amount of 6-10% of the Contract Price would provide adequate protection].</i></p>
GCC 13.3.4	<p>During the Warranty Period (i.e., after Operational Acceptance of the System), the Performance Security shall be reduced to [insert: number] percent of the Contract Price, excluding any Recurrent Costs.</p> <p><i>[Note: An appropriate amount for the Performance Security for a (three-year) Warranty Period would be between one (1) and two and a half (2.5) percent of the Contract Price including Recurrent Costs for the Warranty period.]</i></p>

D. Intellectual Property

9. Copyright (GCC Clause 15)

GCC 15.3	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 15.3</i></p> <p><i>[Note: If KEFRI is a corporate or commercial entity, it may choose to specify the conditions under which contractual rights would be conveyed to any Procuring Entity of the concern, or any successor entities following a group reorganization or bankruptcy or other insolvency procedures. Procuring Entities with other organizational structures may need to add other similar provisions.]</i></p>
GCC 15.4	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 15.4</i><i>[Note: There is a broad spectrum of strategies that KEFRI can adopt regarding Intellectual Property Rights in Custom Software (and in Custom Materials). One extreme case is that KEFRI retains all Intellectual Property Rights and tightly restricts what the Supplier can do with the Custom Software and information related to it. This approach may be appropriate when KEFRI has highly sensitive procedures embedded in the Custom Software (e.g., a central bank's</i></p>

settlement system) or commercial competitive concerns regarding wider use of the Software, designs, or information, or where KEFRI considers that it is contributing valuable know-how to the development of the Custom Software and wishes to share in future profits with the Supplier that derives from exploitation of that know-how. The other extreme case is where KEFRI retains no Intellectual Property Rights in the Custom Software and only licenses its use from the Supplier. This approach is most appropriate when the Supplier wants to take advantage of the potential cost reduction in allowing the Supplier to commercialize the Custom Software (rather than sharing in future profits) and where KEFRI has no proprietary or commercial concerns regarding its reuse.

A wide variety of intermediate arrangements can be appropriate, depending on the circumstances. These would entail variations of what KEFRI is entitled to do with the software, designs, and related information (and under what conditions). These rights and obligations include the following: (i) duplicating and using the software on different equipment, such as back-ups, additional computers, replacements, upgraded units, etc.; (ii) transferring the license or sublicensing the software for other entities to use, modify, develop, commercialize, etc.; (iii) sharing proprietary information regarding the Custom Software with various parties. KEFRI's obligations and rights (and the conditions under which those rights and obligations apply) can vary substantially also. These include: (i) what KEFRI must and can do with the CASE files, Source Code, and executable code of the Custom Software; (ii) sharing, reselling, and otherwise providing access to the software, designs and related information; and (iii) auditing for license compliance.

The Supplier's rights in relation to the Custom Software may:

- Be limited to use in order to support KEFRI; or*
- Extend to commercial exploitation by re-licensing to third-party customers.*

If the Supplier's rights extend to commercial exploitation, they may be limited as follows:

- There may be an interim period, designed to protect KEFRI's competitive edge, during which the Supplier is not permitted to exploit commercially; and/or*
- The Supplier may be prohibited from licensing the Custom Software to certain categories of customer (for example, direct competitors of KEFRI) or in certain territories (for example, Kenya), either for a limited period or indefinitely; and/or*
- The Supplier may be required to pay royalties to KEFRI when it licenses third parties to use the Custom Software.*

The first two of these categories of limitation are intended to protect KEFRI's competitive edge. The third is intended to allow KEFRI to share in future profits made by the Supplier through exploitation of the Custom Software. Royalty arrangements will have to be backed up by obligations to report to KEFRI regarding future sales of products to

which royalties apply and audit rights so that KEFRI can check that the Supplier's reports are accurate. Clearly, if royalty arrangements are put in place, the value of the Custom Software to the Supplier is reduced, so KEFRI may not benefit from an up-front cost saving.

KEFRI's rights in relation to the Custom Software may also be restricted to "user" rights or extended to commercial exploitation. If KEFRI is to be treated as a mere user of the Custom Software, it might accept restrictions on use similar to those imposed in relation to the Standard Software (indeed, the default position in the GCC is that the Custom Software will be licensed to KEFRI on exactly the same terms as the Standard Software if the Intellectual Property Rights in the Custom Software does not vest in KEFRI). It may, however, also expect to have access to, and a right to use, CASE files and Source Code to the Custom Software (whereas, at best, Source Code to the Standard Software is likely to be deposited in escrow).

If KEFRI is to be permitted to exploit the Custom Software commercially, its exploitation rights may be limited in similar ways to the ways in which KEFRI's own usage rights to the Custom Software may be limited.

It may be appropriate to apply different arrangements to various elements of the Custom Software, according to their commercial sensitivity and potential for exploitation and the degree of competitive advantage that they afford to KEFRI.

The various possible arrangements can be achieved by a variety of contractual mechanisms. Ownership of Intellectual Property Rights in the Custom Software may vest the Supplier or KEFRI, with the owner of those rights granting an appropriate license to the other party. This license may be subject to various degrees of exclusivity, depending on the desired commercial outcome (for example, the Supplier may own the Intellectual Property Rights in the Custom Software by granting to KEFRI a license that is exclusive, in relation to exploitation in Kenya, for two years).

If an exclusive license is to be granted, competition law issues will need to be considered in some jurisdictions.

Each is sufficiently different as to render virtually all sample text inappropriate in numerous cases. Accordingly, KEFRI of Custom Software will, in most instances, require the services of an appropriately skilled lawyer to draft SCC for the rights and obligations regarding Custom Software (more particularly, the variety of rights and obligations that potentially apply to different items of Custom Software).]

GCC 15.5

There are no Special Conditions of Contract applicable to GCC Clause 15.5

[Note: Special software escrow arrangements are generally needed in relation to Contracts for the supply of Software, particularly Application Software, where there is concern about the ability of the Supplier to provide ongoing support throughout the life of the System. The protection provided by an escrow arrangement, however, should be weighed against the costs of administering it. The actual language of

	<p><i>the escrow contract will vary depending on the laws of the country in which the escrow deposit is to be made (which may be Kenya or another country with a suitable legal regime) and the escrow agent selected (escrow agents generally have their own standard form contracts). Provisions may cover:</i></p> <ul style="list-style-type: none"> <i>(i) the Supplier’s obligations to deliver the Source Code to the escrow agent and make replacement deposits to ensure that the Source Code is up to date;</i> <i>(ii) the Supplier’s warranties that the Source Code is at all times capable of being used to generate the latest version of the executable code to the relevant Software in use by KEFRI and suitable to enable KEFRI to support and develop the Software;</i> <i>(iii) the escrow agent’s obligations to keep the Source Code secure and confidential;</i> <i>(iv) the escrow agent’s obligations in relation to verification of the Source Code (to ensure that it is Source Code and that it is capable of generating the executable code);</i> <i>(v) the obligations of the Supplier and KEFRI in relation to payment of the escrow agent’s fee;</i> <i>(vi) the escrow agent’s right and obligation to release the Source Code to KEFRI in certain specified “release events” (e.g., bankruptcy or insolvency of the Supplier or the Supplier’s failure to make deposits or to support the Software);</i> <i>(vii) limitations and exclusions of the escrow agent’s liability;</i> <i>(viii) the circumstances in which the escrow arrangement will terminate, and what will happen to the deposited Source Code on termination; and</i> <i>(ix) confidentiality undertakings to be given by KEFRI on release of the Source Code.]</i>
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10. Software License Agreements (GCC Clause 16)

<p>GCC 16.1 (a) (iv)</p>	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 16.1 (a) (iv)</i></p> <p><i>[Note: In the interest of soliciting lower Tender prices, Procuring Entities may wish to consider defining limitations in the use of the software. For example:</i></p> <ul style="list-style-type: none"> <i>(a) restrictions on the number of records in particular categories that may be held by the System;</i> <i>(b) restrictions on the numbers of transactions in particular categories that may be processed by the System in any day, week, month, or other specified period;</i> <i>(c) restrictions on the number of persons who may be authorized to</i>
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	<p><i>use the System at any time;</i></p> <p><i>(d) restrictions on the number of persons who may access the System simultaneously at any time; or</i></p> <p><i>(e) restrictions on the number of workstations that may be connected to the System at any time.</i></p> <p><i>Note that, from the point of view of KEFRI, if restrictions of any of these kinds (or any similar kind) are to be imposed and there is a real likelihood that the limits may be reached, it would be better to specify additional license fees that are payable when the limits are reached rather than imposing an absolute prohibition on exceeding the limits.]</i></p>
GCC 16.1 (b) (vi)	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 16.1 (b) (vi)</i></p> <p><i>[Note: KEFRI may also wish to specify, for example, that such entities shall be not direct competitors of the Supplier.]</i></p>
GCC 16.1 (b) (vii)	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 16.1 (b) (vii)</i></p> <p><i>[Note: KEFRI may, for example, wish to specify the members of KEFRI's business group that are not direct competitors of the Supplier and that KEFRI must obtain and provide the Supplier written evidence from such parties that such parties will adhere by the terms of the Contract as if they were party to the Contract.]</i></p>
GCC 16.2	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 16.2</i></p> <p><i>[Note: If on-site audits are acceptable, KEFRI may specify conditions on the duration and number of audits per year; the hours or days during which audits may be conducted; the categories of software subject to audit; the procedures for access to Procuring Entity's hardware or software; the number and affiliation of individual auditors; the timing and terms of advance notice; the indemnity by Supplier for losses, liabilities, and costs incurred by KEFRI as a direct result of the audit; etc.]</i></p>

11. Confidential Information (GCC Clause 17)

GCC 17.1	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 17.1</i></p> <p><i>[Note: KEFRI may wish to give members of its business group or related agencies, for example, access to certain specific types of technical and / or financial information it obtains or develops with respect to the Supplier and its Information Technologies. The SCC covering such an exemption should define the individuals covered and generally provide that KEFRI will ensure that such parties are aware of and will adhere by KEFRI's obligations under GCC Clause 17 as if such party were a party to the Contract in place of KEFRI.</i></p> <p><i>if necessary and appropriate, specify: persons, topics, and conditions for which the confidentiality clause does not apply.]</i></p>
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E. Supply, Installation, Testing, Commissioning, and Acceptance of the System

12. Representatives (GCC Clause 18)

GCC 18.1	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 18.1</i></p> <p><i>[Note: If appropriate specify additional powers or limitations.]</i></p> <p>KEFRI’s Project Manager shall have the following additional powers and / or limitations to his or her authority to represent KEFRI in matters relating to the Contract <i>[state necessary and appropriate clauses]</i>.</p>
GCC 18.2.2	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 18.2.2</i></p> <p><i>[Note: If appropriate specify additional powers or limitations.]</i></p> <p>The Supplier’s Representative shall have the following additional powers and / or limitations to his or her authority to represent the Supplier in matters relating to the Contract <i>[state necessary and appropriate clauses]</i>.</p> <p><i>[Note: Any additional powers or limitations of the Supplier’s Representative will, of necessity, be subject to discussions at Contract finalization and the SCC amended accordingly.]</i></p>

13. Project Plan (GCC Clause 19)

GCC 19.1	<p>Chapters in the Project Plan shall address the following subject:</p> <ul style="list-style-type: none"> <i>(a) Project Organization and Management Sub-Plan, including management authorities, responsibilities, and contacts, as well as task, time and resource-bound schedules (in GANTT format);</i> <i>(b) Implementation Sub-Plan;</i> <i>(c) Training Sub-Plan;</i> <i>(d) Testing and Quality Assurance Sub-Plan;</i> <i>(e) Warranty Defect Repair and Technical Support Service Sub-Plan</i> <p><i>Further details regarding the required contents of each of the above chapters are contained in the Technical Requirements, (insert: reference)].</i></p>
GCC 19.6	<p><i>The Supplier shall submit to KEFRI:</i></p> <ul style="list-style-type: none"> <i>(i) monthly inspection and quality assurance reports</i> <i>(ii) monthly training participants test results</i> <i>(iii) monthly log of service calls and problem resolutions</i>

14. Design and Engineering (GCC Clause 21)

GCC 21.3.1	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 21.3.1.</i></p>
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	<p>[Note: <i>If necessary and appropriate, specify the Controlling Technical Documents (i.e., document that must be approved by KEFRI’s Project Manager before any relevant downstream work can be undertaken by the Supplier).]</i></p> <p><i>[The Supplier shall prepare and furnish to the Project Manager the following documents for which the Supplier must obtain the Project Manager’s approval before proceeding with work on the System or any Subsystem covered by the documents. [state “none” or specify, for example:</i></p> <ul style="list-style-type: none"> <i>(*) detailed site surveys;</i> <i>(*) final Subsystem configurations;</i> <i>(*) etc.</i>
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15. Product Upgrades (GCC Clause 23)

GCC 23.4	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 23.4.</i></p> <p><i>[Note: Mandating that all new versions, releases, and updates of Standard Software will be passed on for free during the Warranty Period is a comprehensive requirement, the benefits of which must be balanced against the perceived costs in the mind of the successful Tenderer at the time of tender submission. To require the Supplier to provide for free only new releases and updates, but agreeing that it would be reimbursed for the supply of complete new versions might be more cost-effective. For example, this may be particularly appropriate when KEFRI would not benefit from costs of migrating its business applications to an entirely new version of the underlying database system if such a version came out during a three Warranty Period. Another approach may be to shorten the time period during which updates, etc., would have to be supplied for free, for example, to only the first year of the Warranty Period; or alternatively, a narrower set of Standard Software could be covered.]</i></p>
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16. Inspections and Tests (GCC Clause 25)

GCC 25	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 25.</i></p> <p><i>[Note: Procuring Entity’s may wish to consider employing qualified inspectors to inspect and certify the Information Technologies, Materials, and other Goods prior to shipment. This can minimize the number of cases where KEFRI receives shipped goods that do not conform to the Technical Requirements and shorten the repair or replacement time.]</i></p>
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17. Commissioning and Operational Acceptance (GCC Clause 27)

GCC 27.2.1	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 27.2.1.</i></p> <p><i>[Note: Few aspects of Information Technology procurement are more critical to the successful implementation of a System than the specification of Operational Acceptance Tests. It is imperative that KEFRI prepare the</i></p>
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	<p><i>specification for these tests as carefully as the overall specification of the System itself. The description should be sufficiently comprehensive, unambiguous, and verifiable to result in proper operation of the System with minimal confusion or controversy between KEFRI and its management, the Supplier, and any users.</i></p> <p><i>In addition, where the Contract covers the Installation and acceptance testing of a number of Subsystems, the nature of the acceptance tests required for each Subsystem, and for the final tests to be carried out on the entire System once all Subsystems have been completed, needs to be clearly specified here and/or in the Technical Requirements and which party bears responsibility for correcting any defects discovered during the final tests of the entire System needs to be identified.]</i></p>

F. Guarantees and Liabilities

18. Operational Acceptance Time Guarantee (GCC Clause 28)

GCC 28.2	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 28.2.</i></p> <p><i>[Note: Typical percentages are, respectively, one half of one percent (0.5%) per week and ten percent (10%) of the total. In some instances, KEFRI may wish to consider specifying liquidated damages on a daily basis. If so, specify this in the SCC].</i></p>
GCC 28.3	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 28.3.</i></p> <p><i>[Note: Establishing more milestones for liquidated damages may provide a somewhat greater degree of control and assurances regarding the pace of the implementation of the System. However, this will come at a price of increased complexity of Contract management and increased perceptions of financial risks on the part of Tenderers. This most likely will lead to higher tender prices. In most cases, Operational Acceptance should be the most appropriate financial control for ensuring the timeliness of implementation, since it captures the impact of earlier delays and is, in the final analysis, the milestone that truly matters. Whatever milestones are selected, it is critical that the Implementation Schedule precisely specify what Subsystems or other components are covered and when the milestone is set. These, of course, can be refined and revised through the Agreed Project Plan.]</i></p>

19. Defect Liability (GCC Clause 29)

GCC 29.1	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 29.1.</i></p> <p><i>[Note: Software is never completely error or “bug” free. Thus, KEFRI may wish to refine or to limit the Supplier’s warranty obligations. Properly done, this can reduce Tenderer’s perceptions of financial risk and help lower tender prices. However, KEFRI should balance the potential savings against the risks to reliable and effective operation of the System and the related costs to KEFRI. These tradeoffs are very specific to the type of the System and its uses. These tradeoffs are also changing very rapidly with technological development. KEFRI should consult experts in the relevant areas for an up-to-date assessment of the risks and the most appropriate text to express any such</i></p>
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	<i>exceptions and limitations.]</i>
GCC 29.4	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 29.4.</i></p> <p><i>[Note: When defining the Warranty period, Procuring Entity should be careful to recognize that services such as resident engineer support, new software releases and end-user help desk support are not typically included in commercial warranties and should be priced separately in the Recurrent Cost Table.]</i></p>
GCC 29.10	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 29.10</i></p> <p><i>[Note: Typically, KEFRI should develop a set of response times for different degrees of seriousness of the defects and/or categories of IT and/or specific Subsystems. The most appropriate and economical set of response times are highly dependent on the specific System, its use, and the relevant conditions in Kenya.</i></p> <p><i>The GCC specifies that the Supplier must commence work on warranty defects within a maximum of two weeks; else KEFRI may contract-in such services at the Supplier's expense. KEFRI may wish to shorten or lengthen this period in the SCC. The time specified must strike a reasonable balance between the response time the typical qualified Supplier can physically achieve and the importance of maintaining continued System operation. If too short a time period is specified, Suppliers will need to protect themselves by adding a contingency to their tender prices.]</i></p>

20. Functional Guarantees (GCC Clause 30)

GCC 30	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 30.</i></p> <p><i>[Note: In the event that Information Systems and Technologies would have to conform to other calendar system(s), here would be the place to specify related requirements in addition to, or in variation of, the requirements in GCC clause 30.2.]</i></p>
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G. Risk Distribution

21. Insurances (GCC Clause 37)

GCC 37.1 (c)	<p>The Supplier shall obtain Third-Party Liability Insurance in the amount of <i>[insert: monetary value]</i> with deductible limits of no more than <i>[insert: monetary value]</i>. The insured Parties shall be <i>[list insured parties]</i>. The Insurance shall cover the period from <i>[insert: beginning date, relative to the Effective Date of the Contract]</i> until <i>[insert: expiration date, relative to the Effective Date of the Contract or its completion]</i>.</p>
GCC 37.1 (e)	<p><i>There are no Special Conditions of Contract applicable to GCC Clause 37.1 (e).</i></p> <p><i>[Note: Many countries have statutory requirements for various insurances. These should be reviewed with KEFRI's legal department.</i></p> <p><i>For example:</i></p>

	<p><i>The Supplier shall obtain Worker’s Compensation Insurance in accordance with the statutory requirements of [insert: Kenya]. Specifically: [insert: requirements]. The Insurance shall cover the period from [insert: beginning date, relative to the Effective Date of the Contract] until [insert: expiration date, relative to the Effective Date of the Contract or its completion].</i></p> <p><i>The Supplier shall obtain Employer’s Liability Insurance in accordance with the statutory requirements of [insert: Kenya]. Specifically: [insert: requirements]. The Insurance shall cover the period from [insert: beginning date, relative to the Effective Date of the Contract] until [insert: expiration date, relative to the Effective Date of Contract or its completion].</i></p>
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H. CHANGE IN CONTRACT ELEMENTS

22.Changes to the System (GCC Clause 39)

GCC 39.4.3	<p>Value Engineering</p> <p>If the value engineering proposal is approved by KEFRI the amount to be paid to the Supplier shall be ___% (insert appropriate percentage. The percentage is normally up to 50%) of the reduction in the Contract Price.</p>
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I. Settlement of Disputes

23.Settlement of Disputes (GCC Clause 43)

GCC 43.1.4	<p>The Appointing Authority for the Adjudicator is: <i>[insert: the name of an impartial international technical organization in the information technology sector, or, if no Adjudicator is used in this Contract Agreement or no organization has been identified and agreed to serve as Appointing Authority for the Adjudicator, state “not applicable.”]</i>.</p>
GCC 43.2.3	<p>If the Supplier is from outside Kenya arbitration proceedings shall be conducted in accordance with the rules of arbitration of <i>[select one of the following: UNCITRAL / the International Chamber of Commerce (ICC) / the Arbitration Institute of the Stockholm Chamber of Commerce / the London Court of International Arbitration]</i>. These rules, in the version in force at the time of the request for arbitration, will be deemed to form part of this Contract.</p> <p>If the Supplier is a national of Kenya, any dispute between KEFRI and a Supplier arising in connection with the present Contract shall be referred to arbitration in accordance with the laws of Kenya.</p>

SECTION VIII - CONTRACT FORMS

Notes to KEFRI on preparing the Contract Forms.

Performance Security: Pursuant to GCC Clause 13.3, the successful Tenderer is required to provide the Performance Security within twenty-eight (28) days of notification of Contract award.

Advance Payment Security: Pursuant to Clause 13.2, the successful Tenderer is required to provide a bank guarantee securing the Advance Payment, if the SCC related to GCC Clause 12.1 provides for an Advance Payment.

Installation and Operational Acceptance Certificates: Recommended formats for these certificates are included in this SPD. Unless KEFRI has good reason to require procedures that differ from those recommended, or to require different wording in the certificates, the procedures and forms shall be included unchanged. If KEFRI wishes to amend the recommended procedures and/ or certificates, it may do so before release of the tendering document to potential Tenderers.

Change Order Procedures and Forms: Similar to the Installation and Operational Acceptance Certificates, the Change Estimate Proposal, Estimate Acceptance, Change Proposal, Change Order, and related Forms should be included in the tendering document unaltered. If KEFRI wishes to amend the recommended procedures and/ or certificates, it may do so before release of the tendering document.

Notes to Tenderers on working with the Sample Contractual Forms

The following forms are to be completed and submitted by the successful Tenderer following notification of award: (i) Contract Agreement, with all Appendices; (ii) Performance Security; and (iii) Advance Payment Security.

Contract Agreement: In addition to specifying the parties and the Contract Price, the Contract Agreement is where the:

(i) Supplier Representative; (ii) if applicable, agreed Adjudicator and his/her compensation; and (iii) the List of Approved Subcontractors are specified. In addition, modifications to the successful Tenderer's Tender Price Schedules are attached to the Agreement. These contain corrections and adjustments to the Supplier's tender prices to correct errors, adjust the Contract Price to reflect - if applicable - any extensions to tender validity beyond the last day of original tender validity plus 56 days, etc.

Performance Security: Pursuant to GCC Clause 13.3, the successful Tenderer is required to provide the Performance Security in the form contained in this section of these tendering documents and in the amount specified in accordance with the SCC.

Advance Payment Security: Pursuant to GCC Clause 13.2, the successful Tenderer is required to provide a bank guarantee for the full amount of the Advance Payment - if an Advance Payment is specified in the SCC for GCC Clause

12.1 - in the form contained in this section of these tendering documents or another form acceptable to KEFRI. If a Tenderer wishes to propose a different Advance Payment Security form, it should submit a copy to KEFRI promptly for review and confirmation of acceptability before the tender submission deadline.

KEFRI and Supplier will use the following additional forms during Contract implementation to

formalize or certify important Contract events: (i) the Installation and Operational Acceptance Certificates; and (ii) the various Change Order forms. These and the procedures for their use during performance of the Contract are included in the tendering documents for the information of Tenderers.

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 Tenderer Information Form]

1) For the attention of Tenderer's Authorized Representative Name: *[insert Authorized Representative's name]*

Address: *[insert Authorized Representative's Address]*

Telephone/Fax numbers: *[insert Authorized Representative's telephone/fax numbers]*

Email Address: *[insert Authorized Representative's email address]*

[IMPORTANT: insert the date that this Notification is transmitted to all participating 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.]

DATE OF TRANSMISSION:This Notification is sent by: *[email/fax]* on *[date]* (local time) Notification of Intention to Award

[Procuring Entity]: *[insert the name of KEFRI]*

Project:*[insert name of project]*

Contract title: *[insert the name of the contract]*

Country:*[insert country where ITT is issued]*

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:

- a) Request a debriefing inrelation to the evaluation of your Tender, and/ or
- b) Submit a Procurement-related Complaint in relation to the decision to award the contract.

i) The successful Tenderer

Name:	<i>[insert name of successful Tenderer]</i>
Address:	<i>[insert address of the successful Tenderer]</i>
Contract price:	<i>[insert contract price of the successful Tenderer]</i>
Total combined score:	<i>[insert the total combined score of the successful Tenderer]</i>

2) Other Tenderers *[INSTRUCTIONS: insert 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.]*

Name of Tenderer	Technical Score (If applicable)	Tender price	Evaluated Tender Cost	Combined Score (if applicable)
[insert name]	[insert Technical score]	[insert Tender price]	[insert evaluated cost]	[insert combined score]
[insert name]	[insert Technical score]	[insert Tender price]	[insert evaluated cost]	[insert combined score]
[insert name]	[insert Technical score]	[insert Tender price]	[insert evaluated cost]	[insert combined score]
[insert name]	[insert Technical score]	[insert Tender price]	[insert evaluated cost]	[insert combined score]
[insert name]	[insert Technical score]	[insert Tender price]	[insert evaluated cost]	[insert combined score]

3) Reason/s why your Tender was unsuccessful *[Delete if the combined score already reveals the reason]*

[INSTRUCTIONS; State the reason/s why this Tenderer's Tender was unsuccessful. Do NOT include: (a) a point by point comparison with another Tenderer's Tender or (b) information that is marked confidential by the Tenderer in its Tender.]

4) How to request a debriefing

DEADLINE: The deadline to request a debriefing expires at midnight on *[insert date]* (local time).

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 (3) Business Days of receipt of this Notification of Intention to Award.

Provide the contract name, reference number, name of the Tenderer, contact details; and address the request for debriefing as follows:

Attention: *[insert full name of person, if applicable]* **Title/position:** *_[insert title/position]*

Agency: *[insert name of Procuring Entity]* **Email address:** *_____ [insert email address]*

Fax number: *_____ [insert fax number] delete if not used*

If your request for a debriefing is received within the 3 Business Days deadline, we will provide the debriefing within five (5) 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 (5) Business 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.

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.

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) Business Days from the date of publication of the Contract Award Notice.

5) How to make a complaint

DEADLINE: The deadline for submitting a Procurement-related Complaint challenging the decision to award the contract expires on midnight, *[insert date]* (local time).

Provide the contract name, reference number, name of the Tenderer, contact details; and address the Procurement- related Complaint as follows:

Attention: *[insert full name of person, if applicable]* **Title/position:** *__ [insert title/position]*

Agency: *[insert name of Procuring Entity]* **Email address:** *_____ [insert email address]*

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. Further information:

For more information refer to the Public Procurement and Disposals Act 2015 and its Regulations available from the Website info@ppra.go.ke or complaints@ppra.go.ke.

In summary, there are four essential requirements:

1. You must be an 'interested party'. In this case, that means a Tenderer who submitted a Tender in this procurement, and is the recipient of a Notification of Intention to Award.
2. The complaint can only challenge the decision to award the contract.
3. You must submit the complaint within the deadline stated above.
4. You must include, in your complaint, all of the information required by the Procurement Regulations (as described in Annex III).

6) Standstill Period

DEADLINE: The Standstill Period is due to end at midnight on [*insert date*] (local time).

The Standstill Period lasts ten (10) Business Days after the date of transmission of this Notification of Intention to Award.

The Standstill Period may be extended. This may happen where we are unable to provide a debriefing within the five (5) Business Day deadline. If this happens we will notify you of the extension.

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

Signature:___ Name:_____ Title/position:_____Telephone:___ Email: _____

2 REQUEST FOR REVIEW

FORM FOR REVIEW(r.203(1))

PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NO.....OF.....20.....

BETWEEN

.....**APPLICANT**

AND

.....**RESPONDENT (Procuring Entity)**

Request for review of the decision of the..... (Name of KEFRI ofdated the...day of20.....in the matter of Tender No.....of20..... for(Tender description).

REQUEST FOR REVIEW

I/We.....,the above named Applicant(s), of address: Physical address.....P. O. Box No..... Tel. No.....Email, hereby request the Public Procurement Administrative Review Board to review the whole/part of the above mentioned decision on the following grounds , namely:

- 1.
- 2.

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

- 1.
- 2.

SIGNED(Applicant) Dated on.....day of/...20.....

FOR OFFICIAL USE ONLY Lodged with the Secretary Public Procurement Administrative Review Board on.....day of20.....

SIGNED

Board Secretary

3. Letter of Award

_____)_____

To: __

This is to notify you that your Tender dated__for execution of the_ for the Contract Price in the aggregate of_____, as corrected and modified in accordance with the Instructions to Tenderers is here by accepted by our Agency.

You are requested to furnish the Performance Security within 28 days in accordance with the Conditions of Contract, using for that purpose one of the Performance Security Forms included in Section X, - Contract Forms, of the Tendering Document.

Authorized Signature:____ Name and Title of Signatory:____ Name of Agency:__

Attachment: Contract Agreement

4. Contract Agreement

THIS CONTRACT AGREEMENT is made on the*[insert: ordinal]* day of *[insert: month]*, *[insert: year]*. BETWEEN (1) *[insert: Name of Procuring Entity]*, a *[insert: description of type of legal entity, for example, an agency of the Department of.....]* of the Government of Kenya, or corporation incorporated under the laws of Kenya and having its principal place of business at *[insert: address of Procuring Entity]* (here in after called “KEFRI”), and (2).....*[insert: name of Supplier]*, a corporation incorporated under the laws of *[insert: country of Supplier]* and having its principal place of business at *[insert: address of Supplier]* (here in after called “the Supplier”).

WHEREAS KEFRI desires to engage the Supplier to supply, install, achieve Operational Acceptance of, and support the following Information System *[insert: brief description of the Information System]* (“the System”), and the Supplier has agreed to such engagement upon and subject to the terms and conditions appearing below in this Contract Agreement.

NOW IT IS HERE BY AGREED as follows:

Article 1. Contract Documents

1. Contract Documents (Reference GCC Clause 1.1(a) (ii))

The following documents shall constitute the Contract between KEFRI and the Supplier, and each shall be read and construed as an integral part of the Contract:

- a) This Contract Agreement and the Appendices attached to the Contract Agreement
- b) Special Conditions of Contract
- c) General Conditions of Contract
- d) Technical Requirements (including Implementation Schedule)
- e) The Supplier's tender and original Price Schedules
- f) *[Add here: any other documents]*

1.2 Order of Precedence (Reference GCC Clause 2)

In the event of any ambiguity or conflict between the Contract Documents listed above, the order of precedence shall be the order in which the Contract Documents are listed in Article 1.1 (Contract Documents) above, provided that Appendix 7 shall prevail over all provisions of the Contract Agreement and the other Appendices attached to the Contract Agreement and all the other Contract Documents listed in Article 1.1 above.

1.3 Definitions (Reference GCC Clause 1)

Capitalized words and phrases used in this Contract Agreement shall have the same meanings as prescribed to them in the General Conditions of Contract.

Article 2.

Contract Price and Terms of Payment

- 2.1 Contract Price (Reference GCC Clause 1.1(a)(viii) and GCC Clause 11) KEFRI here by agrees to pay to the Supplier the Contract Price in consideration of the performance by the Supplier of its obligations under the Contract. The Contract Price shall be the aggregate of: *[insert: amount of foreign currency A in words]*, *[insert: amount in figures]*, plus *[insert: amount of foreign currency B in words]*, *[insert: amount in figures]*, plus *[insert: amount of foreign currency C in words]*, *[insert: amount in figures]*, *[insert: amount of local currency in words]*, *[insert: amount in figures]*, as specified in the Grand Summary Price Schedule.

The Contract Price shall be understood to reflect the terms and conditions used in the specification of prices in the detailed price schedules, including the terms and conditions of the associated incoterms, and the taxes, duties and related levies if and as identified.

Article 3.

Effective Date for Determining Time for Operational Acceptance

3.1 Effective Date (Reference GCC Clause 1.1(e) (ix))

The time allowed for supply, installation, and achieving Operational Acceptance of the System shall be determined from the date when all of the following conditions have been fulfilled:

- a) This Contract Agreement has been duly executed for and on behalf of KEFRI and the Supplier;
- b) The Supplier has submitted to KEFRI the performance security and the advance payment security, in accordance with GCC Clause 13.2 and GCC Clause 13.3;
- c) KEFRI has paid the Supplier the advance payment, in accordance with GCC Clause 12; Each party shall use its best efforts to fulfill the above conditions for which it is responsible as soon as practicable.

3.2 If the conditions listed under 3.1 are not fulfilled within two (2) months from the date of this Contract Agreement because of reasons not attributable to the Supplier, the parties shall discuss and agree on an equitable adjustment to the Contract Price and the Time for Achieving Operational Acceptance and/or other relevant conditions of the Contract.

Article 4. Appendixes

4.1 The Appendixes listed below shall be deemed to form an integral part of this Contract Agreement.

4.2 Reference in the Contract to any Appendix shall mean the Appendixes listed below and attached to this Contract Agreement, and the Contract shall be read and construed accordingly.

APPENDIXES

Appendix 1. Supplier's Representative

Appendix 2. Adjudicator *[If there is no Adjudicator, state "not applicable"]*

Appendix 3. List of Approved Subcontractors

Appendix 4. Categories of Software

Appendix 5. Custom Materials

Appendix 6. Revised Price Schedules (if any)

Appendix 7. Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments

IN WITNESS WHEREOF KEFRI and the Supplier have caused this Agreement to be duly executed by their duly authorized representatives the day and year first above written.

i) **For and on behalf of KEFRI**

Signed:

in the capacity of *[insert: title or other appropriate designation]*

in the presence of__

ii) **For and on behalf of the Supplier**

Signed:

in the capacity of *[insert: title or other appropriate designation]*

in the presence of__

5. Appendices

b) Appendix 1. Supplier's Representative

In accordance with GCC Clause 1.1 (b) (iv), the Supplier's Representative is:

Name:[*insert: name and provide title and address further below, or state "to be nominated within fourteen (14) days of the Effective Date"*]

Title:[*if appropriate, insert: title*]

In accordance with GCC Clause 4.3, the Supplier's addresses for notices under the Contract are:

Address of the Supplier's Representative:[*as appropriate, insert: personal delivery, postal, cable, facsimile, electronic mail, and/or EDI addresses.*]

Fallback address of the Supplier:[*as appropriate, insert: personal delivery, postal, cable, facsimile, electronic mail, and/or EDI addresses.*]

d) Appendix

2. **Adjudicator** in accordance with GCC Clause 1.1 (b) (vi), the agreed-upon Adjudicator is:

Name: *[insert: name]* Title:

..... *[insert: title]* Address:

..... *[insert: postal address]* Telephone:

..... *[insert: telephone]* in accordance with GCC

Clause 43.1.3, the agreed-upon fees and reimbursable expenses are: Hourly Fees:

..... *[insert: hourly fees]* Reimbursable Expenses:

..... *[list: reimbursables]*

Pursuant to GCC Clause 43.1.4, if at the time of Contract signing, agreement has not been reached between KEFRI and the Supplier, an Adjudicator will be appointed by the Appointing Authority named in the SCC.

c) Appendix 3. List of Approved Subcontractors

KEFRI has approved use of the following Subcontractors nominated by the Supplier for carrying out the item or component of the System indicated. Where more than one Subcontractor is listed, the Supplier is free to choose between them, but it must notify KEFRI of its choice sufficiently in advance of the time when the subcontracted work needs to commence to give KEFRI reasonable time for review. In accordance with GCC Clause 20.1, the Supplier is free to submit proposals for Subcontractors for additional items from time to time. No subcontracts shall be placed with any such Subcontractors for additional items until the Subcontractors have been approved in writing by KEFRI and their names have been added to this list of Approved Subcontractors, subject to GCC Clause 20.3.

[specify: item, approved Subcontractors, and their place of registration that the Supplier proposed in the corresponding attachment to its tender and that KEFRI approves that the Supplier engage during the performance of the Contract. Add additional pages as necessary.]

Item	Approved Subcontractors	Place of Registration

d) Appendix 4. Categories of Software

The following table assigns each item of Software supplied and installed under the Contract to one of the three categories: (i) System Software, (ii) General-Purpose Software, or (iii) Application Software; and to one of the two categories: (i) Standard Software or (ii) Custom Software.

Software Item	(select one per item)			(select one per item)	
	System Software	General-Purpose Software	Application Software	Standard Software	Custom Software

e) Appendix 5. Custom Materials

The follow table specifies the Custom Materials the Supplier will provide under the Contract.

Custom Materials

f) Appendix 6. Revised Price Schedules

The attached Revised Price Schedules (if any) shall form part of this Contract Agreement and, where differences exist, shall supersede the Price Schedules contained in the Supplier's Tender. These Revised Price Schedules reflect any corrections or adjustments to the Supplier's tender price, pursuant to the ITT Clauses 30.3 and 38.2.

g) Appendix 7. Minutes of Contract Finalization Discussions and Agreed-to Contract Amendments

The attached Contract amendments (if any) shall form part of this Contract Agreement and, where differences exist, shall supersede the relevant clauses in the GCC, SCC, Technical Requirements, or other parts of this Contract as defined in GCC Clause 1.1 (a) (ii).

5. Performance and Advance Payment Security Forms

5.1 Performance Security Form (Demand Bank Guarantee)

[The bank, as requested by the successful Tenderer, shall fill in this form in accordance with the instructions indicated] [Guarantor Form head or SWIFT identifier code]

.....
[insert: Bank's Name, and Address of Issuing Branch or Office]
Beneficiary: *[insert: Name and Address of Procuring Entity]*
Date: *[insert: date]*
PERFORMANCE GUARANTEE No.: *[insert: Performance Guarantee Number]*
Guarantor: *[Insert name and address of place of issue, unless indicated in the Form head.]*

We have been informed that on *[insert: date of award]* you awarded Contract No. *[insert: Contract number]* for *[insert: title and/or brief description of the Contract]* (hereinafter called "the Contract") to *[insert: complete name of Supplier which in the case of a joint venture shall be in the name of the joint venture]* (hereinafter called "the Applicant"). Furthermore, we understand that, according to the conditions of the Contract, a performance guarantee is required.

At the request of the Applicant, we as Guarantor here by irrevocably undertake to pay you any sum(s) not exceeding *[insert: amount(s)¹ in figures and words]* such sum being payable in the types and proportions of currencies which the Contract Price is payable upon receipt by us of the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating that the Applicant is in breach of its obligation(s) under the contract without the Beneficiary needing to prove or to show grounds or reasons for their demand or the sum specified there in.

On the date of your issuing, to the Supplier, the Operational Acceptance Certificate for the System, the value of this guarantee will be reduced to any sum(s) not exceeding.....
[insert: amount(s) 4 in figures and words]. This remaining guarantee shall expire no later than.....*[insert: number and select: of months/of years (of the Warranty Period that needs to be covered by the remaining guarantee)]* from the date of the Operational Acceptance Certificate for the System², and any demand for payment under it must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees, (URDG) 2010 Revision, ICC Publication No. 758, except that the supporting statement under 15 (a) is hereby excluded.

[Signature(s)]

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

¹ *The bank shall insert the amount(s) specified and denominated in the SCC for GCC Clauses 13.3.1 and 13.3.4 respectively, either in the currency(ies) of the Contract or a freely convertible currency acceptable to KEFRI.*

² *In this sample form, the formulation of this paragraph reflects the usual SCC provisions for GCC Clause 13.3. However, if the SCC for GCC Clauses 13.3.1 and 13.3.4 varies from the usual provisions, the paragraph, and possibly the previous paragraph, need to be adjusted to precisely reflect the provisions specified in the SCC.*

5.2 Advance Payment Security

Demand Bank Guarantee

[Guarantor Form head or SWIFT identifier code]

Beneficiary: *[insert: Name and Address of Procuring Entity]*

Date: *[insert date of issue]*

ADVANCE PAYMENT GUARANTEE No.: *[insert: Advance Payment Guarantee Number]*

Guarantor: *[Insert name and address of place of issue, unless indicated in the Form head]*

We have been informed that on.....*[insert: date of award]* you awarded Contract No. *[insert: Contract number]* for*[insert: title and/or brief description of the Contract]* (here in after called "the Contract") to *[insert: complete name of Supplier, which in the case of a joint venture shall be the name of the joint venture]* (here in after called" the Applicant").

Furthermore, we understand that, according to the conditions of the Contract, an advance payment in the sum of *[insert: amount in numbers and words, for each currency of the advance payment]* is to be made to the Supplier against an advance payment guarantee.

At the request of the Applicant, we as Guarantor, here by irrevocably undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of..... *[Insert amount in figures]* () *[insert amount in words]*⁷ upon receipt by us of the Beneficiary's complying demand supported by the Beneficiary's statement, whether in the demand itself or in a separate signed document accompanying or identifying the demand, stating either that the Applicant:

- (a) Has used the advance payment for purposes other than toward delivery of Goods; or
- (b) has failed to repay the advance payment in accordance with the Contract conditions, specifying the amount which the Applicant has failed to repay.

A demand under this guarantee may be presented as from the presentation to the Guarantor of a certificate from the Beneficiary's bank stating that the advance payment referred to above has been credited to the Applicant on its account number.....*[insert number]*at.....*[insert name and address of Applicant's bank]*.

The maximum amount of this guarantee shall be progressively reduced by the amount of the advance payment repaid by the Applicant 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, has been certified for payment, or on the.....*[insert day]* day of.....*[insert month]*, 2 *[insert year]*, whichever is earlier. Consequently, any demand for payment under this guarantee must be received by us at this office on or before that date.

This guarantee is subject to the Uniform Rules for Demand Guarantees (URDG) 2010 Revision, ICC Publication No.758, except that the supporting statement under Article 15(a) is hereby excluded.

[signature(s)]

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

5.3 Installation and Acceptance Certificates *(insert format)*

Installation Certificate

Date: *[insert: date]*

ITT: *[insert: title and number of ITT]*

Contract: *[insert: name and number of Contract]*

To: *[insert: name and address of Supplier]*

Dear Sir or Madam:

Pursuant to GCC Clause 26 (Installation of the System) of the Contract entered into between yourselves and the..... *[insert: name of Procuring Entity]* (hereinafter the “Procuring Entity”) dated..... *[insert: date of Contract]*, relating to the.....*[insert: brief description of the Information System]*, we hereby notify you that the System (or a Subsystem or major component thereof) was deemed to have been correctly installed on the date specified below.

1. Description of the System (or relevant Subsystem or major component):
..... *[insert: description]*
2. Date of Installation:
[insert: date]

Notwithstanding the above, you are required to complete the outstanding items listed in the attachment to this certificate as soon as practicable. This Form shall not relieve you of your obligation to achieve Operational Acceptance of the System in accordance with the Contract nor of your obligations during the Warranty Period.

For and on behalf of KEFRI

Signed:

Date:

in the capacity of:[*state: “Project Manager” or state the title of a higher-level authority in KEFRI's organization*]

6.0 Operational Acceptance Certificate

Date:[insert: date]

ITT:[insert: title and number of ITT]

Contract:[insert: name of System or Subsystem and number of Contract]

To:[insert: name and address of Supplier]

Dear Sir or Madam:

Pursuant to GCC Clause 27 (Commissioning and Operational Acceptance) of the Contract entered into between yourselves and the.....[insert: name of Procuring Entity] (hereinafter the “Procuring Entity”) dated..... [insert: date of Contract], relating to the.....[insert: brief description of the Information System], we hereby notify you the System (or the Subsystem or major component identified below) successfully completed the Operational Acceptance Tests specified in the Contract. In accordance with the terms of the Contract, KEFRI here by takes over the System (or the Subsystem or major component identified below), together with the responsibility for care and custody and the risk of loss thereof on the date mentioned below.

1. Description of the System (or Subsystem or major component):[insert: description]
2. Date of Operational Acceptance:[insert: date]

This Form shall not relieve you of your remaining performance obligations under the Contract nor of your obligations during the Warranty Period.

For and on behalf of KEFRI

Signed:

Date:

in the capacity of:[state: “Project Manager” or higher-level authority in KEFRI's organization]

7. Change Order Procedures and Forms

Date:[*insert: date*]

ITT:[*insert: title and number of ITT*]

Contract:[*insert: name or System or Subsystem and number of Contract*]

General

This section provides samples of procedures and forms for carrying out changes to the System during the performance of the Contract in accordance with GCC Clause 39 (Changes to the System) of the Contract.

Change Order Log

The Supplier shall keep an up-to-date Change Order Log to show the current status of Requests for Change and Change Orders authorized or pending. Changes shall be entered regularly in the Change Order Log to ensure that the log is kept up-to-date. The Supplier shall attach a copy of the current Change Order Log in the monthly progress report to be submitted to KEFRI.

References to Changes

- 1) Request for Change Proposals (including Application for Change Proposals) shall be serially numbered CR-nnn.
- 2) Change Estimate Proposals shall be numbered CN-nnn.
- 3) Estimate Acceptances shall be numbered CA-nnn.
- 4) Change Proposals shall be numbered CP-nnn.
- 5) Change Orders shall be numbered CO-nnn. On all forms, the numbering shall be determined by the original CR-nnn.

Annexes

- | | |
|-----|--------------------------------------|
| 7.1 | Request for Change Proposal Form |
| 7.2 | Change Estimate Proposal Form |
| 7.3 | Estimate Acceptance Form |
| 7.4 | Change Proposal Form |
| 7.5 | Change Order Form |
| 7.6 | Application for Change Proposal Form |

7.1 Request for Change Proposal Form

(Procuring Entity's Form head)

Date:[insert: date]

ITT:[insert: title and number of ITT]

Contract:[insert: name of System or Subsystem or number of Contract]

To:[insert: name of Supplier and address]

Attention:[insert: name and title]

Dear Sir or Madam:

With reference to the above-referenced Contract, you are requested to prepare and submit a Change Proposal for the Change noted below in accordance with the following instructions within [insert: number] days of the date of this Form.

1. Title of Change: [insert: title]
2. Request for Change No./Rev.: [insert: number]
3. Originator of Change: [select Procuring Entity / Supplier (by Application for Change Proposal), and add: name of originator]
4. Brief Description of Change: [insert: description]
5. System (or Subsystem or major component affected by requested Change): [insert: description]
6. Technical documents and/ or drawings for the request of Change: Document or Drawing No.
Description
7. Detailed conditions or special requirements of the requested Change: [insert: description]
8. Procedures to be followed:
 - a) Your Change Proposal will have to show what effect the requested Change will have on the Contract Price.
 - b) Your Change Proposal shall explain the time it will take to complete the requested Change and the impact, if any, it will have on the date when Operational Acceptance of the entire System agreed in the Contract.
 - c) If you believe implementation of the requested Change will have a negative impact on the quality, operability, or integrity of the System, please provide a detailed explanation, including other approaches that might achieve the same impact as the requested Change.
 - d) You should also indicate what impact the Change will have on the number and mix of staff needed by the Supplier to perform the Contract.
 - e) You shall not proceed with the execution of work related to the requested Change until we have accepted and confirmed the impact it will have on the Contract Price and the Implementation Schedule in writing.
9. As next step, please respond using the Change Estimate Proposal form, indicating how much it will cost you to prepare a concrete Change Proposal that will describe the proposed approach for implementing the Change, all its elements, and will also address the points in paragraph 8 above pursuant to GCC Clause 39.2.1. Your Change Estimate Proposal should contain a first approximation of the proposed approach, and implications for schedule and cost, of the Change.

For and on behalf of KEFRI

Signed:

Date:

in the capacity of:[*state: "Project Manager" or higher-level authority in KEFRI's organization*]

7.2 Change Estimate Proposal Form
(Supplier's Form head)

Date:[insert: date]

ITT:[insert: title and number of ITT]

Contract:[insert: name of System or Subsystem and number of Contract]

To:[insert: name of Procuring Entity and address]

Attention: [insert: name and title]

Dear Sir or Madam:

With reference to your Request for Change Proposal, we are pleased to notify you of the approximate cost of preparing the below-referenced Change in accordance with GCC Clause 39.2.1 of the Contract. We acknowledge that your agreement to the cost of preparing the Change Proposal, in accordance with GCC Clause 39.2.2, is required before we proceed to prepare the actual Change Proposal including a detailed estimate of the cost of implementing the Change itself.

1. Title of Change:[insert: title]
2. Request for Change No./Rev.:[insert: number]
3. Brief Description of Change (including proposed implementation approach):[insert: description]
4. Schedule Impact of Change (initial estimate):[insert: description]
5. Initial Cost Estimate for Implementing the Change:[insert: initial cost estimate]
6. Cost for Preparation of Change Proposal:[insert: cost in the currencies of the Contract], as detailed below in the breakdown of prices, rates, and quantities.

For and on behalf of the Supplier Signed:

.....

.....

Date:

in the capacity of:[state: "Supplier's Representative" or other higher-level authority in the Supplier's organization]

7.3 Estimate Acceptance Form

(Procuring Entity's Form head) Date:*[insert: date]*

ITT.....*[insert: title and number of ITT]*

Contract:*[insert: name of System or Subsystem and number of Contract]*

To:*[insert: name of Supplier and address]* Attention:*[insert: name and title]* Dear Sir or Madam:

We hereby accept your Change Estimate and agree that you should proceed with the preparation of a formal Change Proposal.

1. Title of Change: *[insert: title]*
2. Request for Change No./ Rev.: *[insert: request number /revision]*
3. Change Estimate Proposal No./ Rev.: *[insert: proposal number/ revision]*
4. Estimate Acceptance No./ Rev.: *[insert: estimate number/ revision]*
5. Brief Description of Change: *[insert: description]*
6. Other Terms and Conditions:

In the event that we decide not to order the Change referenced above, you shall be entitled to compensation for the cost of preparing the Change Proposal up to the amount estimated for this purpose in the Change Estimate Proposal, in accordance with GCC Clause 39 of the General Conditions of Contract.

For and on behalf of KEFRI

Signed:

Date:

in the capacity of:*[state: "Project Manager" or higher-level authority in KEFRI's organization]*

7.4 Change Proposal Form

(Supplier's Form head)

Date:*[insert: date]*

ITT:*[insert: title and number of ITT]*

Contract:*[insert: name of System or Subsystem and number of Contract]*

To:*[insert: name of Procuring Entity and address]*

Attention:*[insert: name and title]*

Dear Sir or Madam:

In response to your Request for Change Proposal No. *[insert: number]*, we here by submit our proposal as follows:

1. Title of Change: *[insert: name]*
2. Change Proposal No./ Rev.: *[insert: proposal number /revision]*
3. Origin at or of Change: *[select: Procuring Entity /Supplier; and add: name]*
4. Brief Description of Change: *[insert: description]*
5. Reasons for Change: *[insert: reason]*
6. The System Subsystem, major component, or equipment that will be affected by the requested Change: *[insert: description]*
7. Technical documents and/ or drawings for the requested Change: Document or Drawing No.
Description
8. Estimate of the increase/ decrease to the Contract Price resulting from the proposed Change: *[insert: amount in currencies of Contract]*, as detailed below in the breakdown of prices, rates, and quantities. Total lump sum cost of the Change:
Cost to prepare this Change Proposal (i. e., the amount payable if the Change is not accepted, limited as provided by GCC Clause 39.2.6):
9. Additional Time for Achieving Operational Acceptance required due to the Change: *[insert: amount in days/ weeks]*
10. Effect on the Functional Guarantees: *[insert: description]*
11. Effect on the other terms and conditions of the Contract: *[insert: description]*
12. Validity of this Proposal: for a period of*[insert: number]* days after receipt of this Proposal by KEFRI
13. Procedures to be followed:
 - a) You are requested to notify us of your acceptance, comments, or rejection of this detailed Change Proposal within.....*[insert: number]* days from your receipt of this Proposal.
 - b) The amount of any increase and / or decrease shall be taken into account in the adjustment of the Contract Price.

For and on behalf of the Supplier

Signed:

Date:

in the capacity of: [*state: "Supplier's Representative" or other higher-level authority in the Supplier's organization*]

7.5 Change Order Form

(Procuring Entity's Form head)

Date:*[insert: date]*

ITT:*[insert: title and number of ITT]*

Contract:*[insert: name of System or Subsystem and number of Contract]*

To:*[insert: name of Supplier and address]*

Attention:*[insert: name and title]*

Dear Sir or Madam:

We hereby approve the Change Order for the work specified in Change Proposal No. *[insert: number]*, and agree to adjust the Contract Price, Time for Completion, and/ or other conditions of the Contract in accordance with GCC Clause 39 of the Contract.

1. Title of Change: *[insert: name]*
2. Request for Change No./ Rev.: *[insert: request number/ revision]*
3. Change Order No./ Rev.: *[insert: order number/ revision]*
4. Origin at or of Change: *[select: Procuring Entity / Supplier; and add: name]*
5. Authorized Price for the Change: Ref. No.: *[insert: number]* Date: *[insert: date]*
[insert: amount in foreign currency A] plus [insert: amount in foreign currency B] plus [insert: amount in foreign currency C] plus [insert: amount in local currency]
6. Adjustment of Time for Achieving Operational Acceptance: *[insert: amount and description of adjustment]*
7. Other effects, if any: *[state: "none" or insert description]*

For and on behalf of KEFRI

Signed:

Date:

in the capacity of:*[state: "Project Manager" or higher-level authority in KEFRI's organization]*

For and on behalf of the Supplier

Signed:

Date:

in the capacity of:*[state "Supplier's Representative" or higher-level authority in the Supplier's organization]*

7.6 Application for Change Proposal Form

(Supplier's Form head)

Date:*[insert: date]*

ITT:*[insert: title and number of ITT]*

Contract:*[insert: name of System or Subsystem and number of Contract]*

To:*[insert: name of Procuring Entity and address]*

Attention:*[insert: name and title]*

Dear Sir or Madam:

We hereby propose that the below-mentioned work be treated as a Change to the System.

1. Title of Change:*[insert: name]*
2. Application for Change Proposal No./ Rev.:*[insert: number/ revision]* dated: *[insert: date]*
3. Brief Description of Change:*[insert: description]*
4. Reasons for Change:*[insert: description]*
5. Order of Magnitude Estimation:*[insert: amount in currencies of the Contract]*
6. Schedule Impact of Change:*[insert: description]*
7. Effect on Functional Guarantees, if any:*[insert: description]*
8. Appendix:*[insert: titles (if any); otherwise state "none"]*

For and on behalf of the Supplier

Signed:

Date:

in the capacity of:*[state: "Supplier's Representative" or higher-level authority in the Supplier's organization]*

7.7 BENEFICIAL OWNERSHIP DISCLOSURE FORM

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

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

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

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

Tender Reference No.: _____ [*insert identification no*] Name of the Assignment: _____ [*insert name of the assignment*] to: _____ [*insert complete name of Procuring Entity*]

In response to your notification of award dated _____ [*insert date of notification of award*] to furnish additional information on beneficial ownership: _____ [*select one option as applicable and delete the options that are not applicable*]

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

Details of beneficial ownership

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

OR

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

OR

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

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

Directly or indirectly having the right to appoint a majority of the board of directors or equivalent governing body of the Tenderer]”

Name of the Tenderer:[insert complete name of the Tenderer]___*

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

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

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

Date signed [insert date of signing] day of..... [Insert month], [insert year]