



**Ministry of Education**  
**State Department for Technical, Vocational**  
**Education and Training**

**KfW Development Bank**

**German Financial Cooperation with Kenya:**  
**Promotion of Youth Employment and Vocational Training in Kenya**  
**BMZ No. 2016 67 211 / 2016 65 298**

**International Competitive Bidding**  
**ICB-09/MOE-VTT/TVET/KfW 2016 65 298/005/2023-2024**

**Bidding Documents for:**

**Supply, Delivery and Commissioning of Equipment for Technical**  
**Training Institutes in Kenya:**

**ICT Hardware, Software, and Internet connectivity**

- Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP**
- Lot 2: Data Center, CCTV, Access Control**
- Lot 3: Computers, Smart Classroom, Learning Automation, and software licensing.**
- Lot 4: Internet Connectivity**

**November 2023**

---



---

# INVITATION FOR BIDS

Ministry of Education, State Department for Technical, Vocational Education and Training  
Promotion of Youth Employment and Vocational Training in Kenya  
BMZ No. 2016 67 211 / 2016 65 298

**28<sup>th</sup> November 2023**

Tender Reference: ICB-09/MOE-VTT/TVET/KfW 2016 65 298/005/2023-2024

The State Department for Technical, Vocational Education and Training, Ministry of Education, Government of the Republic of Kenya has received financing from KfW toward the cost of the programme “Promotion of Youth Employment and Vocational Training in Kenya”, and intends to apply part of the proceeds toward payments under the contract(s) for *Supply, Delivery and Commissioning of Equipment for Technical Training Institutes in Kenya: ICT Hardware, Software, and Internet connectivity*.

The Ministry of Education, State Department for Technical, Vocational Education and Training, now invites sealed Bids from eligible Bidders for *the supply of ICT Hardware, Software, and Internet connectivity, including delivery, installation, commissioning, related training, and servicing / maintenance at: Kiambu Institute of Science and Technology (KIST), Nairobi Technical Training Institute (NTTI) and Thika Technical Training Institute (TTTI)*.

*This tender includes 4 Lots;*

*Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP*

*Lot 2: Data Center, CCTV, Access Control*

*Lot 3: Computers, Smart Classroom, Learning Automation, and software licensing.*

*Lot 4: Internet Connectivity.*

The required items, quantities, delivery periods, and other details are specified in the bidding document.

Bidding will be conducted by means of the International Competitive Bidding procedure with qualification as specified in KfW’s Procurement Guidelines (“Guidelines for the Procurement of Consulting Services, Works, Plant, Goods and Non-Consulting Services in Financial Cooperation with Partner Countries”, Version 2019; updated 2021), with due regard to the Kenyan Public Procurement and Asset Disposal Act (2015) and regulations 2020.

Interested eligible Bidders may obtain further information from the Ministry of Education, State Department for Technical, Vocational Education and Training, on 7th floor room 703 Uchumi House, Along Agha Khan Walk or by writing to the following email address: [tenders.moe.tvet@gmail.com](mailto:tenders.moe.tvet@gmail.com).

---

A complete set of bidding documents is available to interested Bidders and can be downloaded from the Ministry of Education website <https://www.education.go.ke/index.php/tenders>. In order to receive any potential notifications in relation to these bidding documents, interested Bidders should immediately send their contact details (including the tender reference number) to the email address: [tenders.moe.tvet@gmail.com](mailto:tenders.moe.tvet@gmail.com).

Bids must be delivered to the Tender Box marked Ministry of Education, State Department for Technical, Vocational Education and Training KfW project located on the ground floor of Jogoo House B, Harambee Avenue on or before **11.00 am (East Africa Time), 30th January 2024**. Late Bids will be rejected.

Bids will be opened in a public session on 10th floor of Jogoo House B, Conference room in the presence of the Bidders' designated representatives.

All Bids must be accompanied by a **Bid Security of two percent (2%)** of the Total Bid Price per lot, and in accordance with the Instructions to Bidders.

The Purchaser will not be responsible for any costs or expenses incurred by bidders in connection with the preparation or delivery of bids.

HEAD SUPPLY CHAIN MANAGEMENT  
FOR ; PRINCIPAL SECRETARY  
STATE DEPARTMENT FOR TECHNICAL, VOCATIONAL EDUCATION AND TRAINING

---

## Table of Contents

<b>PART 1 – Bidding Procedures</b> .....	<b>4</b>
Section I. Instructions to Bidders .....	5
Section II. Bid Data Sheet (BDS).....	27
Section III. Qualification and Evaluation Criteria .....	31
Section IV. Bidding Forms .....	44
Section V. Eligibility Criteria.....	67
Section VI. KfW Policy – Sanctionable Practice – Social and Environmental Responsibility .....	69
<b>PART 2 – Supply Requirements</b> .....	<b>71</b>
Section VII. Schedule of Requirements .....	72
<b>PART 3 - Contract</b> .....	<b>196</b>
Section VIII. General Conditions of Contract .....	197
Section IX. Particular Conditions of Contract .....	214
Section X. Contract Forms .....	224

---

# **PART 1 – Bidding Procedures**

# Section I. Instructions to Bidders

## Table of Contents

<b>A. General</b> .....	<b>7</b>
1. Scope of Bid .....	7
2. Source of Funds .....	7
3. Corrupt and Fraudulent Practices .....	7
4. Eligible Bidders .....	7
5. Eligible Goods and Related Services .....	9
<b>B. Contents of Bidding Documents</b> .....	<b>9</b>
6. Sections of Bidding Documents .....	9
7. Clarification of Bidding Documents .....	10
8. Amendment of Bidding Document.....	10
<b>C. Preparation of Bids</b> .....	<b>10</b>
9. Cost of Bidding .....	10
10. Language of Bid.....	11
11. Documents Comprising the Bid.....	11
12. Declaration of Undertaking, Qualification Forms, and Bid Submission Form, Bidding Forms, Price Schedules .....	12
13. Alternative Bids.....	12
14. Bid Prices and Discounts .....	12
15. Currencies of Bid and Payment .....	14
16. Documents Establishing the Eligibility and Conformity of the Goods and Related Services.....	14
17. Documents Establishing the Eligibility and Qualifications of the Bidder.....	15
18. Period of Validity of Bids .....	15
19. Bid Security .....	16
20. Format and Signing of Bid .....	17
<b>D. Submission and Opening of Bids</b> .....	<b>18</b>
21. Sealing and Marking of Bids .....	18
22. Deadline for Submission of Bids .....	19
23. Late Bids.....	19
24. Withdrawal, Substitution, and Modification of Bids .....	19
25. Bid Opening.....	19
<b>E. Evaluation and Comparison of Bids</b> .....	<b>21</b>
26. Confidentiality .....	21
27. Qualification of the Bidder.....	21
28. Clarification of Bids .....	21
29. Deviations, Reservations, and Omissions .....	22
30. Determination of Responsiveness .....	22
31. Non-conformities, Errors and Omissions.....	22
32. Correction of Arithmetical Errors .....	23
33. Conversion to Single Currency .....	23
34. Margin of Preference .....	23
35. Evaluation of Bids.....	23
36. Comparison of Bids .....	25

---

37.	Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids .....	25
<b>F.</b>	<b>Award of Contract .....</b>	<b>25</b>
38.	Award Criteria .....	25
39.	Purchaser's Right to Vary Quantities at Time of Award .....	25
40.	Notification of Award .....	25
41.	Signing of Contract .....	26
42.	Performance Security .....	26

# Section I. Instructions to Bidders<sup>1</sup>

## A. General

- |  |   |
|--|---|
| 1. <b>Scope of Bid</b>                     | <p>1.1 In connection with the Invitation for Bids, <b>specified in the Bid Data Sheet (BDS)</b>, the Purchaser, <b>as specified in the BDS</b>, issues these Bidding Documents for the Procurement of Goods and Related Services incidental thereto as specified in Section VII, Schedule of Requirements. The name, identification and number of lots (contracts) of this International Competitive Bidding (ICB) are <b>specified in the BDS</b>.</p> <p>1.2 Throughout these Bidding Documents:</p> <ul style="list-style-type: none"> <li>(a) The term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, telex) with proof of receipt;</li> <li>(b) If the context so requires, “singular” means “plural” and vice versa; and</li> <li>(c) “Day” means calendar day.</li> </ul> |
| 2. <b>Source of Funds</b>                  | <p>2.1 The Purchaser <b>specified in the BDS</b> has applied for or received financing (hereinafter called “funds”) from the KfW Entwicklungsbank (hereinafter called “the KfW”), toward the project <b>named in the BDS</b>. The Purchaser intends to apply a portion of the funds to eligible payments under the contract for which these Bidding Documents are issued.</p>   |
| 3. <b>Corrupt and Fraudulent Practices</b> | <p>3.1 KfW requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Section VI.</p> <p>3.2 In further pursuance of this policy, Bidders shall permit and shall cause its agents to provide information and permit KfW or an agent appointed by KfW to inspect on site all accounts, records and other documents relating to bid submission and contract performance (in the case of award), and to have them audited by auditors or agents appointed by KfW.</p>   |
| 4. <b>Eligible Bidders</b>                 | <p>4.1 A Bidder may be a firm that is a private entity, a state-owned entity- subject to ITB 4.3 - or any combination of such entities in the form of a joint venture (“JV”) under an existing JV Agreement or with the intent to enter into such an agreement supported by a letter of intent to execute a JV Agreement, in accordance with ITB 11.2. In the case of a JV, all members shall be jointly and severally liable for the execution of the Contract in accordance with the Contract terms. The Bidder shall nominate an authorised representative who shall have the authority to conduct all business for and on behalf of Bidder and any and all its members, if the Bidder is a JV,</p>  |

<sup>1</sup> [Text in this Section shall not be modified.]

during bidding and contract execution (in the event the Bidder is awarded the Contract). Unless specified in the BDS, there is no limit on the number of members in a JV.

- 4.2 A Bidder shall not have a conflict of interest. Any Bidder found to have a conflict of interest shall be disqualified. A Bidder may be considered to have a conflict of interest for the purpose of this bidding process, if the Bidder:
- (a) Directly or indirectly controls, is controlled by or is under common control with another Bidder; or
  - (b) Receives or has received any direct or indirect subsidy from another Bidder; or
  - (c) Has the same legal representative as another Bidder; or
  - (d) Has a relationship with another Bidder, directly or through common third parties, that puts it in a position to influence the bid of another Bidder, or influence the decisions of the Purchaser regarding this bidding process; or
  - (e) Participates in more than one bid in this bidding process, both as an individual firm and as a JV member. Participation by a Bidder in more than one Bid will result in the disqualification of all Bids in which such Bidder is involved. However, this does not limit the inclusion of the same subcontractor in more than one bid; or
  - (f) Any of its affiliates participated as a consultant in the preparation of the design or technical specifications of the goods that are the subject of the bid; or
  - (g) Any of its affiliates has been hired (or is proposed to be hired) by the Purchaser for the Contract implementation; or
  - (h) Has a close business or family relationship with a professional staff of the Purchaser (or of the project implementing agency, or of a recipient of a part of the funds) who: (i) are directly or indirectly involved in the preparation of the bidding documents or specifications of the contract, and/or the bid 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 the KfW throughout the procurement process and execution of the contract.
- 4.3 The KfW's eligibility criteria to bid are described in Section V, Eligibility criteria.
- 4.4 A Bidder shall not be under suspension from bidding by the Purchaser as the result of the execution of a Bid-Securing Declaration.

- 4.5 This bidding is open only to eligible Bidders, who will be subject to qualification.
- 4.6 A Bidder shall provide such evidence of eligibility satisfactory to the Purchaser, as specified in ITB 17.1 or as the Purchaser shall reasonably request.
- 5. Eligible Goods and Related Services**
- 5.1 All the Goods and Related Services to be supplied under the Contract and financed by the KfW shall have their origin in any country in accordance with Section V, Eligibility Criteria.
- 5.2 For purposes of this Clause, the term “goods” includes commodities, raw material, machinery, equipment, and industrial plants; and “related services” includes services such as insurance, installation, training, and initial maintenance.
- 5.3 The term “origin” means the country where the goods have been mined, grown, cultivated, produced, manufactured or processed; or, through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.

## **B. Contents of Bidding Documents**

- 6. Sections of Bidding Documents**
- 6.1 The Bidding Documents consist of Parts 1, 2, and 3, which include all the Sections indicated below, and should be read in conjunction with any Addenda issued in accordance with ITB 8.

### **PART 1 - Bidding Procedures**

- Section I. Instructions to Bidders (ITB);
- Section II. Bid Data Sheet (BDS);
- Section III. Qualification and Evaluation Criteria;
- Section IV. Bidding Forms;
- Section V. Eligibility Criteria;
- Section VI. KfW Policy - Corrupt and Fraudulent Practices and Social and Environmental Responsibility;

### **PART 2 - Supply Requirements**

- Section VII. Schedule of Requirements;

### **PART 3 - Contract**

- Section VIII. General Conditions of Contract (GC);
- Section IX. Particular Conditions of Contract (PC);

- Section X. Contract Forms.

- 6.2 The Invitation for Bids issued by the Purchaser is not part of the Bidding Documents.
- 6.3 Unless obtained directly from the Purchaser, the Purchaser is not responsible for the completeness of the Bidding Documents, responses to requests for clarification or Addenda to the Bidding Documents in accordance with ITB 8. In case of any contradiction, documents obtained directly from the Purchaser shall prevail.
- 6.4 The Bidder is expected to examine all instructions, forms, terms, and specifications in the Bidding Documents and to furnish with its Bid all information or documentation as is required by the Bidding Documents.
- 7. Clarification of Bidding Documents**
- 7.1 A Bidder requiring any clarification of the Bidding Documents shall contact the Purchaser in writing at the Purchaser's address **specified in the BDS**. The Purchaser will respond in writing to any request for clarification, provided that such request is received no later than 14 (fourteen) days prior to the deadline for submission of bids. The Purchaser shall forward copies of its response to all Bidders who have acquired the Bidding Documents in accordance with ITB 6.3, including a description of the inquiry but without identifying its source. If so **specified in the BDS**, the Purchaser shall also promptly publish its response at the web page **identified in the BDS**. Should the clarification result in changes to the essential elements of the Bidding Documents, the Purchaser shall amend the Bidding Documents following the procedure under ITB 8 and ITB 22.2.
- 8. Amendment of Bidding Document**
- 8.1 At any time prior to the deadline for submission of bids, the Purchaser may amend the Bidding Documents by issuing addenda.
- 8.2 Any addendum issued shall be part of the Bidding Documents and shall be communicated in writing to all who have obtained the Bidding Documents from the Purchaser in accordance with ITB 6.3. The Purchaser shall also promptly publish the addendum on the Purchaser's web page in accordance with ITB 7.1.
- 8.3 To give Bidders reasonable time in which to take an addendum into account in preparing their bids, the Purchaser may, at its discretion, extend the deadline for the submission of bids, pursuant to ITB 22.2.

### C. Preparation of Bids

- 9. Cost of Bidding**
- 9.1 The Bidder shall bear all costs associated with the preparation and submission of its bid, and the Purchaser shall not be responsible or liable for those costs,

regardless of the conduct or outcome of the bidding process.

- 10. Language of Bid** 10.1 The Bid, as well as all correspondence and documents relating to the Bid exchanged by the Bidder and the Purchaser, shall be written in the language **specified in the BDS**. Supporting documents and printed literature that are part of the Bid may be in another language provided they are accompanied by an accurate translation of the relevant passages into the language **specified in the BDS**, in which case, for purposes of interpretation of the Bid, such translation shall govern.
- 11. Documents Comprising the Bid** 11.1 The Bid shall comprise the following:
- (a) Qualification
    - (i) Bid Submission Form [see also (b)(i) below], in accordance with Section III (1.2) (Table 1);
    - (ii) Declaration of Undertaking duly signed, in accordance with Section III (1.2) (Table 1);
    - (iii) Written confirmation authorizing the signatory of the Bid to commit the Bidder, in accordance with ITB 20.2 and Section III (1.2) (Table 1);
    - (iv) Any other forms and supporting documents required in Section III (1.1) (1.2) (Tables 1 to 5).
  - (b) Technical and Financial Bid
    - (i) Bid Submission Form and the Bidding Forms in accordance with ITB 12;
    - (ii) Completed schedules, in accordance with ITB 12 and 14;
    - (iii) Bid Security, in accordance with ITB 19.1;
    - (iv) Alternative bids, if permissible, in accordance with ITB 13;
    - (v) Documentary evidence in accordance with ITB 17 establishing the Bidder's qualifications to perform the contract if its Bid is accepted;
    - (vi) Documentary evidence in accordance with ITB 17 establishing the Bidder's eligibility to bid;
    - (vii) Documentary evidence in accordance with ITB 16, that the Goods and Related Services to be supplied by the Bidder are of eligible origin;
    - (viii) Documentary evidence in accordance with ITB 16 and 30, that the Goods and Related Services conform to the Bidding Documents;
    - (ix) Any other document **required in the BDS**.

- 11.2 In addition to the requirements under ITB 11.1, bids submitted by a JV shall include a copy of the Joint Venture Agreement entered into by all members. Alternatively, a letter of intent to execute a Joint Venture Agreement in the event of a successful bid shall be signed by all members and submitted with the bid, together with a copy of the proposed Agreement.
- 11.3 The Bidder shall furnish in the Bid Submission Form information on commissions and gratuities, if any, paid or to be paid to agents or any other party relating to this Bid.
- 12. Declaration of Undertaking, Qualification Forms, and Bid Submission Form, Bidding Forms, Price Schedules**
- 12.1 The Declaration of Undertaking and the Qualification Forms as listed in ITB 11.1(a) shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.4. All blank spaces shall be filled in with the information requested.
- 12.2 The Bid Submission Form, the Price Schedules, and the Bidding Forms as listed in ITB 11.1(b) shall be prepared using the relevant forms furnished in Section IV, Bidding Forms. The forms must be completed without any alterations to the text, and no substitutes shall be accepted except as provided under ITB 20.4. All blank spaces shall be filled in with the information requested.
- 13. Alternative Bids**
- 13.1. Unless otherwise **specified in the BDS**, alternative bids shall not be considered.
- 14. Bid Prices and Discounts**
- 14.1 The prices and discounts quoted by the Bidder in the Bid Submission Form and in the Price Schedules shall conform to the requirements specified below.
- 14.2 All lots (contracts) and items must be listed and priced separately in the Price Schedules.
- 14.3 The price to be quoted in the Bid Submission Form shall be the total price of the bid, excluding any discounts offered.
- 14.4 The Bidder shall quote any discounts and indicate the methodology for their application in the Bid Submission Form.
- 14.5 Prices quoted by the Bidder shall be fixed during the Bidder's performance of the Contract and not subject to variation on any account, **unless otherwise specified in the BDS**. A bid submitted with an adjustable price quotation shall be treated as nonresponsive and shall be rejected, pursuant to ITB 30. However, if in accordance with the BDS, prices quoted by the Bidder shall be subject to adjustment during the performance of the Contract, a bid submitted with a fixed price quotation shall not be rejected, but the price adjustment shall be treated as zero.

- 14.6 If so specified in ITB 1.1, bids are being invited for individual lots (contracts) or for any combination of lots (packages). Prices quoted shall correspond to 100 % of the items specified for each lot and to 100% of the quantities specified for each item of a lot. Bidders wishing to offer discounts for the award of more than one Contract shall specify in their bid the price reductions applicable to each package, or alternatively, to individual Contracts within the package. Discounts shall be submitted in accordance with ITB 14.4 provided the bids for all lots (contracts) are opened at the same time.
- 14.7 The term CIP (Carriage and Insurance Paid to), and other similar terms shall be governed by the rules prescribed in the current edition of Incoterms, published by The International Chamber of Commerce, as **specified in the BDS**.
- 14.8 Prices shall be quoted as specified in each Price Schedule included in Section IV, Bidding Forms. The disaggregation of price components is required solely for the purpose of facilitating the comparison of bids by the Purchaser. In quoting prices, the Bidder shall be free to use transportation through carriers registered in any eligible country, in accordance with Section V, Eligibility Criteria. Similarly, the Bidder may obtain insurance services from any eligible country in accordance with Section V, Eligibility Criteria. Prices shall be entered in the following manner:
- (a) For Goods manufactured in the Purchaser's Country:
- (i) The price of the Goods quoted CIP named place of destination (final destinations), including all customs duties and sales and other taxes already paid or payable on the components and raw material used in the manufacture or assembly of the Goods;
  - (ii) All related services required in these Bidding Documents; and
  - (iii) Any Purchaser's Country sales tax and other taxes which will be payable on the Goods if the contract is awarded to the Bidder.
- (b) For Goods manufactured outside the Purchaser's Country, to be imported:
- (i) The price of the Goods, quoted CIP named place of destination (port of entry and/or place of customs clearance), in the Purchaser's Country, **as specified in the BDS**; and
  - (ii) All related services required in these Bidding Documents.

- (c) For Goods manufactured outside the Purchaser's Country, already imported:
- (i) The price of the Goods, quoted CIP named place of destination (final destinations), excluding the custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported;
  - (ii) All related services required in these Bidding Documents; and
  - (iii) All custom duties and other import taxes already paid (need to be supported with documentary evidence) or to be paid on the Goods already imported in the Purchaser's country, payable on the Goods, if the Contract is awarded to the Bidder;
  - (iv) Any Purchaser's Country sales and other taxes which will be payable on the Goods if the contract is awarded to the Bidder; and
- (d) For Related Services specified in Section VII - Schedule of Requirements:
- (i) All related services are to be included in the respective Price Schedule [(a), (b), or (c) above] submitted by each Bidder.

- 15. Currencies of Bid and Payment**
- 15.1 The currency(ies) of the bid and the currency(ies) of payments shall be **as specified in the BDS**. The Bidder shall quote in the currency of the Purchaser's Country the portion of the bid price that corresponds to expenditures incurred in the currency of the Purchaser's country, unless otherwise **specified in the BDS**.
- 16. Documents Establishing the Eligibility and Conformity of the Goods and Related Services**
- 16.1 To establish the eligibility of the Goods and Related Services in accordance with ITB 5, Bidders shall complete the country of origin declarations in the Price Schedule Forms, included in Section IV, Bidding Forms.
- 16.2 To establish the conformity of the Goods and Related Services to the Bidding Documents, the Bidder shall furnish as part of its Bid the documentary evidence that the Goods conform to the technical specifications and standards specified in Section VII, Schedule of Requirements.
- 16.3 The documentary evidence may be in the form of literature, drawings or data, and shall consist of a detailed item by item description of the essential technical and performance characteristics of the Goods and Related Services, demonstrating substantial responsiveness of the Goods and Related Services to the technical specification, and if applicable, a statement of deviations

and exceptions to the provisions of the Section VII, Schedule of Requirements.

- 16.4 The Bidder shall also furnish a list giving full particulars, including available sources and current prices of spare parts, special tools, etc., necessary for the proper and continuing functioning of the Goods during the period **specified in the BDS** following commencement of the use of the goods by the Purchaser.
- 16.5 Standards for workmanship, process, material, and equipment, as well as references to brand names or catalogue numbers specified by the Purchaser in the Schedule of Requirements, are intended to be descriptive only and not restrictive. The Bidder may offer other standards of quality, brand names, and/or catalogue numbers, provided that it demonstrates, to the Purchaser's satisfaction, that the substitutions ensure substantial equivalence or are superior to those specified in the Section VII, Schedule of Requirements.
- 17. Documents Establishing the Eligibility and Qualifications of the Bidder**
- 17.1 To establish Bidder's their eligibility in accordance with ITB 4, Bidders shall complete the Bid Submission Form, included in Section IV, Bidding Forms.
- 17.2 The documentary evidence of the Bidder's qualifications to perform the contract if its bid is accepted shall establish to the Purchaser's satisfaction:
- (a) That, if **required in the BDS**, a Bidder that does not manufacture or produce the Goods it offers to supply shall submit the Manufacturer's Authorization using the form included in Section IV, Bidding Forms to demonstrate that it has been duly authorized by the manufacturer or producer of the Goods to supply these Goods in the Purchaser's Country;
  - (b) That, if **required in the BDS**, in case of a Bidder not doing business within the Purchaser's Country, the Bidder is represented by an Agent in the country equipped and able to carry out the Supplier's maintenance, repair and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications; and
  - (c) That the Bidder meets each of the qualification criterion specified in Section III, Qualification and Evaluation and Criteria.
- 18. Period of Validity of Bids**
- 18.1 Bids shall remain valid for the period **specified in the BDS** after the bid submission deadline date prescribed by the Purchaser in accordance with ITB 22.1. A bid valid for a shorter period shall be rejected by the Purchaser as nonresponsive.
- 18.2 In exceptional circumstances, prior to the expiration of the bid validity period, the Purchaser may request bidders to

extend the period of validity of their bids. The request and the responses shall be made in writing. If a Bid Security is requested in accordance with ITB Clause 19, it shall also be extended for forty-two (42) days beyond the deadline of the extended validity period. A Bidder may refuse the request without forfeiting its Bid Security. A Bidder granting the request shall not be required or permitted to modify its bid, except as provided in ITB 18.3.

18.3 If the award is delayed by a period exceeding fifty-six (56) days beyond the expiry of the initial bid validity, the Contract price shall be determined as follows:

- (a) In the case of fixed price contracts, the Contract price shall be the bid price adjusted by the factor **specified in the BDS**;
- (b) In the case of adjustable price contracts, no adjustment shall be made;
- (c) In any case, bid evaluation shall be based on the bid price without taking into consideration the applicable correction from those indicated above.

## 19. Bid Security

19.1 The Bidder shall furnish as part of its bid, a Bid Security, as **specified in the BDS**, in original form and in the amount and currency **specified in the BDS**.

19.2 A Bid Security shall use the form included in Section IV, Bidding Forms, without deviations. The Bid Security must be issued in the currency of the Bid.

19.3 If a Bid Security is specified pursuant to ITB 19.1, the Bid Security shall be a demand guarantee in any of the following forms at the Bidder's option:

- (a) An unconditional guarantee issued by a reputable bank or financial institution (such as an insurance, bonding or surety company);
- (b) A cashier's or certified check issued by a bank; or
- (c) Another security **specified in the BDS**;

From a reputable source from an eligible country as specified in Section V, Eligibility Criteria. Bidders are free to use any reputable bank for the purpose of issuing the required Bid Security, subject to all conditions of ITB 19 are being met without exception; the issuing bank shall have a correspondent bank in the Purchaser's country. In the case of a bank guarantee, the Bid Security shall be submitted either using the Bid Security Form included in Section IV, Bidding Forms, or in another substantially similar format approved by the Purchaser prior to bid submission. The Bid Security shall be valid for forty-two (42) days beyond the original validity period of the bid, or beyond any period of extension if requested under ITB 18.2.

- 19.4 If a Bid Security is specified pursuant to ITB 19.1, any bid not accompanied by a substantially responsive Bid Security shall be rejected by the Purchaser as non-responsive.
- 19.5 The Bid Security of unsuccessful Bidders shall be returned as promptly as possible upon the successful Bidder's signing the contract and furnishing the Performance Security pursuant to ITB 42.
- 19.6 The Bid Security of the successful Bidder shall be returned as promptly as possible once the successful Bidder has signed the contract and furnished the required performance security.
- 19.7 The Bid Security may be forfeited:
- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Submission Form, or any extension thereto provided by the Bidder; or
  - (b) If the successful Bidder fails to:
    - (i) Sign the Contract in accordance with ITB 41; or
    - (ii) Furnish a performance security in accordance with ITB 42.
- 19.8 The Bid Security of a JV must be in the name of the JV that submits the bid. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, the Bid Security shall be in the names of all future members as named in the letter of intent referred to in ITB 4.1 and ITB 11.2.
- 19.9 If a Bid Security is **not required in the BDS**, pursuant to ITB 19.1, and:
- (a) If a Bidder withdraws its bid during the period of bid validity specified by the Bidder on the Bid Submission Form, or any extension thereto provided by the Bidder; or
  - (b) If the successful Bidder fails to: sign the Contract in accordance with ITB 41; or furnish a performance security in accordance with ITB 42;

the Purchaser may, **if provided for in the BDS**, declare the Bidder ineligible to be awarded a contract by the Purchaser for a period of time **as stated in the BDS**.

## 20. Format and Signing of Bid

- 20.1 The Bidder shall prepare one original of the documents comprising the bid as described in ITB 11, clearly mark "ORIGINAL". Alternative bids, if permitted in accordance with ITB 13, shall be clearly marked "ALTERNATIVE". In addition, the Bidder shall submit copies of the bid, in the number **specified in the BDS** and clearly mark them "COPY". In the

event of any discrepancy between the original and the copies, the original shall prevail.

- 20.2 The original and all copies of the bid shall be typed or written in indelible ink and shall be signed by a person duly authorized to sign on behalf of the Bidder. This authorization shall consist of a written confirmation **as specified in the BDS** and shall be attached to the bid. The name and position held by each person signing the authorization must be typed or printed below the signature. All pages of the bid where entries or amendments have been made shall be signed or initialed by the person signing the bid.
- 20.3 In case the Bidder is a JV, the Bid 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. If the JV has not been legally constituted into a legally enforceable JV at the time of bidding, then the Bid shall be signed by every member of the proposed JV.
- 20.4 Any inter-lineation, erasures, or overwriting shall be valid only if they are signed or initialed by the person signing the bid.

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

##### **21. Sealing and Marking of Bids**

- 21.1 The Bidder shall enclose the original and all copies of the bid, including alternative bids, if permitted in accordance with ITB 13, in separate sealed envelopes, duly marking the envelopes as "ORIGINAL", "ALTERNATIVE" and "COPY". These envelopes containing the original and the copies shall then be enclosed in one single envelope/package.

In addition an electronic version as true and complete colour copy in one file in unalterable PDF format on CD or flashdrive must be submitted; Considering that a CD or flashdrive and its content may be considered dutiable goods by customs authorities in the Purchaser's country, it is the full responsibility and risk of the Bidder, pursuant to ITB 22 and ITB 23, to either (i) include the electronic version in the inner envelope containing the original or (ii) send the electronic version separately to arrive within one week from the date and time stipulated in ITB 22; the electronic version is meant for convenience of the Purchaser and shall have no legal status.

- 21.2 The inner and outer envelopes shall:
- (a) Bear the name and address of the Bidder;
  - (b) Be addressed to the Purchaser in accordance with ITB 22.1;

- (c) Bear the specific identification of this bidding process indicated in ITB 1.1; and
- (d) Bear a warning not to open before the time and date for opening of the qualification documents.
- 21.3 If all envelopes are not sealed and marked as required, the Purchaser will assume no responsibility for the misplacement or premature opening of the qualification documents and/or bid.
- 22. Deadline for Submission of Bids**
- 22.1 Bids, as defined in ITB 21.1, must be received by the Purchaser at the address and no later than the date and time **specified in the BDS**.
- 22.2 The Purchaser may, at its discretion, extend the deadline for the submission of Bids by amending the Bidding Documents in accordance with ITB 8, in which case all rights and obligations of the Purchaser and Bidders previously subject to the deadline shall thereafter be subject to the deadline as extended.
- 23. Late Bids**
- 23.1. The Purchaser shall not consider any Bid that arrives after the deadline for submission of bids, in accordance with ITB 22. Any Bid received by the Purchaser after the deadline for submission of bids shall be declared late, rejected, and returned unopened to the Bidder.
- 24. Withdrawal, Substitution, and Modification of Bids**
- 24.1 A Bidder may withdraw, substitute, or modify its bid after it has been submitted by sending a written notice, duly signed by an authorized representative, and shall include a copy of the authorization (the power of attorney) in accordance with ITB 20.2. The corresponding substitution or modification of the bid must accompany the respective written notice. All notices must be:
- (a) Prepared and submitted in accordance with ITB 20 and 21 (except that withdrawal notices do not require copies), and in addition, the respective envelopes shall be clearly marked "WITHDRAWAL," "SUBSTITUTION," or "MODIFICATION"; and
- (b) Received by the Purchaser prior to the deadline prescribed for submission of bids, in accordance with ITB 22.
- 24.2 Bids requested to be withdrawn in accordance with ITB 24.1 shall be returned unopened to the Bidders.
- 24.3 No Bid may be withdrawn, substituted, or modified in the interval between the deadline for submission of bids and the expiration of the period of bid validity specified by the Bidder on the Bid Submission Form or any extension thereof.
- 25. Bid Opening**
- 25.1 Except in cases specified in ITB 23 and ITB 24, the Purchaser shall publicly open and read out in accordance with ITB 25.2 all Bids received by the deadline (regardless

of the number of Bids received), at the date, time and place **specified in the BDS**, in public and in the presence of Bidders' designated representatives.

- 25.2 First, envelopes marked "WITHDRAWAL" shall be opened and read out and the envelope with the corresponding bid shall not be opened, but returned to the Bidder. No bid withdrawal shall be permitted unless the corresponding withdrawal notice contains a valid authorization to request the withdrawal and is read out at bid opening.

Next, envelopes marked "SUBSTITUTION" shall be opened and read out and exchanged with the corresponding Bid being substituted, and the substituted Bid shall not be opened, but returned to the Bidder. No Bid substitution shall be permitted unless the corresponding substitution notice contains a valid authorization to request the substitution and is read out at bid opening.

Envelopes marked "MODIFICATION" shall be opened and read out with the corresponding Bid. No Bid modification shall be permitted unless the corresponding modification notice contains a valid authorization to request the modification and is read out at Bid opening.

Only bids that are opened and read out at Bid opening shall be considered further.

- 25.3 All other envelopes shall be opened one at a time, reading out: the name of the Bidder and whether there is a modification; the total Bid Prices, per lot (contract) if applicable, including any discounts and alternative bids (if permitted pursuant to ITB 13); the presence or absence of a Bid Security, if required; and any other details as the Purchaser may consider appropriate. Only discounts and alternative bids read out at bid opening shall be considered for evaluation. The Purchaser shall neither discuss the merits of any bid nor reject any bid (except for late bids, in accordance with ITB 23.1).

- 25.4 The Purchaser shall prepare a record of the opening session that shall include, as a minimum: the name of the Bidder and whether there is a withdrawal, substitution, or modification; the Bid Price, per lot (contract) if applicable, including any discounts, and alternative bids; and the presence or absence of a Bid Security, if one was required. The Bidders' representatives who are present shall be requested to sign the record. The omission of a Bidder's signature on the record shall not invalidate the contents and effect of the record. A copy of the record shall be distributed to all Bidders.

## E. Evaluation and Comparison of Bids

- 26. Confidentiality**
- 26.1 Information relating to the examination, evaluation, and comparison of the bids, and qualification of the Bidders and recommendation of contract award, shall not be disclosed to Bidders or any other persons not officially concerned with the bidding process until information on Contract Award is communicated to all Bidders in accordance with ITB 40.
- 26.2 Any attempt by a Bidder to influence the Purchaser in the examination, evaluation, and comparison of the bids, and qualification of the bidders, or contract award decisions may result in the rejection of its Bid.
- 26.3 Notwithstanding ITB 26.2, from the time of bid opening to the time of Contract Award, if any Bidder wishes to contact the Purchaser on any matter related to the bidding process, it shall do so in writing.
- 27. Qualification of the Bidder**
- 27.1 The Purchaser shall determine to its satisfaction whether the Bidder meets the qualifying criteria specified in Section III, Qualification and Evaluation Criteria, Qualification.
- 27.2 The determination shall be based upon an examination of the documentary evidence of the Bidder's qualifications submitted by the Bidder, pursuant to ITB 17.2 (c), Qualification.
- 27.3 Only those criteria listed in Section III, Qualification and Evaluation Criteria, 1. Qualification, shall be used during this evaluation step.
- 27.4 An affirmative determination shall be a prerequisite for successful qualification of the Bidder, and continued evaluation of the Bidder's Bid. A negative determination shall result in disqualification of the bid.
- 28. Clarification of Bids**
- 28.1 To assist in the examination, evaluation, comparison of the qualification and technical and financial bids of the Bidders, the Purchaser may, at its discretion, ask any Bidder for a clarification of its Bid, given a reasonable time for a response. Any clarification submitted by a Bidder that is not in response to a request by the Purchaser shall not be considered. The Purchaser's request for clarification and the response shall be in writing. No change, including any voluntary increase or decrease, in the prices or substance of the Bid shall be sought, offered, or permitted, except to confirm the correction of arithmetic errors discovered by the Purchaser in the Evaluation of the bids, in accordance with ITB 32.
- 28.2 If a Bidder does not provide clarifications of its Bid by the date and time set in the Purchaser's request for clarification, its Bid may be rejected.

- 29. Deviations, Reservations, and Omissions**
- 29.1 During the evaluation of bids, the following definitions apply:
- (a) “Deviation” is a departure from the requirements specified in the Bidding Documents;
  - (b) “Reservation” is the setting of limiting conditions or withholding from complete acceptance of the requirements specified in the Bidding Documents; and
  - (c) “Omission” is the failure to submit part or all of the information or documentation required in the Bidding Documents.
- 30. Determination of Responsiveness**
- 30.1 The Purchaser’s determination of a bid’s responsiveness is to be based on the contents of the bid itself, as defined in ITB 11.
- 30.2 A substantially responsive Bid is one that meets the requirements of the Bidding Documents 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 Goods and Related Services specified in the Contract; or
    - (ii) Limit in any substantial way, inconsistent with the Bidding Documents, the Purchaser’s rights or the Bidder’s obligations under the proposed Contract; or
  - (b) If rectified, would unfairly affect the competitive position of other bidders presenting substantially responsive bids.
- 30.3 The Purchaser shall examine the technical aspects of the bid submitted in accordance with ITB 16, in particular, to confirm that all requirements of Section VII, Schedule of Requirements have been met without any material deviation or reservation, or omission.
- 30.4 If a bid is not substantially responsive to the requirements of the Bidding Documents, it shall be rejected by the Purchaser and may not subsequently be made responsive by correction of the material deviation, reservation, or omission.
- 31. Non-conformities, Errors and Omissions**
- 31.1 Provided that a Bid is substantially responsive, the Purchaser may waive any nonmaterial nonconformities in the Bid.
- 31.2 Provided that a bid is substantially responsive, the Purchaser may request that the Bidder submit the necessary information or documentation, within a reasonable period of time, to rectify nonmaterial nonconformities in the bid related to documentation

requirements. Requesting information or documentation on such nonconformities shall not be related to any aspect of the price of the Bid. Failure of the Bidder to comply with the request may result in the rejection of its Bid.

- 31.3 Provided that a bid is substantially responsive, the Purchaser shall rectify quantifiable nonmaterial nonconformities related to the Bid Price. To this effect, the Bid Price shall be **adjusted as specified in the BDS**, for comparison purposes only, to reflect the price of a missing or non-conforming item or component.
- 32. Correction of Arithmetical Errors**
- 32.1 Provided that the Bid is substantially responsive, the Purchaser shall correct arithmetical errors on the following basis:
- (a) If there is a discrepancy between the unit price and the line item total that is obtained by multiplying the unit price by the quantity, the unit price shall prevail and the line item total shall be corrected, unless in the opinion of the Purchaser there is an obvious misplacement of the decimal point in the unit price, in which case the line item total as quoted shall govern and the unit price shall be corrected;
  - (b) If there is an error in a total corresponding to the addition or subtraction of subtotals, the subtotals shall prevail and the total shall be corrected; 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 subject to (a) and (b) above.
- 32.2 Bidders shall be requested to accept correction of arithmetical errors. Failure to accept the correction in accordance with ITB 32.1 shall result in the rejection of the Bid.
- 33. Conversion to Single Currency**
- 33.1 For evaluation and comparison purposes, the currency(ies) of the Bid shall be converted in a single currency as **specified in the BDS**.
- 34. Margin of Preference**
- 34.1 **Unless otherwise specified in the BDS**, a margin of preference shall not apply.
- 35. Evaluation of Bids**
- 35.1 The Purchaser shall use the criteria and methodologies listed in this Clause. No other evaluation criteria or methodologies shall be permitted.
- 35.2 To evaluate a Bid (evaluation will be done for Lots (contracts)), the Purchaser shall consider the following:
- (a) The Bid Price as quoted in accordance with clause 14;

- (b) Price adjustment for correction of arithmetic errors in accordance with ITB 32.1;
  - (c) Price adjustment due to discounts offered in accordance with ITB 14.4;
  - (d) Price adjustment due to quantifiable nonmaterial nonconformities in accordance with ITB 31.3;
  - (e) Converting the amount resulting from applying (a) to (d) above, if relevant, to a single currency in accordance with ITB 33;
  - (f) The additional evaluation factors as specified in Section III, Qualification and Evaluation Criteria, 2. Evaluation.
- 35.3 The estimated effect of the price adjustment provisions of the Conditions of Contract, applied over the period of execution of the Contract, shall not be taken into account in bid evaluation.
- 35.4 If these Bidding Documents allows Bidders to quote separate prices for different lots (contracts), the methodology to determine the lowest evaluated price of the lot (contract) combinations, including any discounts offered in the Bid Submission Form, is specified in Section III, Qualification and Evaluation Criteria.
- 35.5 The Purchaser's evaluation of a bid will exclude and not take into account:
- (a) In the case of Goods manufactured in the Purchaser's Country, sales and other similar taxes, which will be payable on the goods if a contract is awarded to the Bidder;
  - (b) In the case of Goods manufactured outside the Purchaser's Country, already imported or to be imported, customs duties and other import taxes levied on the imported Good, sales and other similar taxes, which will be payable on the Goods if the contract is awarded to the Bidder;
  - (c) In the case of Related Services, customs duties and sales and other similar taxes that will be payable on the Related Services if the contract is awarded to the Bidder;
  - (d) Any allowance for price adjustment during the period of execution of the contract, if provided in the bid.
- 35.6 The Purchaser's evaluation of a bid may require the consideration of other factors, in addition to the Bid Price quoted in accordance with ITB 14. These factors may be related to the characteristics, performance, and terms and conditions of purchase of the Goods and Related Services. The effect of the factors selected, if any, shall be expressed in monetary terms to facilitate comparison of bids, unless otherwise **specified in Section III**,

**Qualification and Evaluation Criteria.** The criteria and methodologies to be used shall be as specified in Section III, Qualification and Evaluation Criteria.

- 35.7 If the bid, which results in the lowest Evaluated Bid Price, is significantly lower than the Purchaser's estimate, the Purchaser shall require the Bidder to produce detailed price analyses for any or all items of the Price Schedules, to demonstrate the internal consistency of those prices with the supply requirements and the method and schedule proposed. If one or several inconsistencies are evidenced, or if a bidder does not provide the required detailed price analyses, the bid shall be declared non-compliant and rejected.
- 36. Comparison of Bids** 36.1 The Purchaser shall compare the evaluated prices of all substantially responsive bids established in accordance with ITB 35.2 to determine the lowest evaluated bid.
- 37. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids** 37.1 The Purchaser reserves the right to accept or reject any Bid, and to annul the bidding process and reject all Bids at any time prior to Contract Award, without thereby incurring any liability to Bidders. In case of annulment, all Bids submitted and specifically, bid securities, shall be promptly returned to the Bidders.

## **F. Award of Contract**

- 38. Award Criteria** 38.1 Subject to ITB 37.1, the Purchaser shall award the Contract to the qualified, pursuant to ITB 27, Bidder whose bid has been determined to be the lowest evaluated bid and is substantially responsive to the Bidding Documents.
- 39. Purchaser's Right to Vary Quantities at Time of Award** 39.1 At the time the Contract is awarded, the Purchaser reserves the right to increase or decrease the quantity of Goods and Related Services originally specified in Section VII, Schedule of Requirements, provided this does not exceed the percentages **specified in the BDS**, and without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.
- 40. Notification of Award** 40.1 Prior to the expiration of the period of bid validity, the Purchaser shall notify the successful Bidder, in writing, that its Bid has been accepted; for this purpose the Letter of Acceptance Form attached to these Bidding Documents shall be used. The notification letter (hereinafter and in the Conditions of Contract and Contract Forms called the "Letter of Acceptance") shall specify the sum that the Purchaser will pay the Supplier in consideration of the supply of Goods (hereinafter and in the Conditions of Contract and Contract Forms called "the Contract Price"). At the same time, the Purchaser shall also notify all other Bidders of the results of the bidding.

- 40.2 Until a formal Contract is prepared and executed, the notification of award shall constitute a binding Contract.
- 40.3 The Purchaser shall promptly respond in writing to any unsuccessful Bidder who, after notification of award in accordance with ITB 40.1, requests in writing the grounds on which its bid was not selected.
- 41. Signing of Contract**
- 41.1 Promptly after notification, the Purchaser shall send the successful Bidder the Contract Agreement.
- 41.2 Within twenty-eight (28) days of receipt of the Contract Agreement, the successful Bidder shall sign, date, and return it to the Purchaser.
- 41.3 Notwithstanding ITB 41.2 above, in case signing of the Contract Agreement is prevented by any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, where such export restrictions arise from trade regulations from a country supplying those products/goods, systems or services, the Bidder shall not be bound by its bid, always provided however, that the Bidder can demonstrate to the satisfaction of the Purchaser and of the KfW that signing of the Contract Agreement has not been prevented by any lack of diligence on the part of the Bidder in completing any formalities, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract.
- 42. Performance Security**
- 42.1 Within twenty-eight (28) days of the receipt of notification of award from the Purchaser, the successful Bidder shall furnish the Performance Security<sup>2</sup> in accordance with the GC, using for that purpose the Performance Security Form included in Section X, Contract Forms. Bidders are free to use any reputable bank acceptable to the Purchaser for the purpose of issuing the required performance security, subject to all conditions of ITB 42 and GC are being met without exception the issuing bank shall have a correspondent bank in the Purchaser's country.
- 42.2 Failure of the successful Bidder 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 Bid Security. In that event the Purchaser may award the Contract to the next lowest evaluated Bidder, whose bid is qualified, pursuant to ITB 27, and substantially responsive.

---

<sup>2</sup> Bonds shall only be permitted with prior approval from KfW.

## Section II. Bid Data Sheet (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

ITB Clause Reference	A. General
ITB 1.1	The number of the Invitation for Bids is: <b>ICB-09/MOE-VTT/TVET/KfW 2016 65 298/005/2023-2024</b>
ITB 1.1	The Purchaser is: <b>Ministry of Education, State Department for Technical, Vocational Education and Training</b>
ITB 1.1	<p>The name and identification number of the ICB are: <b>ICT Hardware, Software, and Internet connectivity, ICB-09/MOE-VTT/TVET/KfW 2016 65 298/005/2023-2024</b></p> <p>The number, identification and names of the lots (contracts) comprising this ICB are:</p> <p><b>Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b></p> <p><b>Lot 2: Data Center, CCTV, Access Control</b></p> <p><b>Lot 3: Computers, Smart Classroom, Learning Automation, and software licensing.</b></p> <p><b>Lot 4: Internet Connectivity.</b></p> <p><b>Bidders may apply for 1 (one) or more Lots, and may be awarded 1 (one) or more Lots. Refer to ITB 35.4.</b></p>
ITB 2.1	The name of the Project is: <b>Promotion of Youth Employment and Vocational Training in Kenya</b>
	<b>B. Contents of Bidding Documents</b>
ITB 7.1	<p>For <b>clarification of bid purposes</b> only, the Purchaser's address is:</p> <p>Address:</p> <p><b>The Principal Secretary</b></p> <p><b>Ministry of Education</b></p> <p><b>State Department for Technical, Vocational Education and Training,</b></p> <p><b>Jogoo House B, Harambee Avenue,</b></p> <p><b>P.O.BOX 9583 00200 Nairobi, Kenya</b></p> <p>Electronic mail address: <a href="mailto:tenders.moe.tvet@gmail.com">tenders.moe.tvet@gmail.com</a></p>
ITB 7.1	Web page: <b>None</b>

	<b>C. Preparation of Bids</b>
<b>ITB 10.1</b>	The language of the bid is: <b>English</b> . All correspondence exchange shall be in the English language. Language for translation of supporting documents and printed literature is English.
<b>ITB 11.1 (b ix)</b>	The Bidder shall submit the following additional documents in its bid: <b>None</b> .
<b>ITB 13.1</b>	Alternative Bids <b>shall not be</b> considered.
<b>ITB 14.5</b>	The prices quoted by the Bidder <b>shall not</b> be adjustable.
<b>ITB 14.7</b>	The Incoterms edition is Incoterms 2010.
<b>ITB 14.8 (a), (b), (c)</b>	The prices quoted shall be <b>exclusive</b> of all government taxes and levies.
<b>ITB 14.8 (b) (i)</b>	Named Place of Destination: - <b>CIP Kiambu Institute of Science and Technology (KIST)</b> - <b>CIP Nairobi Technical Training Institute (NTTI)</b> - <b>CIP Thika Technical Training Institute (TTTI)</b>
<b>ITB 14.8 (d) (i)</b>	<b>Local services (including transportation to final delivery destination and related services) shall be quoted.</b> <b>Final delivery destinations (Project Sites):</b> <b>according to Section VII. Schedule of Requirements, 6. Distribution of Goods.</b>
<b>ITB 15.1</b>	The prices shall be quoted by the bidder in: <b>€/EUR</b> The Bidder <b>is not</b> required to quote in the currency of the Purchaser's Country the portion of the bid price that corresponds to expenditures incurred in that currency.
<b>ITB 16.4</b>	Period of time the Goods are expected to be functioning (for the purpose of spare parts): <b>five (5) years</b>
<b>ITB 17.2 (a)</b>	Manufacturer's authorization is: <b>required for items specified in Section VII. Schedule of Requirements, 3. Technical Specifications.</b> <b>As a general requirement, the Bidder is required to submit documentation to substantiate that it is an authorized dealer, distributor, or reseller of the goods being procured.</b>
<b>ITB 17.2 (b)</b>	After sales service is: <b>required for items specified in Section VII. Schedule of Requirements, 3. Technical Specifications.</b>
<b>ITB 18.1</b>	The bid validity period shall be <b>120</b> days.

<b>ITB 18.3 (a)</b>	The bid price shall be adjusted by the following factor: <b>Not applicable</b>
<b>ITB 19.1</b>	<p>A Bid Security <b>is</b> required.</p> <p>If a Bid Security shall be required, the percentage and currency of the Bid Security shall be:</p> <p><b>The amount and currency of the bid security shall be 2% of the bid price for each lot in Euro.</b></p> <p><b>The Bid Security shall be issued by a reputable bank or financial institution acceptable to the Purchaser, and shall be without deviation in the form as provided in Section IV. Bidding Forms.</b></p>
<b>ITB 19.3 (c)</b>	Other types of acceptable securities: <b>None, no other forms of bid securities are acceptable.</b>
<b>ITB 19.9</b>	<b>Not applicable.</b>
<b>ITB 20.1</b>	In addition to the original of the bid, the number of copies is: <b>1 (one).</b> <b>See also ITB 21.1 below.</b>
<b>ITB 20.2</b>	The written confirmation of authorization to sign on behalf of the Bidder shall consist of: <b>original power of attorney established in the name of the signatory of the bid.</b>
<b>D. Submission and Opening of Bids</b>	
<b>ITB 21.1</b>	<p>Bidders take note the requirement stated in the Instructions to Bidders to submit an electronic version, in addition to the physical Original and Copy:</p> <p><b>“In addition an electronic version as true and complete colour copy in one file in unalterable PDF format on CD or flash drive must be submitted ...”</b></p>
<b>ITB 22.1</b>	<p>For bid submission purposes, the Purchaser’s address is:</p> <p>Address:</p> <p><b>The Principal Secretary</b> <b>Ministry of Education</b> <b>State Department for Technical, Vocational Education and Training,</b> <b>Jogoo House B, Harambee Avenue,</b> <b>P.O.BOX 9583 00200 Nairobi, Kenya</b></p> <p>Floor-Room number: <b>Tender Box marked Ministry of Education, State Department for Technical, Vocational Education and Training KfW project located on the ground floor.</b></p> <p><b>The deadline for the submission of bids is:</b> Date: <b>30th January 2024</b> Time: <b>11.00 am East Africa Time (EAT)</b></p>

<b>ITB 25.2</b>	<p>The bid opening shall take place at: Address: <b>Ministry of Education</b> <b>State Department for Technical, Vocational Education and Training,</b> <b>Jogoo House B, Harambee Avenue,</b> <b>10th Floor at the conference room</b> <b>P.O.BOX 9583 00200 Nairobi, Kenya</b></p> <p>No minimum number of bids is required in order to proceed to bid opening.</p>
<b>ITB 25.2</b>	<p>The public bid opening session shall take place on/at: Date: <b>30<sup>th</sup> January 2024</b> Time: <b>11.00 am East Africa Time (EAT)</b></p>
	<b>E. Evaluation and Comparison of Bids</b>
<b>ITB 31.1</b>	<p>The provisions in ITB 31.1 do not apply to items classified as major items in Section VII. Bidders are expected to quote for all the items.</p>
<b>ITB 33.1</b>	<p>The currency that shall be used for bid evaluation and comparison purposes to convert all bid prices expressed in different currencies into a single currency is: <b>€/EUR</b></p>
<b>ITB 34.1</b>	<p>A margin of domestic preference <b>shall not</b> apply.</p>
	<b>F. Award of Contract</b>
<b>ITB 39.1</b>	<p>The maximum percentage by which quantities may be increased is: <b>10%</b> The maximum percentage by which quantities may be decreased is: <b>10%</b></p>
<b>ITB 41.3</b>	<p><b>Bidders are advised to familiarize themselves with the Kenya Bureau of Standards' Pre-Export Verification of Conformity (PVoC) requirements, which may be applicable to item(s) in this tender and for which the successful bidder is responsible. More information is available at <a href="http://www.kebs.org">www.kebs.org</a></b></p>

# Section III. Qualification and Evaluation Criteria

*[This Section complements the Instructions to Bidders. It contains the criteria that the Purchaser may use to determine whether a Bidder has the required qualifications and to evaluate a bid. No other criteria shall be used.]*

## Contents

1. Qualification (ITB 27).....	32
2. Evaluation (ITB 35) .....	40
3. Domestic Preference (ITB 34) .....	41

## 1. Qualification (ITB 27)

All qualification documents listed here (including attached forms, and required support documents) shall be submitted in accordance with ITB 25 and ITB 27, and will be evaluated first; only bids passing the qualification shall be evaluated further.

### 1.1 The Qualification Document submission shall consist of:

#### (1) Bid Submission Form, Declaration of Undertaking, and Eligibility (Table 1)

Bidder shall meet the requirements as per Table 1 and submit the required forms and supporting documents; forms provided in this bidding document may not be amended but only completed following the instructions in this bidding document.

Mandatory or Optional (when required) + power of attorney

#### (2) Historical Contract Non-Performance (Table 2)

Both forms must be submitted duly filled and signed; any non-performance during the required period stated in Form CON-2 will lead to disqualification of the Bidder's bid.

#### (3) Financial Situation and Performance (Table 3)

Bidders shall meet the requirements as per Table 3 and submit the required forms and supporting documents; forms provided in this bidding document may not be amended but only completed following the instructions in this bidding document.

#### (4) Experience (Table 4)

Submission of the required number of references (similar experience / contracts).

#### (5) Technical Capacity, Spare Parts and Local Agent (if applicable) (Table 5)

Submission of the required information, in response the requirements stated in Section VII, Schedule of Requirements.

## 1.2. Requirements and Criteria

The following tables describe qualification requirements and criteria, in accordance with ITB 27 and Section III (Qualification), which must be satisfied by each Bidder. Only specified requirements and criteria shall be used, and requirements and criteria not included in the tables below shall not be used in the evaluation of the Bidder's Qualification.

<b>Table 1</b>							
<b>Qualification Criteria</b>			<b>Compliance Requirements</b>				<b>Documentation</b>
<b>No.</b>	<b>Subject</b>	<b>Requirement</b>	<b>Single Entity</b>	<b>Joint Venture (existing or intended)</b>			<b>Submission Requirements</b>
				<b>All Parties Combined</b>	<b>Each Member</b>	<b>One Member</b>	
<b>1. Bid Submission Form, Declaration of Undertaking, and Eligibility</b>							
1.1	<b>Bid Submission Form</b>	Submission, in accordance with Section III, Qualification	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Bid Submission Form
1.2	<b>Declaration of Undertaking</b>	Submission, in accordance with ITB 12	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Declaration of Undertaking
1.3	<b>Power of Attorney</b>	Submission, in accordance with ITB 20.2	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Power of Attorney (free format)
1.4	<b>Joint Venture Agreement</b>	JV Agreement or Letter of Intent, (in case of a JV), in accordance with ITB 4.1	N/A	Must meet requirement	Must meet requirement	N/A	Relevant pages of an existing JV Agreement or Letter of Intent (free format)
1.5	<b>Nationality</b>	Nationality in accordance with ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and ELI - 1.2 (in case of JV), with attachments
1.6	<b>Conflict of Interest</b>	No conflicts of interest in accordance with ITB 4.2	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Bid Submission Form
1.7	<b>KfW Eligibility</b>	Not being ineligible for KfW financing, as described in ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Bid Submission Form
1.8	<b>State-owned Entity</b>	Meets conditions of ITB 4.3	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Forms ELI – 1.1 and ELI - 1.2 (in case of JV), with attachments

<b>Table 2</b>							
<b>Qualification Criteria</b>			<b>Compliance Requirements</b>				<b>Documentation</b>
<b>No.</b>	<b>Subject</b>	<b>Requirement</b>	<b>Single Entity</b>	<b>Joint Venture (existing or intended)</b>			<b>Submission Requirements</b>
				<b>All Parties Combined</b>	<b>Each Member</b>	<b>One Member</b>	
<b>2. Historical Contract Non-Performance</b>							
2.1	<b>History of Non-Performing Contracts</b>	Termination of a contract <sup>1</sup> did not occur as a result of Supplier default in the past 5 years.	Must meet requirement <sup>2</sup>	Must meet requirements	Must meet requirement <sup>2</sup>	N/A	Form CON - 2
2.2	<b>Suspension Based on Execution of Bid Securing Declaration by the Purchaser or withdrawal of the Bid within Bid validity</b>	Not under suspension based on execution of a Bid Securing Declaration pursuant to ITB 4.4 or withdrawal of a Bid pursuant ITB 19.9.	Must meet requirement	Must meet requirement	Must meet requirement	N/A	Bid Submission Form
2.3	<b>Pending Litigation</b>	All pending litigation shall in total not represent more than one hundred percent (100%) of the Bidder's net worth and shall be treated as resolved against the Bidder.	Must meet requirement	N/A	Must meet requirement	N/A	Form CON – 2

<sup>1</sup> Non-performance shall include all terminations of contracts where (a) non-performance was not challenged by the supplier, including through referral to the dispute resolution mechanism under the respective contract, and (b) contracts that were so challenged but fully settled against the supplier. Non-performance shall not include contracts where Purchaser's decision was overruled by the dispute resolution mechanism.

<sup>2</sup> This requirement also applies to contracts executed by the Bidder as a JV member.

Table 3							
Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
<b>3. Financial Situation and Performance</b>							
3.1	<b>Financial Capabilities</b>	<p><b>Submission of audited balance sheets</b> or if not required by the law of the Bidder's country, other financial statements acceptable to the Purchaser, <b>for the last three (3) years</b> to demonstrate the current soundness of the Bidder's financial position based on the following criteria:</p> <p><b>a) Liquidity ratio <math>\geq 1.1</math></b>            ((Current Assets) / (Current Liabilities) <math>\geq 1.1</math>)</p> <p><b>b) Indebtedness ratio <math>\leq 80\%</math></b>            ((Total Liabilities) x 100 / (Total Assets) <math>\leq 80\%</math>)</p>	Must meet requirement	N/A	Must meet requirement	N/A	Form FIN – 3.1, with attachments

Table 3							
Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
<b>3. Financial Situation and Performance</b>							
3.2	<b>Average Annual Supplier Turnover</b>	Minimum average annual supplier turnover of following amounts for <b>Lot 1: EUR 1,200,000 (Euro One million, Two hundred thousand)</b> , <b>Lot 2: EUR 1,160,000 (Euro one million One hundred and Sixty thousand)</b> , <b>Lot 3: EUR 1,040,000 (Euro one million One hundred and Forty thousand)</b> , <b>Lot 4: EUR 80,000 (Euro Eighty thousand)</b> , (for clarity: if bidding for more than 1 lot, the minimum requirement is the sum total of each value), calculated as total certified payments received for contracts in progress and/or completed within the last <b>three (3) years</b> , divided by <b>three (3) years</b> .	Must meet requirement	Must meet requirement	Must meet at least twenty-five percent (25%) of the requirement	Must meet at least forty percent (40%) of the requirement	Form FIN – 3.2
3.3	<b>Access to Liquidity</b>	Access to liquidity of <b>at least the following amounts for Lot 1: EUR 600,000 (Euro six hundred thousand)</b> , <b>Lot 2: EUR 580,000 (Euro Five hundred and eighty</b>	Must meet requirement	Must meet requirement	Must meet at least twenty-five percent (25%) of the requirement	Must meet at least forty percent (40%) of the requirement	Liquidity Letter issued by the Bidder's bankers (free format)

<b>Table 3</b>							
<b>Qualification Criteria</b>			<b>Compliance Requirements</b>				<b>Documentation</b>
<b>No.</b>	<b>Subject</b>	<b>Requirement</b>	<b>Single Entity</b>	<b>Joint Venture (existing or intended)</b>			<b>Submission Requirements</b>
				<b>All Parties Combined</b>	<b>Each Member</b>	<b>One Member</b>	
<b>3. Financial Situation and Performance</b>							
		thousand), Lot 3: EUR 520,000 (Euro Five hundred and twenty thousand) Lot 4: EUR 40,000 (Euro Forty thousand) (for clarity: if bidding for more than 1 Lot, the minimum requirement is the sum total of each value).					

Table 4							
Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
<b>4. Experience</b>							
4.1	Similar Experience	A minimum number of similar <sup>3</sup> contracts specified below that have been satisfactorily and substantially <sup>4</sup> completed as Supplier, or joint venture member <sup>5</sup> , during the past <b>five (5) years: minimum two (2) contracts, each of a minimum value for Lot 1: EUR 600,000 (Euro six hundred thousand), Lot 2: EUR 580,000 (Euro Five hundred and eighty thousand), Lot 3: EUR 520,000 (Euro Five hundred and twenty thousand) Lot 4: EUR 40,000 (Euro Forty thousand)</b>	Must meet requirement	Must meet requirement <sup>6</sup>	N/A	N/A	Form EXP - 4.1 (one per contract)

<sup>3</sup> The similarity shall be based on the physical size, complexity, methods/technology and/or other characteristics described in Section VII, Schedule of Requirements. Summation of number of small value contracts (less than the value specified under requirement) to meet the overall requirement will not be accepted.

<sup>4</sup> Substantial completion shall be based on 80% or more completed under the contract.

<sup>5</sup> For contracts under which the Bidder participated as a joint venture member or sub-contractor, only the Bidder's share, by value, shall be considered to meet this requirement.

<sup>6</sup> In the case of JV, the value of contracts completed by its members shall not be aggregated to determine whether the requirement of the minimum value of a single contract has been met. Instead, each contract performed by each member shall satisfy the minimum value of a single contract as required for single entity. In determining whether the JV meets the requirement of total number of contracts, only the number of contracts completed by all members each of value equal or more than the minimum value required shall be aggregated.

Table 5							
Qualification Criteria			Compliance Requirements				Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)			Submission Requirements
				All Parties Combined	Each Member	One Member	
<b>5. Technical Capacity, Spare Parts and Local Agent (if applicable)</b>							
5.1	<b>Technical Capacity</b>	If so required in Section VII, Schedule of Requirements, the <b>Bidder's must have qualified personnel to satisfy the requirements.</b>	Must meet requirement	Must meet requirement	N/A	N/A	Support documents as required in Section VII, Schedule of Requirements
5.2	<b>Spare Parts</b>	If so required in Section VII, Schedule of Requirements, the Bidder's <b>must confirm availability of spare parts.</b>	Must meet requirement	Must meet requirement	N/A	N/A	Form SPA - 5.1, and any support documents as required in Section VII, Schedule of Requirements
5.3	<b>Local Agent</b>	If so required in Section VII, Schedule of Requirements, the Bidder's must have a local agent including qualified personnel for the purpose of after sales services.	Must meet requirement	Must meet requirement	N/A	N/A	Support documents as required in Section VII, Schedule of Requirements

## **2. Evaluation (ITB 35)**

### **2.1 Evaluation Criteria (ITB 35.6)**

**Not applicable.**

### **2.2. Multiple Contracts (ITB 35.4)**

The Purchaser shall award multiple contracts to the Bidder that offers the lowest evaluated combination of bids (one contract per bid) and has met the qualification criteria (this Section III, 1. Qualification (ITB 27)).

The Purchaser shall:

- (a) Evaluate only lots or contracts that include at least the percentages of items per lot and quantity per item as specified in ITB Sub Clause 14.6;
- (b) Take into account:
  - (i) The lowest-evaluated bid for each lot; and
  - (ii) The price reduction per lot and the methodology for its application as offered by the Bidder in its bid.

---

### **3. Domestic Preference (ITB 34)**

Not applicable.

## Documents Index

Bidders must carefully read the requirements detailed in the Instruction to Bidders (ITB), Bid Data Sheet (BDS), Qualification and Evaluation Criteria, Schedule of Requirements, and Contract Conditions.

Bidders must ensure they submit all requested documents according to the specified conditions, completed in full and including attachments as applicable. This refers to administrative aspects (e.g. minimum days of bid validity after submission deadline; validity of their Bid Security; all blank spaces filled in the templates; duly-signed, dated, and initialled documents etc.) and technical aspects (e.g. offers for every item in the Lot, submission of supporting catalogues/leaflets etc.). In case of a Joint Venture (JV) bid, ensure relevant documents are completed and submitted for each member, as specified in the qualification criteria and provided forms/templates.

Bidders are requested to clearly compile and index their submitted documents. The following table serves as a guide for Bidders to compile and index their bids. In case of discrepancies, the referenced clauses or sections take precedent over other parts of the table.

No.	Clause reference	Document	Template provided?	Location of template	Completed in full according to requirements, and submitted?
1	ITB 11.1 (a)(i)	Bid Submission Form	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
2	ITB 11.1 (a)(ii)	Declaration of Undertaking	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
3	ITB 11.1 (a)(iii)	Power of Attorney (authorized signatory)	NO	(free format)	<input type="checkbox"/>
4	ITB 11.1 (b)(iii)	Bid Security	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
5	ITB 11.1 (a)(iv)	Form ELI - 1.1: Bidder Information Form ( <i>and Attachments</i> )	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
6	ITB 11.1 (a)(iv)	Form ELI - 1.2: Bidder's JV Information Form ( <i>if applicable</i> ) ( <i>and Attachments</i> )	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
7	ITB 11.1 (a)(iv)	Form CON - 2: Historical Contract Non-Performance, Pending Litigation and Litigation History	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
8	ITB 11.1 (a)(iv)	Form FIN - 3.1: Financial Situation and Performance ( <i>and Attachments: Financial Documents</i> )	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
9	ITB 11.1 (a)(iv)	Form FIN - 3.2: Average Annual Turnover	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
10	ITB 11.1 (a)(iv)	Liquidity Letter issued by the Bidder's banker	NO	(free format)	<input type="checkbox"/>
11	ITB 11.1 (a)(iv)	Form EXP - 4.1: Experience ( <i>One form per contract</i> )	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
12	ITB 11.1 (a)(iv)	Technical Capacity (CVs)	NO	(free format)	<input type="checkbox"/>
13	ITB 16.4	Form SPA - 5.1: Spare Parts	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
14	ITB 17.2 (b)	Local Agent ( <i>if applicable</i> ) ( <i>CVs, company description, certificate of registration, tax registration</i> )	NO	(free format)	<input type="checkbox"/>
15	ITB 11.1 (b)(ii)	Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported ( <i>if applicable</i> ) ( <i>One schedule per Lot</i> )	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
16	ITB 11.1 (b)(ii)	Price Schedule: Goods Manufactured Outside the Purchaser's Country, Already Imported ( <i>if applicable</i> ) ( <i>One schedule per Lot</i> )	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
17	ITB 11.1 (b)(ii)	Price Schedule: Goods Manufactured in the Purchaser's Country ( <i>if applicable</i> ) ( <i>One schedule per Lot</i> )	YES	(Section IV. Bidding Forms)	<input type="checkbox"/>
18	ITB 17.2 (a)	Manufacturer's Authorization ( <i>submit documentation as authorized dealer, distributor, reseller</i> ) ( <i>and additional applicable Certificates specified in Technical Specifications &gt; "Manufacturer's Authorization"</i> )	NO	(free format)	<input type="checkbox"/>
19	GCC 13	List of Goods and Delivery Schedule	YES	(Section VII. Schedule of Requirements)	<input type="checkbox"/>
20	ITB 11.1 (b)(ii)	Lot 1: Technical Specifications ( <i>if applicable</i> ) ( <i>and Attachments: documentary evidence - catalogues/leaflets/literature</i> )	YES	(Section VII. Schedule of Requirements)	<input type="checkbox"/>
21	ITB 11.1 (b)(ii)	Lot 2: Technical Specifications ( <i>if applicable</i> ) ( <i>and Attachments: documentary evidence - catalogues/leaflets/literature</i> )	YES	(Section VII. Schedule of Requirements)	<input type="checkbox"/>

---

22	ITB 11.1 (b)(ii)	Lot 3: Technical Specifications <i>(if applicable) (and Attachments: documentary evidence - catalogues/leaflets/literature)</i>	YES	<i>(Section VII. Schedule of Requirements)</i>	<input type="checkbox"/>
23	ITB 11.1 (b)(ii)	Lot 4: Technical Specifications <i>(if applicable) (and Attachments: documentary evidence - catalogues/leaflets/literature)</i>	YES	<i>(Section VII. Schedule of Requirements)</i>	<input type="checkbox"/>
24	-	<i>Any other supporting documentation, determined as relevant by the Bidder to their bid.</i>	NO	<i>(free format)</i>	<input type="checkbox"/>

# Section IV. Bidding Forms

## Table of Forms

<b>Declaration of Undertaking.....</b>	<b>45</b>
<b>Form ELI - 1.1: Bidder Information Form .....</b>	<b>50</b>
<b>Form ELI - 1.2: Bidder's JV Information Form .....</b>	<b>51</b>
<b>Form CON - 2: Historical Contract Non-Performance, Pending Litigation and Litigation History .....</b>	<b>52</b>
<b>Form FIN - 3.1: Financial Situation and Performance .....</b>	<b>54</b>
<b>Form FIN - 3.2: Average Annual Turnover .....</b>	<b>56</b>
<b>Form EXP - 4.1: Experience .....</b>	<b>57</b>
<b>Form SPA - 5.1: Spare Parts .....</b>	<b>58</b>
<b>Bid Submission Form .....</b>	<b>59</b>
<b>Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported.....</b>	<b>62</b>
<b>Price Schedule: Goods Manufactured Outside the Purchaser's Country, Already Imported.....</b>	<b>63</b>
<b>Price Schedule: Goods Manufactured in the Purchaser's Country .....</b>	<b>64</b>
<b>Bid Security .....</b>	<b>65</b>
<b>Manufacturer's Authorization.....</b>	<b>66</b>

## Declaration of Undertaking

Reference name of the Application/Offer/Contract: ("Contract")<sup>1</sup>

To: ("Project Executing Agency")

1. We recognise and accept that KfW only finances projects of the Project Executing Agency ("PEA")<sup>2</sup> subject to its own conditions which are set out in the Funding Agreement it has entered into with the PEA. As a matter of consequence, no legal relationship exists between KfW and our company, our Joint Venture or our Subcontractors under the Contract. The PEA retains exclusive responsibility for the preparation and implementation of the Tender Process and the performance of the Contract.
2. We hereby certify that neither we nor any of our board members or legal representatives nor any other member of our Joint Venture including Subcontractors under the Contract are in any of the following situations:
  - 2.1) being bankrupt, wound up or ceasing our activities, having our activities administered by courts, having entered into receivership, reorganisation or being in any analogous situation;
  - 2.2) convicted by a final judgement or a final administrative decision or subject to financial sanctions by the United Nations, the European Union or Germany for involvement in a criminal organisation, money laundering, terrorist-related offences, child labour or trafficking in human beings; this criterion of exclusion is also applicable to legal Persons, whose majority of shares are held or factually controlled by natural or legal Persons which themselves are subject to such convictions or sanctions;
  - 2.3) having been convicted by a final court decision or a final administrative decision by a court, the European Union, national authorities in the Partner Country or in Germany for Sanctionable Practice in connection with a Tender Process or the performance of a Contract or for an irregularity affecting the EU's financial interests (*in the event of such a conviction, the Applicant or Bidder shall attach to this Declaration of Undertaking supporting information showing that this conviction is not relevant in the context of this Contract and that adequate compliance measures have been taken in reaction*);
  - 2.4) having been subject, within the past five years to a contract termination fully settled against us for significant or persistent failure to comply with our contractual obligations during such Contract performance, unless this termination was challenged and dispute resolution is still pending or has not confirmed a full settlement against us;
  - 2.5) not having fulfilled the applicable fiscal obligations with regard to the payment of taxes at the respective tax residence and in the country of origin of the PEA (contractors based in Annex 1 countries (<https://www.consilium.europa.eu/de/policies/eu-list-of-non-cooperative-jurisdictions/>) must submit a fully completed and legally countersigned declaration of tax conformity (Appendix 1 to the Declaration of Undertaking) in addition to the Declaration of Undertaking at the time of award

<sup>1</sup> Capitalised terms used, but not otherwise defined in this Declaration of Undertaking have the meaning given to such term in KfW's "Guidelines for the Procurement of Consulting Services, Works, Goods, Plant and Non-Consulting Services in Financial Cooperation with Partner Countries".

<sup>2</sup> The PEA means the purchaser, the employer, the client, as the case may be, for the procurement of Consulting Services, Works, Plant, Goods or Non-Consulting Services.

*of the contract/contract review. This shall become an integral part of the contract. Failure to submit may result in exclusion from the awarding procedure. For contractors based in countries not listed as Annex I countries, only the Declaration of Undertaking must be submitted, and not the declaration of tax conformity;*

2.6) being subject to an exclusion decision of the World Bank or any other multilateral development bank and being listed on the website <http://www.worldbank.org/debarr> or respectively on the relevant list of any other multilateral development bank (*in the event of such exclusion, the Applicant or Bidder shall attach to this Declaration of Undertaking supporting information showing that this exclusion is not relevant in the context of this Contract and that adequate compliance measures have been taken in reaction*); or

2.7) being guilty of misrepresentation in supplying the information required as condition to participation in this Tender Procedure.

3. We hereby certify that neither we, nor any of the members of our Joint Venture or any of our Subcontractors under the Contract are in any of the following situations of conflict of interest:

3.1) being an affiliate controlled by the PEA or a shareholder controlling the PEA, unless the stemming conflict of interest has been brought to the attention of KfW and resolved to its satisfaction;

3.2) having a business or family relationship with a PEA's staff involved in the Tender Process or the supervision of the resulting Contract, unless the stemming conflict of interest has been brought to the attention of KfW and resolved to its satisfaction;

3.3) being controlled by or controlling another Applicant or Bidder, or being under common control with another Applicant or Bidder, or receiving from or granting subsidies directly or indirectly to another Applicant or Bidder, having the same legal representative as another Applicant or Bidder, maintaining direct or indirect contacts with another Applicant or Bidder which allows us to have or give access to information contained in the respective Applications or Offers, influencing them or influencing decisions of the PEA;

3.4) being engaged in a Consulting Services activity, which, by its nature, may be in conflict with the assignments that we would carry out for the PEA;

3.5) in the case of procurement of Works, Plant or Goods:

- i. having prepared or having been associated with a Person who prepared specifications, drawings, calculations and other documentation to be used in the Tender Process of this Contract;
- ii. having been recruited (or being proposed to be recruited) ourselves or any of our affiliates, to carry out works supervision or inspection for this Contract;

4. If we are a state-owned entity, and compete in a Tender Process, we certify that we have legal and financial autonomy and that we operate under commercial laws and regulations.

5. We undertake to bring to the attention of the PEA, which will inform KfW, any change in situation with regard to points 2 to 4 here above.

6. In the context of the Tender Process and performance of the corresponding Contract:

6.1) neither we nor any of the members of our Joint Venture nor any of our Subcontractors under the Contract have engaged or will engage in any Sanctionable Practice during the Tender Process and in the case of being awarded a Contract will engage in any Sanctionable Practice during the performance of the Contract;

6.2) neither we nor any of the members of our Joint Venture or any of our Subcontractors under the Contract shall acquire or supply any equipment nor operate in any sectors under an embargo of the United Nations, the European Union or Germany; and

6.3) we commit ourselves to complying with and ensuring that our Subcontractors and major suppliers under the Contract comply with international environmental and labour standards, consistent with laws and regulations applicable in the country of implementation of the Contract and the fundamental conventions of the International Labour Organisation<sup>3</sup> (ILO) and international environmental treaties. Moreover, we shall implement environmental and social risks mitigation measures when specified in the relevant environmental and social management plans or other similar documents provided by the PEA and, in any case, implement measures to prevent sexual exploitation and abuse and gender based violence.

7. In the case of being awarded a Contract, we, as well as all members of our Joint Venture partners and Subcontractors under the Contract will, (i) upon request, provide information relating to the Tender Process and the performance of the Contract and (ii) permit the PEA and KfW or an auditor appointed by either of them, and in the case of financing by the European Union also to European institutions having competence under European Union law, to inspect the respective accounts, records and documents, to permit on the spot checks and to ensure access to sites and the respective project.
8. In the case of being awarded a Contract, we, as well as all our Joint Venture partners and Subcontractors under the Contract undertake to preserve above mentioned records and documents in accordance with applicable law, but in any case for at least six years from the date of fulfillment or termination of the Contract. Our financial transactions and financial statements shall be subject to auditing procedures in accordance with applicable law. Furthermore, we accept that our data (including personal data) generated in connection with the preparation and implementation of the Tender Process and the performance of the Contract are stored and processed according to the applicable law by the PEA and KfW.

Name: \_\_\_\_\_ In the capacity of: \_\_\_\_\_

Duly empowered to sign in the name and on behalf of<sup>4</sup>: \_\_\_\_\_

Signature:

Dated:

\_\_\_\_\_

<sup>3</sup> In case ILO conventions have not been fully ratified or implemented in the Employer's country the Applicant/Bidder/Contractor shall, to the satisfaction of the Employer and KfW, propose and implement appropriate measures in the spirit of the said ILO conventions with respect to a) workers grievances on working conditions and terms of employment, b) child labour, c) forced labour, d) worker's organisations and e) non-discrimination.

<sup>4</sup> In the case of a JV, insert the name of the JV. The person who will sign the application, bid or proposal on behalf of the Applicant/Bidder shall attach a power of attorney from the Applicant/Bidder.

**Appendix 1**

**Declaration of tax conformity – binding confirmation for legal persons**

**Name of company**

I hereby confirm with my signature that:

1. I am authorised to make this declaration on behalf of the above company;
2. the company properly pays all taxes in accordance with the tax laws of the country in which the company is domiciled;
3. the company is not currently nor has been in the past involved in any legal proceedings concerning the taxation of the company;
4. the company will duly pay taxes that may arise from the provision of contracted services;
5. all information and statements provided in advance are complete, accurate in terms of content and currently correct.

.....

(Place)

.....

(Date)

.....

(Name of the consultant)

.....

(Signature(s))



## Form ELI – 1.1: Bidder Information Form

*[The Bidder shall 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]*

ICB No.: *[Insert]*

Page *[Insert]* of *[Insert]* pages

Bidder's name: <i>[Insert Bidder's legal name]</i>
In case of Joint Venture (JV), legal name of each member: <i>[Insert legal name of each member in JV]</i>
Bidder's actual or intended country of registration: <i>[Insert actual or intended country of registration]</i>
Bidder's year of registration: <i>[Insert Bidder's year of registration]</i>
Bidder's address in country of registration: <i>[Insert Bidder's legal address in country of registration]</i>
Bidder'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> E-mail address: <i>[Insert Authorized Representative's email address]</i>
<p><b>2. Attached are copies of original documents of</b> <i>[Check the box(es) of the attached original documents]</i></p> <p><input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association) and/or documents of registration of the legal entity named above, in accordance with ITB 4.5;</p> <p><input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1;</p> <p><input type="checkbox"/> In case of a state-owned enterprise or institution, in accordance with ITB 4.3 documents establishing:</p> <p style="padding-left: 40px;">a) Legal and financial autonomy;</p> <p style="padding-left: 40px;">b) Operation under commercial law;</p> <p style="padding-left: 40px;">c) Establishing that the Bidder is not dependent agency of the Purchaser.</p> <p><b>2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.</b></p>

Title of the person signing the Bid *[Insert complete title of the person signing the Bid]*

Signature of the person named above *[Signature of the person named above]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

## Form ELI – 1.2: Bidder’s JV Information Form

*[The Bidder shall fill in this Form in accordance with the instructions indicated below. The following table shall be filled in for the Bidder and for each member of a Joint Venture. No alterations to its format shall be permitted and no substitutions shall be accepted.]*

Date: *[Insert]*

ICB No.: *[Insert]*

Page *[Insert]* of *[Insert]* pages

Bidder’s name: <i>[Insert Bidder’s legal name]</i>
Bidder’s JV Member’s name: <i>[Insert JV’s Member legal name]</i>
Bidder’s JV Member’s country of registration: <i>[Insert JV’s Member country of registration]</i>
Bidder’s JV Member’s year of registration: <i>[Insert JV Member’s year of registration]</i>
Bidder’s JV Member’s legal address in country of registration: <i>[Insert JV’s Member legal address in country of registration]</i>
Bidder’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’s]</i> Telephone/Fax numbers: <i>[Insert telephone/fax numbers of JV’s Member Authorized Representative]</i> E-mail address: <i>[Insert email address of JV’s Member Authorized Representative]</i>
<p><b>2. Attached are copies of original documents of</b> <i>[Check the box(es) of the attached original documents]</i></p> <p><input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association) of the legal and/or documents of registration of the legal entity named above, in accordance with ITB 4.1 and ITB 4.5;</p> <p><input type="checkbox"/> In case of a state-owned enterprise or institution, in accordance with ITB 4.3 documents establishing:</p> <p style="margin-left: 40px;">a) Legal and financial autonomy;</p> <p style="margin-left: 40px;">b) Operation under commercial law;</p> <p style="margin-left: 40px;">c) Establishing that the Bidder is not dependent agency of the Purchaser.</p> <p><b>2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.</b></p>

Title of the person signing the Bid *[Insert complete title of the person signing the Bid]*

Signature of the person named above *[Signature of the person named above]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

## Form CON – 2: Historical Contract Non-Performance, Pending Litigation and Litigation History

*[To be completed by the Bidder and by each member of the Bidder's JV]*

Bidder's Name: *[Insert]*

Date: *[Insert]*

JV Member's Name: *[Insert or state "None" if the Bidder is not a Joint Venture]*

ICB No.: *[Insert]*

Page *[Insert]* of *[Insert]* pages

### Non-Performed Contracts in accordance with Section III, Qualification and Evaluation Criteria

**Contract non-performance did not occur since 1<sup>st</sup> January 2018** specified in Section III, Qualification and Evaluation Criteria, Qualification, subclause 2.1.

**Or** *[Tick as appropriate]*

**Contract(s) not performed since 1st January 2018** specified in Section III, Qualification and Evaluation Criteria, Qualification, subclause 2.1 are as follows:

Year	Non- performed Portion of Contract	Contract Identification	Total Contract Amount (current value, currency, exchange rate and €-equivalent)
<i>[Insert year]</i>	<i>[Insert amount and percentage]</i>	Contract Identification: <i>[Indicate complete contract name/ number, and any other identification]</i> Name of Purchaser: <i>[Insert full name]</i> Address of Purchaser: <i>[Insert street/city/country]</i> Reason(s) for non-performance: <i>[Indicate main reason(s)]</i>	<i>[Insert amount and values]</i>

Non-Performed Contracts in accordance with Section III, Qualification and Evaluation Criteria			
Pending Litigation, in accordance with Section III, Qualification and Evaluation Criteria and Requirements			
<input type="checkbox"/> <b>No pending litigation</b> in accordance with Section III, Qualification and Evaluation Criteria and Requirements, Qualification, subclause 2.3. <b>Or</b> <i>[Tick as appropriate]</i>			
<input type="checkbox"/> <b>Pending litigation</b> in accordance with Section III, Qualification and Evaluation Criteria, Qualification, subclause 2.3 as indicated below:			
Year of dispute	Amount in dispute (currency)	Contract Identification	Total Contract Amount (currency), €-equivalent (exchange rate)
<i>[Insert year]</i>	<i>[Insert amount]</i>	Contract Identification: Name of Purchaser: Address of Purchaser: Matter in dispute: Party who initiated the dispute: Status of dispute:	<i>[Insert amount and values]</i>

Title of the person signing the Bid *[Insert complete title of the person signing the Bid]*

Signature of the person named above *[Signature of the person named above]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

## Form FIN - 3.1: Financial Situation and Performance

*[To be completed by the Bidder and by each member of the Bidder's JV]*

Bidder's Name: *[Insert]*

Date: *[Insert]*

JV Member's Name: *[Insert or state "None" if the Bidder is not a Joint Venture]*

ICB No.: *[Insert]*

Page *[Insert]* of *[Insert]* pages

### 1. Financial Data

Type of Financial Information in <i>[Insert Bidder's home currency]</i>	Historic information for last available three (3) years (amount in Bidder's home-currency, exchange rate, €-equivalent)		
	<i>[Insert Year 1]</i>	<i>[Insert Year 2]</i>	<i>[Insert Year 3]</i>
<b>Statement of Financial Position (Information from Balance Sheet)</b>			
Total Assets (TA)	<i>[Insert value in Bidder's home currency]</i>	<i>[Insert value in Bidder's home currency]</i>	<i>[Insert value in Bidder's home currency]</i>
	<i>[Insert exchange rate]</i>	<i>[Insert exchange rate]</i>	<i>[Insert exchange rate]</i>
	<i>[Insert €-equivalent]</i>	<i>[Insert €-equivalent]</i>	<i>[Insert €-equivalent]</i>
Total Liabilities (TL)			
Total Equity/Net Worth (NW)			
Current Assets (CA)			
Current Liabilities (CL)			
Working Capital (WC)			
<b>Information from Income Statement</b>			
Total Revenue (TR)			
Profits Before Taxes (PBT)			
<b>Cash Flow Information</b>			
Cash Flow from Operating Activities			

### 2. Financial Documents

The Bidder and its parties shall provide **copies of financial statements for the last available three (3) years** pursuant Section III, Qualification and Evaluation Criteria, Qualification, Sub-factor 3.1.

The financial statements shall:

- (a) Reflect the financial situation of the Bidder or in case of JV member, and not an affiliated entity (such as parent company or group member);
  - (b) Be independently audited or certified in accordance with local legislation;
  - (c) Be complete, including all notes to the financial statements;
  - (d) Correspond to accounting periods already completed and audited.
- Attached are copies of financial statements<sup>1</sup> for the last available three (3) years** required above and complying with the requirements.

Title of the person signing the Bid *[Insert complete title of the person signing the Bid]*

Signature of the person named above *[Signature of the person named above]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

---

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

## Form FIN - 3.2: Average Annual Turnover

*[To be completed by the Bidder and by each member of the Bidder's JV]*

Bidder's Name: *[Insert]*

Date: *[Insert]*

JV Member's Name: *[Insert or state "None" if the Bidder is not a Joint Venture]*

ICB No.: *[Insert]*

Page *[Insert]* of *[Insert]* pages

Annual Turnover Data			
Year	Currency & Amount	Exchange Rate	€-equivalent
Average Annual Turnover <sup>1</sup>			

Title of the person signing the Bid *[Insert complete title of the person signing the Bid]*

Signature of the person named above *[Signature of the person named above]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

<sup>1</sup> See Section III, Qualification and Evaluation Criteria, Qualification, Sub-Factor 3.2

## Form EXP - 4.1: Experience

*(To be completed by the Bidder and by each member of the Bidder's JV)*

Bidder's Legal Name: *[Insert]*

Date: *[Insert]*

JV Member's Legal Name: *[Insert]*

ICB No.: *[Insert]*

Page *[Insert]* of *[Insert]* pages

**Note: fill out one form for each contract (refer to minimum requirements stated in Section III. Evaluation and Qualification Criteria, 4.1 "Similar Experience")**

<b>Similar Contract No. <i>[Insert specific number]</i> of <i>[Total number of contracts]</i> required</b>	<b>Information</b>	
Contract Identification:		
Award date:		
Completion date:		
Role in Contract:		
Total contract amount:		€ equivalent: <i>[Insert]</i>
If member in a JV, specify participation in total contract amount:	<i>[Insert]</i> %	€ equivalent: <i>[Insert]</i>
Purchaser's Name:		
Address:		
Telephone/fax number:		
E-mail:		
Description of the similarity in accordance with Sub-Factor 4.1 or 4.2 of Section III:		
Amount		
Physical size		
Complexity		
Methods/Technology		
Other Characteristics		

Title of the person signing the Bid *[Insert complete title of the person signing the Bid]*

Signature of the person named above *[Signature of the person named above]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

## Form SPA - 5.1: Spare Parts

*[To be completed by the Bidder and by at least one member of the Bidder's JV]*

Bidder's Legal Name: *[Insert]*

Date: *[Insert]*

JV Member's Legal Name: *[Insert]*

ICB No.: *[Insert]*

Page *[Insert]* of *[Insert]* pages

We confirm that, if awarded the Contract, spare parts will be available on short notice, through us / our local agent / the manufacturer-appointed official representative *[Select as appropriate]*.

We further confirm that, if awarded the Contract, we (i) will carry sufficient inventories to assure ex-stock supply of consumables and consumable spares, and other spare parts and components will be supplied as promptly as possible but in any case within *[Insert number of days – same as used in the PC attached at the end of this Bidding Document]* days of placement of order; (ii) will be for a period of *[Insert number of years – same as used in the PC attached at the end of this Bidding Document]* years from the date of delivery and commissioning under obligation to supply spare parts, and will, in the event of termination of production of the spare parts, send an advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements

Title of the person signing the Bid *[Insert complete title of the person signing the Bid]*

Signature of the person named above *[Signature of the person named above]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

## Bid Submission Form

*[The Bidder shall prepare his Bid Submission Form on a Letterhead paper specifying the Bidder's complete name, address and communication details].*

***[Note: All italicized text is for use in preparing these forms by bidders and shall be deleted from the final document.]***

Date: *[Insert date]*

ICB No.: *[Insert ICB No.]*

To: *[Insert complete name of Purchaser]*

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda *[Insert Addenda No./Nos., if any]* issued in accordance with Instructions to Bidders (ITB 8);
- (b) We meet the eligibility requirements and have no conflict of interest in accordance with ITB 4;
- (c) We have not been suspended nor declared ineligible by the Purchaser based on execution of a Bid Securing Declaration in the Purchaser's country in accordance with ITB 4.4;
- (d) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedule(s) specified in the Schedule of Requirements the following Goods: *[Insert a brief description of the Goods and Related Services]*;
- (e) The total price of our Bid, excluding any discounts offered in item (f) below is:
  - i) In case of only one lot, total price of the Bid is: *[Insert total price and currency in words and figures] [Delete if multiple lots are offered]*
  - ii) In case of multiple lots, total price of each lot is: *[Insert a list/table showing the total price and currency in words and figures for each lot offered] [Delete if only one lot is offered]*
  - iii) In case of multiple lots, total price of all lots (sum of all lots) is: *[Insert the total price and currency in words and figures for all lots offered] [Delete if only one lot is offered]*
- (f) The discounts offered and the methodology for their application are:
  - i) The discounts offered are: *[Specify in detail each discount offered; if no discount is offered state "None"]*
  - ii) The exact method of calculations to determine the net price after application of discounts is: *[Specify in detail the method that shall be used to apply the offered discounts; if no discount is offered state "None"]*
- (g) Our bid shall be valid for a period of *[Insert the number of calendar days]* days from the date fixed for the bid submission deadline in accordance with the Bidding Documents, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;

- (h) If our bid is accepted, we commit to obtain and submit a performance security in accordance with ITB 42 of the Bidding Documents;
- (i) We are not participating, as a Bidder, in more than one bid in this bidding process in accordance with ITB 4.2(e), other than alternative bids submitted in accordance with ITB 13;
- (j) 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 an entity or individual that is subject to, a temporary suspension or a debarment imposed by a member of the World Bank Group or a debarment imposed by the KfW, the World Bank in accordance with the Agreement of Mutual Enforcement of Debarment Decisions between the World Bank and other development banks, or any other similar funding agency;
- (k) We have paid, or will pay the following commissions, gratuities, or fees with respect to the bidding process or execution of the Contract: *[Insert complete name of each recipient, its full address, the reason for which each commission, gratuity or fee was or will be paid and the amount and currency of each such commission, gratuity or fee]*

Name of Recipient	Address	Reason	Amount

*[If none has been paid or is to be paid, insert "none"].*

- (l) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed;
- (m) We understand and accept that (i) the Purchaser is not bound to accept the lowest evaluated bid or any other bid that the Purchaser may receive, and (ii) the Purchaser reserves the right to annul the bidding process and reject all bids at any time prior to contract award, without thereby incurring any liability to Bidders; and
- (n) We hereby certify that we have taken steps to ensure that no person acting for us or on our behalf will engage in any type of fraud and corruption.

Name of the Bidder *[Insert the complete name of the bidder; in the case of a Bid submitted by a Joint Venture insert the name of the Joint Venture as Bidder]*

Name of the person duly authorized to sign the Bid on behalf of the Bidder *[Insert complete name of the person duly authorised to sign the Bid; the person signing the Bid shall have the power of attorney given by the Bidder to be attached with the Bid Schedules]*

Title of the person signing the Bid *[Insert complete title of the person signing the Bid]*

Signature of the person named above *[Signature of the person named above]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

## Price Schedule Forms

*[The Bidder shall fill in these Price Schedule Forms in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the List of Goods and Related Services specified by the Purchaser in the Schedule of Requirements; **separate Price Schedules must be submitted for each lot offered**].*

## Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported

Currencies in accordance with ITB Sub-Clause 15						Date: <i>[Insert]</i>	
						ICB No.: <i>[Insert]</i>	
						Lot No.: <i>[Insert, if applicable]</i>	
						Page <i>[Insert]</i> of <i>[Insert]</i>	
1	2	3	4	5	6	7	8
Line Item No.	Description of Goods	Country of Origin	Delivery Time in Days at named place of CIP <b>in accordance with ITB 14.8 (b) (i)</b>	Quantity and Physical Unit	Unit Price & Currency <b>CIP</b> in accordance with ITB 14.8(b)(i)	Unit Price & Currency Related Services (handling, inland transportation to final destination(s), commissioning, and where applicable installation and training in accordance with ITB 14.8(b)(ii))	Total Price & Currency per Line item (Col. (6+7)x5)
<i>[Insert number of the item]</i>	<i>[Insert name of Goods]</i>	<i>[Insert country of origin of the Goods]</i>	<i>[Insert quoted Delivery Time in days]</i>	<i>[Insert number of units to be supplied and name of the physical unit]</i>	<i>[Insert currency &amp; unit price CIP per unit]</i>	<i>[Insert currency &amp; unit price for all required local services]</i>	<i>[Insert currency &amp; total price of the line item]</i>
<b>Total Price (including currency) CIP plus local services (if any) <i>[Insert name of Purchaser's Country]</i></b>							

Name of Bidder *[Insert complete name of Bidder]* Signature of Bidder *[Signature of person(s) signing the Bid]* Date *[Insert Date]*

## Price Schedule: Goods Manufactured Outside the Purchaser's Country, Already Imported

Currencies in accordance with ITB Sub-Clause 15								Date: <i>[Insert]</i>	ICB No.: <i>[Insert]</i>	Lot No.: <i>[Insert, if applicable]</i>	Page <i>[Insert]</i> of <i>[Insert]</i>
1	2	3	4	5	6	7	8	9	10		
Line Item No.	Description of Goods	Country of Origin	Delivery Time in Days at named place of CIP destination <b>in accordance with ITB 14.8 (c) (i)</b>	Quantity and Physical unit	CIP Unit Price & Currency excluding Custom Duties and Import Taxes paid, in accordance with ITB 14.8(c)(i)	Unit Price & Currency Related Services (handling, commissioning, and where applicable installation and training in accordance with ITB 14.8(c)(ii))	Custom Duties and Import Taxes paid & Currency per unit in accordance with ITB 14.8(c)(iii), [to be supported by documents]	Sales and other taxes paid or payable & Currency per item if Contract is awarded, in accordance with ITB 14.8(c)(iv)	Currency & Total Price per line item (Col. (6+7)x5)		
<i>[Insert number of the item]</i>	<i>[Insert name of Goods]</i>	<i>[Insert country of origin of the Goods]</i>	<i>[Insert quoted Delivery Time in days]</i>	<i>[Insert number of units to be supplied and name of the physical unit]</i>	<i>[Insert unit price per unit]</i>	<i>[Insert currency &amp; unit price for all required local services]</i>	<i>[Insert custom duties and taxes paid &amp; currency per unit]</i>	<i>[Insert sales and other taxes payable &amp; currency per item if Contract is awarded]</i>	<i>[Insert currency &amp; total price per line item]</i>		
<b>Total Price (including currency) CIP plus local services (if any) <i>[Insert name of Purchaser's Country]</i></b>											

Name of Bidder *[Insert complete name of Bidder]* Signature of Bidder *[Signature of person(s) signing the Bid]* Date *[Insert Date]*

## Price Schedule: Goods Manufactured in the Purchaser's Country

Currencies in accordance with ITB Sub-Clause 15						Date: <i>[Insert]</i>	
						ICB No.: <i>[Insert]</i>	
						Lot No.: <i>[Insert, if applicable]</i>	
						Page <i>[Insert]</i> of <i>[Insert]</i>	
1	2	3	4	5	6	7	8
Line Item No.	Description of Goods	Delivery Time in Days at named place of destination <b>in accordance with ITB 14.8 (a) (i)</b>	Quantity and Physical unit	Unit Price & Currency CIP	Unit Price & Currency Related Services (handling, commissioning, and where applicable installation and training in accordance with ITB 14.8(a)(ii))	Sales and other taxes payable per line item if Contract is awarded, in accordance with ITB 14.8(a)(iii)	Total Price & Currency per line item (Col. (5+6) x 4)
<i>[Insert number of the item]</i>	<i>[Insert name of Goods]</i>	<i>[Insert quoted Delivery Time in days]</i>	<i>[Insert number of units to be supplied and name of the physical unit]</i>	<i>[Insert CIP unit price &amp; currency]</i>	<i>[Insert currency &amp; unit price for all required local services]</i>	<i>[Insert sales and other taxes payable per line item if Contract is awarded]</i>	<i>[Insert total price &amp; currency per item]</i>
<b>Total Price (including currency) CIP plus local services (if any) <i>[Insert name of Purchaser's Country]</i></b>							

Name of Bidder *[Insert complete name of Bidder]* Signature of Bidder *[Signature of person(s) signing the Bid]* Date *[Insert Date]*

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

## Bid Security

**Beneficiary:** *[Insert name and Address of Purchaser]*

**Date:** *[Insert date of issue]*

**BID GUARANTEE No.:** *[Insert guarantee reference number]*

**Guarantor:** *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[Insert name and address of the bidder, which in the case of a joint venture shall be the name and address of the joint venture]* (hereinafter called "the Applicant") has submitted or will submit to the Beneficiary its bid (hereinafter called "the Bid") for the supply of *[Insert project, object of the contract/brief description of the goods and related services]* under International Competitive Bidding No. *[Insert ICB number]*.

Waiving all objections and defenses, we, as Guarantor, hereby irrevocably and independently undertake to pay the Beneficiary any sum or sums not exceeding in total an amount of *[Insert guarantee amount and currency in words and figures]* upon receipt by us of the Beneficiary's first 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 Bid during the period of bid validity set forth in the Applicant's Bid Submission Form (the Bid Validity Period"); or
- (b) Having been notified of the acceptance of its Bid by the Beneficiary during the Bid Validity Period, (i) has failed to sign the contract agreement, or (ii) has failed to furnish the performance security, in accordance with the Instructions to Bidders ("ITB") of the Beneficiary's bidding document.

This guarantee shall expire not later than *[Insert expiry date]*<sup>1</sup>.

By this date we must have received any claims for payment by letter or encoded telecommunication.

It is understood that you will return this guarantee to us on expiry or after payment of the total amount to be claimed hereunder.

*[As preferred option regarding guarantee rules insert<sup>2</sup>: This guarantee is subject to the Uniform Rule for Demand Guarantees (URDG) 2010 Revision, ICC Publication No. 758.]*

---

Place, date

---

Guarantor's authorized signature(s)

<sup>1</sup> Pursuant to ITB Clause 19.3 the guarantee must be valid for at least 42 days beyond the bid validity.

<sup>2</sup> In the case the issuing bank will not add the preferred option, the following must be added instead: This guarantee is governed by the laws of *[Insert country of jurisdiction]*. Note: the country of jurisdiction shall be the country where the bank's branch issuing the guarantee is physically located.

## Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the **BDS**, and for Items listed in the **BDS** and/or **Specifications**]*

***[Note: All italicized text is for use in preparing these forms by bidders and shall be deleted from the final document.]***

Date: *[Insert date]*

ICB No.: *[Insert ICB No.]*

To: *[Insert complete name of Purchaser]*

### WHEREAS

We *[Insert complete name of Manufacturer]*, who are official manufacturers of *[Insert type of goods manufactured]*, having factories at *[Insert full address of Manufacturer's factories]*, do hereby authorize *[Insert complete name of Bidder]* to submit a bid the purpose of which is to provide the following Goods, manufactured by us:

*[Insert name and or brief description of the Goods],*

and to subsequently negotiate and sign the Contract.

We hereby extend our full guarantee and warranty in accordance with Clause 28 of the General Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[Insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[Insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[Insert title]*

Date signed *[Insert date of signing]* day of *[Insert month]* *[Insert year]*

# Section V. Eligibility Criteria

## Eligibility in KfW-Financed Procurement

1. Consulting Services, Works, Goods, Plant and Non-Consulting Services are eligible for KfW financing regardless of the country of origin of the Contractors (including Subcontractors and suppliers for the execution of the Contract), except where an international embargo or sanction by the United Nations, the European Union or the German Government applies.
2. Applicants/Bidders (including all members of a Joint Venture and proposed or engaged Subcontractors) shall not be awarded a KfW-financed Contract if, on the date of submission of their Application/Offer or on the intended date of Award of a Contract, they:
  - 2.1 are bankrupt or being wound up or ceasing their activities, are having their activities administered by courts, have entered into receivership, or are in any analogous situation;
  - 2.2 have been
    - (a) convicted by a final judgement or a final administrative decision or subject to financial sanctions by the United Nations, the European Union and/or the German Government for involvement in a criminal organisation, money laundering, terrorist-related offences, child labour or trafficking in human beings; this criterion of exclusion is also applicable to legal Persons, whose majority of shares are held or factually controlled by natural or legal Persons which themselves are subject to such convictions or sanctions;
    - (b) convicted by a final court decision or a final administrative decision by a court, the European Union or national authorities in the Partner Country or in Germany for Sanctionable Practice during any Tender Process or the performance of a Contract or for an irregularity affecting the EU's financial interests, unless they provide supporting information together with their Declaration of Undertaking (Form available as Appendix to the Application/Offer which shows that this conviction is not relevant in the context of this Contract and that adequate compliance measures have been taken in reaction;
  - 2.3 have been subject within the past five years to a Contract termination fully settled against them for significant or persistent failure to comply with their contractual obligations during Contract performance, unless this termination was challenged and the dispute resolution is still pending or has not confirmed a full settlement against them;
  - 2.4 have not fulfilled applicable fiscal obligations regarding payments of taxes either in the country where they are constituted or the PEA's country;
  - 2.5 are subject to an exclusion decision of the World Bank or any other multilateral development bank and are listed in the respective table with debarred and cross-debarred firms and individual available on the World Bank's website or any other multilateral development bank unless they provide supporting information together with their Declaration of Undertaking which shows that this exclusion is not relevant in the context of this Contract or
  - 2.6 have given misrepresentation in documentation requested by the PEA as part of the Tender Process of the relevant Contract.

- 3 State-owned entities may compete only if they can establish that they (i) are legally and financially autonomous, and (ii) operate under commercial law. To be eligible, a state-owned entity shall establish to KfW's satisfaction, through all relevant documents, including its charter and other information KfW may request, that it: (i) is a legal entity separate from their state (ii) does not currently receive substantial subsidies or budget support; (iii) operates like any commercial enterprise, and, inter alia, is not obliged to pass on its surplus to their state, can acquire rights and liabilities, borrow funds and be liable for repayment of its debts, and can be declared bankrupt

# Section VI. KfW Policy – Sanctionable Practice – Social and Environmental Responsibility

## 1) Sanctionable Practice

The PEA and the Contractors (including all members of a Joint Venture and proposed or engaged Subcontractors) must observe the highest standard of ethics during the Tender Process and performance of the Contract.

By signing the Declaration of Undertaking the Contractors declare that (i) they did not and will not engage in any Sanctionable Practice likely to influence the Tender Process and the corresponding Award of Contract to the PEA's detriment, and that (ii) in case of being awarded a Contract they will not engage in any Sanctionable Practice.

Moreover, KfW requires to include in the Contracts a provision pursuant to which Contractors must permit KfW and in case of financing by the European Union also to European institutions having competence under European law to inspect the respective accounts, records and documents relating to the Tender Process and the performance of the Contract, and to have them audited by auditors appointed by KfW.

KfW reserves the right to take any action it deems appropriate to check that these ethics rules are observed and reserves, in particular, the rights to:

- (a) reject an Offer for Award of Contract if during the Tender Process the Bidder who is recommended for the Award of Contract has engaged in Sanctionable Practice, directly or by means of an agent in view of being awarded the Contract;
- (b) declare misprocurement and exercise its rights on the ground of the Funding Agreement with the PEA relating to suspension of disbursements, early repayment and termination if, at any time, the PEA, Contractors or their legal representatives or Subcontractors have engaged in Sanctionable Practice during the Tender Process or performance of the Contract without the PEA having taken appropriate action in due time satisfactory to KfW to remedy the situation, including by failing to inform KfW at the time they knew of such practices.

KfW defines, for the purposes of this provision, the terms set forth below as follows:

<b>Coercive Practice</b>	The impairing or harming, or threatening to impair or harm, directly or indirectly, any person or the property of the person with a view to influencing improperly the actions of a person.
<b>Collusive Practice</b>	An arrangement between two or more persons designed to achieve an improper purpose, including influencing improperly the actions of another person.
<b>Corrupt Practice</b>	The promising, offering, giving, making, insisting on, receiving, accepting or soliciting, directly or indirectly, of any illegal payment or undue advantage of any nature, to or by any person, with the intention of influencing the actions of any person or causing any person to refrain from any action.

- Fraudulent Practice** Any action or omission, including misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a person to obtain a financial benefit or to avoid an obligation.
- Obstructive Practice** Means (i) deliberately destroying, falsifying, altering or concealing evidence material to the investigation or the making of false statements to investigators, in order to materially impede an official investigation into allegations of a Corrupt Practice, Fraudulent Practice, Coercive Practice or Collusive Practice, or threatening, harassing or intimidating any Person to prevent them from disclosing their knowledge of matters relevant to the investigation or from pursuing the investigation, or (ii) any act intended to materially impede the exercise of KfW's access to contractually required information in connection with an official investigation into allegations of a Corrupt Practice, Fraudulent Practice, Coercive Practice or Collusive Practice.
- Sanctionable Practice** Any Coercive Practice, Collusive Practice, Corrupt Practice, Fraudulent Practice or Obstructive Practice (as such terms are defined herein) which is unlawful under the Financing Agreement.

## 2) Social and Environmental Responsibility

Projects financed in whole or partly in the framework of Financial Cooperation have to ensure compliance with international Environmental, Social, Health and Safety (ESHS) standards (including issues of sexual exploitation and abuse and gender based violence) Contractors in KfW-financed projects shall consequently undertake in the respective Contracts to:

- (a) comply with and ensure that all their Subcontractors and major suppliers, i.e. for major supply items comply with international environmental and labour standards, consistent with applicable law and regulations in the country of implementation of the respective Contract and the fundamental conventions of the International Labour Organisation<sup>1</sup> (ILO) and international environmental treaties and;
- (b) implement any environmental and social risks mitigation measures, as identified in the environmental and social impact assessment (ESIA) and further detailed in the environmental and social management plan (ESMP) as far as these measures are relevant to the Contract and implement measures for the prevention of sexual exploitation and abuse and gender-based violence

---

<sup>1</sup> In case ILO conventions have not been fully ratified or implemented in the Employer's country the Applicant/Bidder/Contractor shall, to the satisfaction of the Employer and KfW, propose and implement appropriate measures in the spirit of the said ILO conventions with respect to a) workers grievances on working conditions and terms of employment, b) child labour, c) forced labour, d) worker's organisations and e) non-discrimination.

## **PART 2 – Supply Requirements**

# **Section VII. Schedule of Requirements**

## **Contents**

<b>1. List of Goods and Delivery Schedule.....</b>	<b>73</b>
<b>2. List of Related Services and Completion Schedule .....</b>	<b>74</b>
<b>3. Technical Specifications .....</b>	<b>75</b>
<b>4. Drawings .....</b>	<b>170</b>
<b>5. Inspections and Tests .....</b>	<b>171</b>
<b>6. Distribution of Goods .....</b>	<b>172</b>

## 1. List of Goods and Delivery Schedule

[The Purchaser shall fill in this table, with the exception of the column **“Bidder’s offered Delivery date”** to be filled by the Bidder. The item list should be identical to the Price Schedule (Section IV); alternatively, lot numbers may be used if the required delivery time is identical for all items of a lot]

Line Item No. or Lot No.	Description of Goods	Quantity <sup>1</sup>	Physical Unit <sup>1</sup>	Named Place of Destination as specified in BDS	Delivery (as per Incoterms) Date		
					Earliest Delivery Date <sup>2</sup> at named place of destination	Latest Delivery Date at named place of destination	Bidder’s offered Delivery date at named place of destination [to be provided by the bidder]
Lot 1	All items as described in Technical Specifications	-	-	Final destination in accordance with “6. Distribution of Goods.”	No minimum	180 days	
Lot 2	All items as described in Technical Specifications	-	-	Final destination in accordance with “6. Distribution of Goods.”	No minimum	180 days	
Lot 3	All items as described in Technical Specifications	-	-	Final destination in accordance with “6. Distribution of Goods.”	No minimum	180 days	
Lot 4	All items as described in Technical Specifications	-	-	Final destination in accordance with “6. Distribution of Goods.”	No minimum	180 days	

<sup>1</sup> Only required to be filled in case of line items being listed; not required for lots.

<sup>2</sup> Earliest delivery date is used in cases where the Purchaser cannot accept delivery before a specific date, e.g. if construction work is still under way; if there is no earliest delivery date required, leave this column blank.

## 2. List of Related Services and Completion Schedule

<b>Service No.</b>	<b>Description of Service</b>	<b>Quantity<sup>1</sup></b>	<b>Physical Unit<sup>1</sup></b>	<b>Place where Services shall be Performed</b>	<b>Final Completion Date(s) of Services</b>
<i>[Insert Service No]</i>	<i>[Insert description of Related Services]</i>	<i>[Insert quantity of items to be supplied]</i>	<i>[Insert physical unit for the items]</i>	<i>[Insert name(s) of the Place]</i>	<i>[Insert required Completion Date(s)]</i>
<b>1</b>	<b>Inland transportation</b>	-	-	<b>To final destination / project site(s)</b>	<b>30 days</b>
<b>2</b>	<b>Installation and Commissioning</b>	-	-	<b>Final destination / project site(s)</b>	<b>Within 30 days of delivery</b>
<b>3</b>	<b>Training</b>	-	-	<b>Final destination / project site(s)</b>	<b>Within 30 days of delivery</b>
<b>4</b>	<b>Servicing and maintenance</b>	-	-	<b>Final destination / project site(s)</b>	<b>As specified in “3. Technical Specifications”</b>

<sup>1</sup> Only use if quantity/physical unit can be clearly attributed.

### 3. Technical Specifications

Bidder shall note that specifications, standards for workmanship, material and equipment, and open or hidden references to brand names or catalogue numbers, designated by the Purchaser in the Specifications, are intended to be descriptive only and not restrictive.

The bidder may substitute other specifications, authoritative standards, brand names and/or catalogue numbers in its Bid, provided that it demonstrates to the Purchaser's satisfaction that the substitutions are equivalent or superior to those designated in the Specifications.

All Goods offered by Bidders and supplied by the successful Bidders must be new and unused, be of the most recent or current models, and must incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.

#### List of Bid Packages

Lot No.	Description	No. of Line Items	Page No.
Lot 1	Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP	19	-
Lot 2	Lot 2: Data Center, CCTV, Access Control	20	-
Lot 3	Lot 3: Computers, Smart Classroom, Learning Automation, and software licensing.	45	-
Lot 4	Lot 4: Internet Connectivity.	1	-

**Bidders shall provide a clause-by-clause commentary (see attached table) on the Purchaser's specifications, demonstrating the Goods' and related Services' responsiveness to those specifications or a statement of deviation and exceptions to the provisions of the Purchaser's specifications.** General replies to the Purchaser's specifications, such as 'acceptable', 'comply', 'yes', etc., or simply copying the Purchaser's specifications word-by-word, will be treated without exception as non-responsive during the technical evaluation; bidders are also requested to strictly refrain from self-classification of their replies to the Purchaser's specifications (such as 'better', 'compliant', 'acceptable', etc.); **any statement made by the Bidder(s) must be verifiable in the provided catalogues/leaflets/literature** ('custom-made' catalogues/leaflets/literature, i.e. literature specifically manufactured for this tender, and e.g. only consisting of a picture and some text, and generally appearing unprofessional, will not be accepted).

#### Technical Evaluation

The technical evaluation shall be conducted based on a thorough comparison of the Bidder's offered specifications against the Purchaser's required specifications, using the following four (4) evaluation terms: **comply** (an item complies with, or exceeds, the Purchaser's specifications; the classification 'exceeds specification'

shall be used rational and an excessive overspecification, e.g. in terms of capacity, size, power, shall not be considered and accepted), **acceptable** (an item does not fully comply with the Purchaser's specifications, has minor deviations, but fulfills perfectly well the intended purpose), **borderline** (an item deviates considerably from the Purchaser's specifications, but may just be considered for the purpose intended; this classification is not permitted for major items), and **not comply** (an item deviates to an extent not suitable for the intended purpose).

### **Bidder's Technical Capacity**

Bidder's must have **at least two (2) – to be proven with CVs - qualified equipment technicians or engineers**, certified by the manufacturer(s) where appropriate, for the purpose of installation and training, and available to support the local agent for after sales services on short notice **over a period of 24 months**

### **Standards and Certifications**

In accordance with "3. Technical Specifications": Common Specifications & Requirements and Item Specifications.

### **Spare Parts Requirements**

Spare parts must be available on short notice, through the bidder, the bidder's local agent or the manufacturer-appointed official representative of the goods.

Mandatory consumables and/or spare parts required for the proper functioning of equipment for an initial given period of time are specified as items in "3. Technical Specifications", as applicable.

### **After Sales Service (Local Agent)**

**If the bidder's is making use of a local agent**, in the Purchaser's country, the local agent must be a qualified firm handling goods' similar to those offered within their business activities, and must have at least **two (2) – to be proven with CVs - adequate and qualified maintenance and service staff**, certified by the manufacturer(s) where appropriate, for the goods offered by the bidder. **A brief description of the local agent, including registration/licence documents and proof of tax registration shall also be provided.**

### **Common Specifications & Requirements**

The equipment and accessories are intended to be used in technical vocational education and training in Kenya, in an as much as possible near praxis environment.

The following specifications are common to all relevant items. In their bids, bidders must include information indicating compliance with these requirements.

- a) Electrical items must perform correctly, safely, and be compatible with the public Kenyan electricity supply, in terms of voltage, frequency, and interface. Bidders must factor in this requirement in their offers for electrical items.
- b) All equipment items must be provided with an instruction / user manual in the English language.

- c) All equipment items must be provided with the relevant safety and/or quality certificates (e.g. CE-marking, compliance to relevant or mandatory ISO, DIN, IEC standards).
- d) All equipment items must include a warranty in accordance with Contract Conditions, Section 28 "Warranty", valid in Kenya.
- e) In their bids, bidders must provide 1) Table of Contents 2) Sample pages for teaching instructions / books for students and trainers (if such items are required in the lot or tender).

### Purchaser's and Supplier's Responsibilities for Installation and Work on Site

Item	Subject	Assignment	Responsibility
1	Preparation	Each workshop/laboratory/etc. at the Project Site(s), including the necessary outlets for electricity, water supply, drain, etc., installed and functional	Purchaser
		Listing requirements for above	Supplier
2	Transportation	Arranging transportation and insurance CIP place of entry, and after customs clearance (also arranged by the Supplier) to each Project Site (final destination(s))	Supplier
		Storage on site in an easily accessible storage room at the Purchaser's premises	Purchaser
		Lifting and handling on site	Purchaser
		Supervision of above	Supplier
		Unpacking and checking against the contract	Purchaser and Supplier
		Processing of damages and/or insurance claims	Purchaser and Supplier
3	Installation	Foundation works for equipment (including materials)	Purchaser
		Listing requirements for above	Supplier
		Supply of utilities for installation	Purchaser
		All necessary material to connect various items into functioning systems	Supplier
		Installation	Supplier
		<b>Commissioning / Maintenance requirements</b>	<b>Supplier</b>
4	Electric Wiring	Up to the required sockets at point of installation	Purchaser

Item	Subject	Assignment	Responsibility
		Listing requirements for above	Supplier
5	Ancillary Items	Any ancillary items required for the proper operation of each item, unless part of the specifications	Purchaser
6	User Training	For items defined and listed in the specifications	Supplier
7	<b>Acceptance</b>	<b>Acceptance of delivered items</b>	<b>Purchaser and Beneficiaries</b>

### Manufacturer's Authorization

The following items require a manufacturer's authorization to be submitted by the Supplier:

Lot 1	Reference is made to Section II. Bid Data Sheet (BDS); B. Contents of Bidding Documents; ITB 17.2 (a) <b>The Supplier and/or its local agent must also submit:</b> 1. Partner certificate. 2. ICT Authority Certificate Level 1, issued by Government of Kenya ICT Authority.
Lot 2	Reference is made to Section II. Bid Data Sheet (BDS); B. Contents of Bidding Documents; ITB 17.2 (a) <b>The Supplier and/or its local agent must also submit:</b> 1. Partner certificate. 2. ICT Authority Certificate Level 1, issued by Government of Kenya ICT Authority.
Lot 3	Reference is made to Section II. Bid Data Sheet (BDS); B. Contents of Bidding Documents; ITB 17.2 (a)
Lot 4	Reference is made to Section II. Bid Data Sheet (BDS); B. Contents of Bidding Documents; ITB 17.2 (a) <b>The Supplier and/or its local agent must also submit:</b> 1. Communication Authority License for Telecommunication Installer or Service Provider, issued by Government of Kenya Communication Authority.

### Installation of items

The following items require installation by the Supplier:

Lot 1	All items.
-------	------------

Lot 2	All items.
Lot 3	All items.
Lot 4	All items.

### Initial User Training for items

If not already specified as separate items in the Technical Specifications, the following items require initial user training by the Supplier:

Lot 1	As specified.
Lot 2	All items.
Lot 3	As specified.
Lot 4	N/A

Bidders are required to include the related costs in their Price Schedule(s) under local services.

### User Manuals

If not already specified as separate items in the Technical Specifications, the following items require user manuals to be provided, in English language, by the Supplier:

Lot 1	Reference is made to Section VII Schedule of Requirements; 3. Technical Specifications; Common Specifications & Requirements (b)
Lot 2	Reference is made to Section VII Schedule of Requirements; 3. Technical Specifications; Common Specifications & Requirements (b)
Lot 3	Reference is made to Section VII Schedule of Requirements; 3. Technical Specifications; Common Specifications & Requirements (b)
Lot 4	Reference is made to Section VII Schedule of Requirements; 3. Technical Specifications; Common Specifications & Requirements (b)

### Maintenance & Consumable Requirements

Maintenance services and consumables must be available from the supplier's appointed local agent.

If the technical specifications already specify maintenance services, spare parts and/or consumables as separate line items, then bidders are required to provide their quotations for such items.

### **Environmental, Social, Health and Safety (ESHS) Requirements**

In accordance with the Technical Specifications and KfW Declaration of Undertaking.

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>

1	LAN Access Switches	<p>Support 48 10\100\1000 Mbps Base-T downlink interfaces, full PoE+, 4 10G SFP+ uplink interfacesSupport auto-sensing for Ethernet ports for uplink connections.</p> <p>Must be rack mountable in standard racks and should therefore be attached to the backbone using appropriate Transceivers.</p> <p>Must be able to integrate with the existing infrastructure</p> <p>Support Software Defined Networking &amp; Automation based on open Standards and only use IEEE or IETF certified protocols to allow interoperability with other vendors supporting the same standards.</p> <p>Software package MUST be included to allow management of the switch from a central platform, network should be Scalable to guarantee the support for future remote sites, applications, users, traffic, technologies without the need for major forklifts, upgrades, or restructuring.</p> <p>Switching capacity of the switch should support at least 128 Gbps forwarding performance of the switch should support at least 96 Mpps</p> <p>Switches should support at least 4K FIBv4</p> <p>Switches should support more than 16K MAC address entries</p> <p>Switches should support more than 4K VLANs</p> <p>The switches should support static routing, RIP V1/2 and RIPng, OSPF and OSPFv3, IS-IS, BGP and BGP4+, IS- ISv6</p> <p>The switches should support BFD for BGP, IS-IS, and OSPF.</p> <p>The switches should Support IEEE 802.1X/MAC/Portal authentication, MFF for Layer 2 Isolation</p> <p>The switches should support Netstream</p> <p>Switch should be classified as leaders in the Gartner Magic Quadrant 2022. Attach evidence</p> <p>The switches should support IEEE 802.1D</p> <p>The switches should support SNMPv1/v2/v3 Netconf or better</p> <p>The switches should have three (3) year warranty service and a 3 years technical support service</p>	Piece	9	Y	<p>[Manufacturer/Brand]</p> <p>[Model]</p> <p>[Offered specifications]</p>
---	---------------------	--	-------	---	---	--

1.1	Lan Aggregation Switches	<p>The switch should be an Aggregation switch</p> <p>The switch should support 48 GE ports,</p> <p>The switch should support PoE+ capable</p> <p>The switch should have a Larger wiring closet or high throughput requirements</p> <p>The switch should support 4x 10 GE SFP+ and 2x 40 GE QSFP uplink ports</p> <p>The switch should support Management and Configuration</p> <p>The switch should be able to support Auto Discovery of Multiple Switches</p> <p>The switch should support atleast 8 Managed Switches depending on model</p> <p>The switch should support Stacking (Auto Inter-Switch Links)</p> <p>The switch should support Software Upgrade of Switches</p> <p>The switch should support Centralized VLAN Configuration , Switch POE Control, Link Aggregation Configuration, Spanning Tree, LLDP/MED, IGMP Snooping, L3 Routing and Services, Policy-Based Routing, Virtual Domain, Automated detection and recommendations, Dynamic Port Profiles and Provision firmware upon authorization.</p> <p>The switch should support Health Monitoring, High Availability, HA Cluster, LAG support, Active-Active Split LAG for Advanced Redundancy.</p> <p>The switch should support both layer 2 and 3 features.</p> <p>Layer 3</p> <p>Static Routing (Hardware-based)</p> <p>Dynamic Routing Protocols: OSPFv2, RIPv2, VRRP, BGP, ISIS *,</p> <p>Multicast Protocols: PIM-SSM *, ECMP, Bidirectional Forwarding Detection (BFD), DHCP Relay, IP conflict detection and notification, DHCP server, Unicast Reverse Path, Forwarding - uRPF, IPv6 route filtering, Filtering routemaps based on routing protocol, Security and Visibility, Port Mirroring, Admin Authentication Via RFC 2865 RADIUS, IEEE 802.1X Authentication Port-based, IEEE 802.1X Authentication MAC-based, IEEE 802.1X Guest and Fallback VLAN, IEEE 802.1X MAC Access Bypass (MAB), IEEE 802.1X, Dynamic VLAN Assignment, Radius CoA (Change of Authority), Radius Accounting, MAC-IP Binding, sFlow, ACL, IEEE 802.1ab Link Layer Discovery Protocol (LLDP), IEEE 802.1ab</p>	Piece	3	Y	<p>[Manufacturer/Brand]</p> <p>[Model]</p> <p>[Offered specifications]</p>
-----	--------------------------	--	-------	---	---	--

		<p>LLDP-MED, IEEE 802.1ae MAC Security (MAC Sec), DHCP-Snooping, Dynamic ARP Inspection, Sticky MAC and MAC Limit, IEEE 802.1X open auth, IEEE 802.1X EAP pass-through Flow Export (NetFlow and IPFIX), ACL Multistage, ACL Multiple Ingress, ACL Schedule, IP source guard, IPv6 RA Guard, LLDP-MED ELIN support, Per-port and per-VLAN MAC learning limit, Assign VLANs via Radius attributes (RFC 4675) Wake on LAN</p> <p>Layer 2</p> <p>the switch should support Jumbo Frames, Auto-negotiation for Port Speed and Duplex, MDI/MDIX Auto-crossover, IEEE 802.1D MAC Bridging/STP, IEEE 802.1w Rapid Spanning Tree Protocol (RSTP), IEEE 802.1s Multiple Spanning Tree Protocol (MSTP), STP Root Guard, STP BPDU Guard, Edge Port / Port Fast, IEEE 802.1Q VLAN Tagging, Private VLAN</p> <p>IEEE 802.3ad Link Aggregation with LACP, Unicast/Multicast traffic balance over trunking port (dst-ip, dst-mac, src-dst-ip, src-dst-mac, src-ip, src-mac), IEEE 802.1AX Link Aggregation, Spanning Tree Instances (MSTP/CST), IEEE 802.3x Flow Control and Back-pressure, IEEE 802.3 10Base-T, IEEE 802.3u 100Base-TX, IEEE 802.3z 1000Base-SX/LX, IEEE 802.3ab 1000Base-T, IEEE 802.3ae 10 Gigabit Ethernet, IEEE 802.3az Energy Efficient Ethernet, IEEE 802.3bz Multi Gigabit Ethernet, IEEE 802.3 CSMA/CD Access Method and Physical Layer Specifications, Storm Control, MAC, IP, Ethertype-based VLANs, Virtual-Wire, Split Port (QSFP+ breakout to 4x10G SFP+ or 4x1G SFP), Time-Domain Reflectometry (TDR) Support , LAG min/max bundle, Rapid PVST interoperation, Ingress Pause Metering, Loop Guard, Per-port storm control</p> <p>Priority-based Flow Control (802.1Qbb), IEEE 802.1ad QinQ, VLAN Mapping, IEEE 802.3ba, 802.3bj, and 802.3bm 40 and 100 Gigabit Ethernet, Auto topology, Dynamically shared packet buffers, Services, IGMP proxy / querier, MLD Snooping, MLD proxy / querier and IGMP Snooping. The switches should have 3 Year warranty.</p>				
--	--	---	--	--	--	--

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
2	Routers	<p>Router Capable of supporting SD-WAN technology MPLS and SIM Card support.</p> <p>Processor: The router should support multi-core processor for high-speed WAN connections, powerful route calculation capabilities, and enhanced L4-L7 service processing.</p> <p>EMC and Environmental Standards: The router should comply with EMC and environmental standards such as EN 55032 Class A, RoHS, REACH, WEEE</p> <p>Interfaces Fixed WAN Ports: 2*GE Combo, Fixed LAN Ports: 1*GE Combo, 8*GE RJ45 (can be configured as WAN)</p> <p>Memory: 2GB RAM and 1GB flash memory USB 1xUSB 2.0</p> <p>Throughput: Default Forwarding Performance without additional boost license: 1 Gbps with NAT, ACL, and QoS enabled 2 Gbps IPsec IPv4 forwarding performance</p> <p>Routing: RIPng, OSPFv2, OSPFv3, IS-IS, IS-ISv6, BGP4, BGP4+, IGMPv1/v2/v3, PIM DM, PIM-SM and IPv6 PIM</p> <p>5G supported</p> <p>VPN IPsec VPN, GRE VPN, DSVPN, A2A VPN, L2TP VPN, L2TPv3 VPN</p> <p>Quality of Service (QoS) DiffServ mode, MPLS QoS, priority mapping, traffic policing (CAR), traffic shaping, congestion avoidance, congestion management, HQoS, SAC</p> <p>Security URL filtering, IPS, 802.1X and MAC address authentication, Web authentication</p> <p>Netstream protocol for collecting and analyzing service traffic, NETCONF</p> <p>Operating Temperature approximately 0°C to 45°C</p> <p>Technical Support Service Provide three (3) years Warranty service and 3 years technical support service</p> <p>Provide Manufacturer's Authorization</p>	Piece	3	Y	<p>[Manufacturer/Brand]</p> <p>[Model]</p> <p>[Offered specifications]</p>

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
3	Indoor WiFi	<p>Medium to high density            802.11AC WAVE 2 (WI-FI 5)            3x3:3 MU-MIMO            Up to 450 Mbps (2.4 GHz) + 1300 Mbps (5 GHz)            RADIO-0 – 2.4 GHz single band            RADIO-1 – 5 GHz single band            3x internal 2.4 GHz antenna for Radio-0            3x internal 5 GHz antenna for Radio-1            Wall/Ceiling brackets            1x RJ45 connector console serial port            1x RJ45 10/100/1000 Ethernet            1x RJ45 10/100/1000 Ethernet w/PoE+            PoE+ 802.3at            Cables, trunks and any other relevant installation accessories.            The manufacturer/OEM of the WLAN Access Points should be the same as that of the Firewall.            The Firewall should have visibility to WLAN Access Points. The WLAN APs should be managed from the Firewall            The Access Points should have 3 Year warranty.</p>	Piece	50	Y	<p>[Manufacturer/Brand]            [Model]            [Offered specifications]</p>

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
4	Backhaul Radio	<p>The Backhaul solution to link two LANs over distance without cables including erecting of 10m Mast for each Radio  Paired Secure Link preconfigured - AES encryption  The Backhaul solution should be able to support distances of 1500 meters or more  60 GHz wireless link that is not affected by the crowded WiFi spectrum  Gigabit Ethernet  Powered by AF/AT/Passive PoE  2 Gb/s aggregate link  Unit Pair  Quad-core ARM Cortex A7, 716 MHz  RAM 256 MB  16 MB Flash  Ethernet Port 1  Built-in 60 GHz 802.11ad  Wireless Model QCA6335  POE 802.3af/at  12 V - 57 V (802.3af/at and passive PoE)  -40 C .. +70 C  Ø 391 x 222 mm  Warranty of 3 Years.</p>	Piece	9	Y	<p>[Manufacturer/Brand]  [Model]  [Offered specifications]</p>

5	Firewall	<p>The NGFW should combine AI-powered security and machine learning to deliver Threat Protection at any scale. Get deeper visibility into your network and see applications, users, and devices before they become threats.</p> <p>The firewall should have an Advanced NOC and SOC management tools attached to your NGFW provide simplified and faster time-to-activation.</p> <p>The firewall should support the following Interfaces</p> <ol style="list-style-type: none"> <li>1. 1 x 2.5/1 GE RJ45 HA Port</li> <li>2. 1 x GE RJ45 Management Port</li> <li>3. 16 x GE RJ45 Ports</li> <li>4. 8 x GE SFP Slots</li> <li>5. 4 x 10GE/GE SFP+/SFP Slots</li> <li>6. 4 x 25GE/10GE SFP28/SFP+ ULL (ultra-low latency) Slots</li> </ol> <p>Hardware Accelerated 25 GE SFP28 / 10 GE SFP+ Ultra Low Latency Slots 4, Hardware Accelerated 10 GE SFP+ / GE SFP Slots 4</p> <p>Hardware Accelerated GE SFP Slots 8</p> <p>Hardware Accelerated GE RJ45 Slots 16, 2.5 GE / GE HA Port 1, GE Management Port 1, USB Ports (Client / Server) 2 , Console Port 1, Onboard Storage No 2x 480 GB, Trusted Platform Module (TPM) Yes, Included Transceivers 2x SFP SX, System Performance — Enterprise Traffic Mix</p> <p>IPS Throughput 2 26 Gbps</p> <p>NGFW Throughput 2, 4 22 Gbps</p> <p>Threat Protection Throughput 2, 5 20 Gbps</p> <p>System Performance and Capacity</p> <p>IPv4 Firewall Throughput (1518 / 512 / 64 byte, UDP) 164 / 163 / 153 Gbps</p> <p>IPv6 Firewall Throughput (1518 / 512 / 86 byte, UDP) 164 / 163 / 153 Gbps</p> <p>Firewall Latency (64 byte, UDP) 3.78 / 2.5 <math>\mu</math>s*</p> <p>Firewall Throughput (Packet per Second) 229.5 Mpps</p>	Piece	3	Y	<p>[Manufacturer/Brand]</p> <p>[Model]</p> <p>[Offered specifications]</p>
---	----------	---	-------	---	---	--

		<p>                     Concurrent Sessions (TCP) 16 Million                      New Sessions/Second (TCP) 720 000                      Firewall Policies 10 000                      IPsec VPN Throughput (512 byte)1 55 Gbps                      Gateway-to-Gateway IPsec VPN Tunnels 2000                      Client-to-Gateway IPsec VPN Tunnels 50 000                      SSL-VPN Throughput6 10 Gbps                      Concurrent SSL-VPN Users (Recommended Maximum, Tunnel Mode) 10 000                      SSL Inspection Throughput (IPS, avg HTTPS)3 16.7 Gbps                      SSL Inspection CPS (IPS, avg. HTTPS)3 18 000                      SSL Inspection Concurrent Session (IPS, avg HTTPS)3 1.6 Million                      Application Control Throughput (HTTP 64K)2 74.8 Gbps                      CAPWAP Throughput (HTTP 64K) 70 Gbps                      Virtual Domains (Default / Maximum) 10 / 10                      High Availability Configurations Active-Active, Active-Passive, Clustering                 </p>				
--	--	---	--	--	--	--

6	AntiVirus	<p>Integrated Management: Must have a unified console for managing multiple products. Advanced Endpoint Protection, Web Gateway, Server Security, Mobile Control. MUST be configured from a Central Dashboard without the need to access additional consoles.</p> <p>Integration with Firewall: The endpoint must fully integrate with Firewall for maximum protection.</p> <p>Multi-Platform Management: Endpoint Security should support Windows, Mac and Linux machines and must be managed from one management console.</p> <p>Updating Bandwidth Consumption: Must be able to add an Update Management Policy to allow setting of schedules for updating on the endpoint.</p> <p>Policy Administration: Support centralized policy/rules configuration based on specified features. The rules should be able to be pushed to the endpoints for implementation/action.</p> <p>Deployment Options: The solution should support centralized deployment of the endpoint solution. Deployment should also support deployment via AD as well as SCCM.</p> <p>Role Base Management (RBAC): Must provide role-based access to the management console.</p> <p>Enhanced Tamper Protection: The endpoint solution must have the capability to monitor or stop local administrative users or malicious processes to disable the endpoint protection</p> <p>Advanced Deep Threat Prevention Mechanism: Should provide the ability to Protect against zero-day &amp; unknown malware attacks before static signature protections have been created.</p> <p>Should support Content Disarm and Reconstruction</p> <p>Should be able to emulate executable, archive files, documents, JAVA, flash files and etc</p> <p>Should detect the attack at the exploitation stage – i.e. before the shell-code is executed and before the malware is downloaded / executed.</p> <p>Should detect API calls, file system changes, system registry, network connections, system processes. Should be resilient to cases where the shell-code or malware would not execute if they detect the existence of</p>	Units	510	Y	<p>[Manufacturer/Brand]</p> <p>[Model]</p> <p>[Offered specifications]</p>
---	-----------	---	-------	-----	---	--

	<p>virtual environment                  Should emulate real user activities such as mouse clicks, key strokes etc.                  Should Eliminate threats and remove exploitable content, including active content and embedded objects.                  Reporting:Must provide an automated actionable incident report analysis.                  Must continually monitor files and registry for suspicious processes. Must support central logging of activity of all endpoints.                  Anti-Ransomware Protection:Must support Integrated Anti-Ransomware prevention, detection and remediation.Must support automatic restoration of encrypted files.                  Corporate Password Reuse: Endpoint Security must prevent reuse of credentials                  Application Control Capabilities : Must include an integrated Application Control that ensures only legitimate and approved programs/apps can run on endpoints. Must block targeted attacks and stop unwanted traffic. Must support definition of trusted and untrusted access zones.                  Antimalware Capabilities: Must protect clients against known and unknown viruses, Trojan horses, and adware and keystroke loggers.                  All the endpoint security features must be fully supported when both onsite and offsite.                  Endpoint Security must support detection and automatic remediation of file-less malware.                  Must include an integrated Anti-Malware that detects and removes known malware from endpoints.                  Should provide anti exploit capabilities.                  Provide protection against exploit-based attacks compromising legitimate applications, ensuring those vulnerabilities cannot be leveraged.                  Detects exploits by identifying suspicious memory manipulations in runtime.                  Shuts down the exploited process upon detecting one, remediates the entire attack chain. License feature Device Management                  License feature Application Management                  License feature Corporate or bring-your-own-device (BYOD) management                  License feature Malware, ransomware, PUA (potentially unwanted app)</p>				
--	---	--	--	--	--

		protection License feature Web protection against malicious online content License feature MitM (Man-in-the-Middle) detection License feature Extended Detection and Response (XDR) License period 3 Years.				
--	--	---	--	--	--	--

7	Structured Cabling	<p>The LAN installation will consist of a star topology with horizontal UTP subsystem originating from switches and terminating with RJ45 sockets. For each data point, a patch cord of appropriate length with RJ45 connectors at both ends will be required to connect the information point to the network interface adapter.</p> <p>Good cable management practice must be adhered to and proper color-coding used for easy identification.</p> <p>The Main Distribution Facility (MDF) will be located on an already identified room by the client.</p> <p>The location for HDFs (Horizontal Distribution Facility) on each building floor will be located on an already identified rooms by the client.</p> <p>High-speed Fiber Optic Uplink Backbone cable will be used to link building blocks and floors to the main distribution facility location.</p> <p>Cables must be run in the trunking (s) within building wall and surface pathways. This must be metal trunking installations.</p> <p>The Bidder will be responsible for supplying all materials and components that is necessary to complete the installation of the structured cabling system.</p> <p>The horizontal cabling will include outlets and consolidation or transition points, connectors, mechanical terminations and patch cords that compose horizontal cross-connect. Cables will be routed in new wall ducts and terminated on patch panels and other data outlets as specified in accompanying diagrams.</p> <p>A Metal trunking of 200mm by 50mm dimensions must be installed. One will be used for data cables, another for electrical cable and yet leaving space for future services. Although where there's preexisting trunking the may make use of it.</p> <p>The bidder will be responsible for pulling, terminating and testing all circuits installed and each cable shall be assigned a unique cable number.</p> <p>Warranty Period for Cabling Materials: 20 Years</p> <p>Horizontal Cabling</p> <p>The primary media for horizontal cabling will be 4-pair Unshielded Twisted Pair (UTP) that must meet or exceed ANSI/TIA/EIA-568-B and ISO/IEC 11801</p>	Boxes	54	Y	<p>[Manufacturer/Brand]</p> <p>[Model]</p> <p>[Offered specifications]</p>
---	--------------------	---	-------	----	---	--

	<p>standards requirements.                  UTP Category 6A or higher quality cables must be used.                  Cables will be required to move through metal trunking firmly pulled.                  Cables should not be crushed using cable ties.                  Cable conduits must not be overfilled.                  All cable ties and fixings shall be tightened to support the cable loom without distortion of the cable sheath.                  All cables must pass through trunking and should not be seen from outside                  There shall be no splicing of installed cables. Intermediate cross-connects and transition points are not allowed.                  All user-area patch chords shall be at least 3- metre in length. However, 5-metre patch cords shall also be provided as indicated.                  Data outlets shall be flash mounted on the metal trunking.                  All user-area patch chords and cabinet patch cords will be supplied to match the total number of data outlets.                  The contractor shall pull two cables for each faceplate and terminate both cables.                  Backbone Cabling                  The primary media for backbone cabling will be fiber optic.                  Multimode fiber optic cable (50.5/125 micron) twill be used.                  The fiber optic cable shall have a minimum of eight (8) strands.                  All strands must be terminated at each end of the fiber cable whether used or not.                  All optical fiber components and installation practices shall meet applicable building and safety codes requirements and shall provide well organized cable installation management in accordance with the manufacturer's guidelines                  All fiber interfaces for uplink must use relevant transceivers.                  Patch Panels, Equipment Cabinets and Uninterruptible Power Supply (UPS)                  All patch panels must conform to ANSI/TIA/EIA- 568B.                  Patch panels must be equipped with RJ45 Category 6A sockets contacts with capacity of 24 or 48 ports as needed</p>				
--	--	--	--	--	--

	<p>Fibre Optic patching shall be done from the cabinet housing optic boxes/ panels as well as the optic electronic equipment.</p> <p>All patch panels, including fiber optic patch panels must be rack mounted.</p> <p>All patch panels must be earthed to provide electrical safety to users in future and screening to prevent electromagnetic radiations.</p> <p>Except for the patch cords used to connect NICs to the RJ45 sockets, all patch cords must be labeled at each extremity with soft PVC indelible marking. For all other components, the label type should be of stiff plastic PVC.</p> <p>The main cabinet in the server room shall be at least 42U or equivalent included with a 3000VA UPS.</p> <p>Floor/ Block cabinets shall be metallic with front clear glass at least 18U and of good finish and conveniently accessible by technical personnel for maintenance.</p> <p>Power to the cabinets shall be switched off from within the cabinets.</p> <p>Proper power socket cables to be supplied with the cabinets</p> <p>The UPS shall be installed in the cabinets. They shall be 1500VA for the 18U cabinet rack mountable, SMART signaling and line interactive.</p> <p>All cabinets must have forced cooling.</p> <p>The cabinets shall have open doors both at the rear and in front.</p>				
--	--	--	--	--	--

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
8	Single Faceplate + Keystone Jack	RJ45 8P 8C 50u" Jack, Terminating 4 pairs, 23-26 AWG cable, Universal labels for T568A and T568B wiring schemes, Fitting 1U 24 port High-Density, Keystone panel 3P/ETL verified unshielded EIA/TIA connecting hardware	Piece	95	Y	[Manufacturer/Brand] [Model] [Offered specifications]
9	5 Meter UTP Cable	Ethernet LAN Network Cable 100M/1000Mbps High Quality RJ45 CAT6 5M. Factory Terminated	Piece	95	Y	[Manufacturer/Brand] [Model] [Offered specifications]
N/A	N/A	Items 10 – 49 not included in this Lot.	N/A	N/A	N/A	N/A

50	IP Telephony (Executive)	<p>Feature Keys</p> <ul style="list-style-type: none"> <li>• Two dedicated line keys with LEDs</li> <li>• Six programmable soft keys with LEDs that can be customized to access up to a total of 20 functions</li> <li>• Four context-sensitive system keys that can be customized to access up to a total of 18 functions</li> <li>• Four-way navigation key with Select/OK button</li> <li>• Dedicated function keys, including Conference, Transfer, Callers List, Hold, Redial, Goodbye, Options, 2 volume keys, Mute (with LED) and Speaker/Headset (with LED)</li> <li>• Optional customizable hard keys for personalized key configurations5 alternative key caps include: DND, CFD, Voice Mail, L3, L4</li> <li>• Built-in USB 2.0 port</li> </ul> <p>Audio and Codecs</p> <ul style="list-style-type: none"> <li>• Hi-Q Audio Technology</li> <li>• Hearing aid compatible (HAC) handset</li> <li>• Full-duplex quality speakerphone</li> <li>• Dual microphones for enhanced speakerphone performance</li> <li>• Codecs: G.711 <math>\mu</math>-law / A-law, G.729, G.722, AMR*, AMR-WB(G.722.2)*, G.726, iLBC, BV16, BV32, L16</li> <li>• Echo cancellation</li> <li>• Comfort noise utilization</li> <li>• Voice quality metrics, including MOS</li> <li>• DHSG/EHS and 4-pin modular headset supported</li> </ul> <p>Display and Indicators</p> <ul style="list-style-type: none"> <li>• 3.5" QVGA 320x240 pixel color display</li> <li>• Intuitive graphical user interface and navigation menus</li> <li>• Adjustable screen brightness for user comfort in different lighting environments</li> <li>• Dedicated LED for call and message waiting indication</li> </ul> <p>Security</p>	Piece	15	Y	[Manufacturer/Brand] [Model] [Offered specifications]
----	--------------------------------	--	-------	----	---	---

	<ul style="list-style-type: none"> <li>• User and administrator level passwords for login</li> <li>• Encryption of configuration files</li> <li>• HTTPS configuration download and web management</li> <li>• Phone lock with PIN</li> <li>• Digest authentication</li> <li>• Transport Layer Security (TLS)</li> <li>• Secure Real-Time Protocol (SRTP)</li> <li>• 802.1x</li> <li>• Mutual authentication</li>   <li>XML API Capabilities             <ul style="list-style-type: none"> <li>• Display control based on user actions or events</li> <li>• Dynamic phone configuration</li> <li>• RTP Streaming Control</li> <li>• CTI applications</li> <li>• Extensive XML documentation and sample apps</li> </ul> </li>   <li>Localization             <ul style="list-style-type: none"> <li>• Multilingual support – English, French, Spanish, Italian, German</li> <li>• Downloadable language pack support for customization and additional language translations</li> <li>• Country-specific call progress tones and cadences</li> <li>• Latin1, Latin2 Character sets</li> </ul> </li>   <li>Protocol             <ul style="list-style-type: none"> <li>• IETF SIP (RFC3261) and associated RFCs</li> <li>• Extensive SIP standards compliance</li> </ul> </li>   <li>Networking and Provisioning             <ul style="list-style-type: none"> <li>• Dual 10/100/1000 Mbps Ethernet ports (LAN/PC}</li> <li>• Manual or Dynamic Host Configuration Protocol (DHCP) IP address setup</li> <li>• Support of multiple DHCP options: 2,12,42,43,60,66,77,</li> </ul> </li> </ul>				
--	---	--	--	--	--

		<p>120,132,159,160</p> <ul style="list-style-type: none"> <li>• Time and date synchronization using SNTP</li> <li>• Quality of service support – IEEE 802.1 p/Q VLAN and priority tagging, Type of Service (TOS), and Differentiated Services Code Point</li> <li>• Integrated HTTP/HTTPS server for web administration and maintenance, including a built-in troubleshooting section</li> <li>• Mass deployment via central provisioning of user configuration files – TFTP, FTP, HTTP, HTTPS</li> <li>• TR-069 support</li> <li>• Redundant server support DNS-SRV</li> <li>• Backup proxy/registrar server support</li> <li>• RTCP support (RFC1889)</li> <li>• RTP streaming for Paging and Intercom applications</li> <li>• IEEE 802.1x</li> <li>• LLDP-MED</li> </ul> <p>Power</p> <ul style="list-style-type: none"> <li>• PoE Class 2</li> <li>• Dynamic PoE class changes when expansion modules are added</li> <li>• Level “VI” energy efficiency rated power adapters available</li> </ul>				
--	--	---	--	--	--	--

50.1	IP Telephony (Operator Console) and Executive Phone Type II	<p><b>Features Keys</b>  Up to 24 lines with two dedicated line keys with LED 48 programmable soft keys that can be customized over 4 pages 30 context-sensitive system soft keys that can be customized over 6 pages Dedicated function keys including: Callers List, Hold, Redial, Goodbye, Options, 2 volume keys, Mute (with LED) and Speaker/Headset (with LED) Optional customizable hard keys for personalized key configurations 5 alternative key caps include: DND, CFD, Voice Mail, L3, L4 Built-in USB 2.0 Port</p> <p><b>Audio and Codecs</b>  Hi-Q Audio Technology Hearing aid compatible (HAC) Handset Full-duplex quality speakerphone Codecs: G.711 <math>\mu</math>-law / A-law, G.729, G.722, AMR*, AMR-WB (G.722.2)*, G.726, iLBC, L16 Echo cancellation Comfort noise utilization Packet loss concealment Voice quality metrics, including MOS USB headset support Embedded Bluetooth 4.0 for headset support</p> <p><b>Display and Indicators</b>  7" 800x480 pixel color Touch backlit LCD display Intuitive graphical user interface and navigation menus Touch QWERTY/AZERTY keyboard Adjustable screen brightness for user comfort in different lighting environments Dedicated LED for call and message waiting indication (MWI)</p> <p><b>Security</b>  User administrator level passwords for login Brute force detection Encryption of configuration files HTTPS configuration downloaded and web management Phone lock with PIN Digest authentication Transport Layer Security (TLS) Secure Real-Time Protocol (SRTP)</p> <p><b>XML API Capabilities</b>  Display control based on user actions or events Dynamic phone configuration RTP streaming control Extensive XML documentation and sample apps</p> <p><b>Localizations</b>  Multilingual support – English, French, Spanish, Italian, German, Nordic, Russian, Portuguese, Greek Downloadable language pack support for</p>	Piece	6	Y	[Manufacturer/Brand] [Model] [Offered specifications]
------	---	--	-------	---	---	---

		<p>customization and additional language translations Country-specific call progress tones and cadences Unicode UTF8 character sets</p> <p>Protocol IETF SIP (RFC3261) and associated RFCs Extensive SIP standards compliance</p> <p>Power PoE Class 3 (Dynamic switching to Class 4 with expansion modules). IEEE 802.af and 802.at compliant, Level "VI" energy efficiency rated power adapters available, Network and Provisioning, Dual 10/100/1000 Mbps Ethernet ports (LAN/PC), Manual or dynamic host configuration protocol (DHCP) IP address setup Support of multiple DHCP options: 2,12,42,43,60,66,77,120,132,159,160, Time and date synchronization using SNTP, Quality of service support – IEEE 802.1 p/Q VLAN and priority tagging, Type of Service (TOS), and Differentiated Services Code Point, Network address translation (NAT) support, Integrated HTTP/HTTPS server for web administration and maintenance including a built-in troubleshooting section, Mass deployment via central provisioning of user configuration files: TFTP, FTP, HTTP, HTTPS, TR-069 support, Re-direction and configuration service support (zero touch deployment), Redundant server support DNS-SRV, Backup proxy/registrar server support, RTCP support (RFC1889), RTP streaming for Paging and Intercom applications, IEEE 802.1x, LLDP-MED, LDAP, EXCHANGE</p>				
--	--	--	--	--	--	--

51	IP Telephony (Standard)	<p>Feature Keys</p> <ul style="list-style-type: none"> <li>• Up to 2 lines on dedicated line keys with LEDs</li> <li>• Three programmable keys that come pre-programmed and labeled with default values (Callers, Redial and Transfer)</li> <li>• Four-way navigation with Select/OK key</li> <li>• Dedicated function keys, including Transfer, Callers List, Hold, Redial, Goodbye, Options, two volume keys, Mute (with LED) and Speaker (with LED)</li> </ul> <p>Audio and Codecs</p> <ul style="list-style-type: none"> <li>• Hi-Q audio technology</li> <li>• Hearing aid compatible (HAC) handset</li> <li>• Full-duplex quality speakerphone</li> <li>• Wideband handset and speakerphone</li> <li>• Codecs: G.711 <math>\mu</math>-law / A-law, G.729, G.722, AMR*, AMR-WB(G.722.2)*, G.726, iLBC, BV16, BV32, L16</li> <li>• Echo cancellation</li> <li>• Comfort noise utilization</li> <li>• Packet loss concealment</li> </ul> <p>Display and Indicators</p> <ul style="list-style-type: none"> <li>• Monochrome LCD</li> <li>• 2.75" 128x48 pixel graphical display</li> <li>• LED for call and message waiting indication</li> </ul> <p>Security</p> <ul style="list-style-type: none"> <li>• User and administrator level passwords for login</li> <li>• Encryption of configuration files</li> <li>• HTTPS configuration downloaded and web management</li> <li>• Phone lock with PIN</li> <li>• Digest authentication</li> <li>• Transport layer security (TLS)</li> <li>• Secure real-time protocol (SRTP)</li> <li>• 802.1x</li> </ul>	Piece	27	Y	[Manufacturer/Brand] [Model] [Offered specifications]
----	-------------------------------	--	-------	----	---	---

		<ul style="list-style-type: none"> <li>• Mutual authentication</li> </ul> <p>XML API Capabilities</p> <ul style="list-style-type: none"> <li>• Display control based on user actions or events</li> <li>• Dynamic phone configuration</li> <li>• RTP streaming control</li> <li>• CTI applications</li> <li>• Extensive XML documentation and sample apps</li> </ul> <p>Localization</p> <ul style="list-style-type: none"> <li>• Multilingual support – English, French, Spanish, Italian, German</li> <li>• Downloadable language pack support for customization and additional language translations</li> <li>• Country-specific call progress tones and cadences</li> <li>• Latin1, Latin2 Character sets</li> </ul> <p>Protocol</p> <ul style="list-style-type: none"> <li>• IETF SIP (RFC3261) and associated RFCs</li> <li>• Extensive SIP standards compliance</li> </ul> <p>Networking and Provisioning</p> <ul style="list-style-type: none"> <li>• Dual 10/100 Mbps Ethernet ports with hardware-based Ethernet switch</li> <li>• Manual or dynamic host configuration protocol (DHCP) IP address setup</li> <li>• Support of multiple DHCP options: 2, 12, 42, 43, 60, 66, 77, 120, 132, 159, 160</li> <li>• Time and date synchronization using SNTP</li> <li>• Quality of service support – IEEE 802.1 p/Q VLAN and priority tagging, Type of Service (TOS) and Differentiated Services Code Point</li> <li>• Integrated HTTP/HTTPS server for web administration and maintenance including a built-in troubleshooting section</li> <li>• Mass deployment via central provisioning of user configuration files – TFTP, FTP, HTTP, HTTPS</li> <li>• TR-069 support</li> </ul>				
--	--	--	--	--	--	--

		<ul style="list-style-type: none"> <li>• Redundant server support</li> <li>• DNS-SRV</li> <li>• Backup proxy/registrar server support</li> <li>• RTCP support (RFC1889)</li> <li>• RTP streaming for Paging and Intercom applications</li> <li>• IEEE 802.1x</li> <li>• LLDP-MED</li>   <li>Power</li> <li>• PoE Class 1</li> <li>• Level "VI" energy efficiency rated power adapters available</li> <li>• 50006824 (Europe)</li> <li>• 50006822 (North America)</li> <li>• 50006814 (Universal)</li> </ul>				
--	--	---	--	--	--	--

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
52	IP Telephony (Server)	<p>Controller + Software for the Phone System  Users 600  Max. simultaneous calls 250  SIP/SIP-DECT Phones 600  Conference Phones/Video Phone 600  IP Softphone 600  Analog Phones 228  Standard SIP 600  Digital Phones 448  IP Operator Phones 32  Operator Phones 4  IP PC Operators 32  BLF Keys on SIP Phones 4000</p> <p>Special features:  announcement service, call number display suppression, coded call, door function, emergency call, free seating, home alone, least cost, routing, queue with announcement, record malicious calls, switch, control outputs, switch group switchover, user group login/logout</p> <p>User features:  announcement, appointment call, brokering, call acceptance, call hold (inquiry call), call park, call pickup, call recording, call transfer, call waiting, callback, charge recall, conference, dial by name, duplex mode announcement, fast take, hotline, intercom, intrusion, leave voice message, lock phone, music on hold, private call, recall, room monitoring, send text message, silent intrusion, take call, team features, third-party call, three-party conference, voice mail.</p>	Piece	3	Y	<p>[Manufacturer/Brand]  [Model]  [Offered specifications]</p>

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
53	IP Telephony Conference Phone	7" colour touchscreen display (800x400 pixels), Intuitive user interface, 96 programmable keys, 6 context-sensitive soft keys, 8 beam forming microphones, High Quality audio technology, 360-degree microphone pickup, and automatic gain control (AGC), Bluetooth 4.1 and Link to Mobile technology expand the capabilities of your Bluetooth enabled mobile phone, USB 2.0 device port.	Piece	7	Y	[Manufacturer/Brand] [Model] [Offered specifications]

Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP						
Item No.	Item Name	Specifications	Unit	Quantity	Major Item	Statement of Compliance
					(Yes / No)	(Bidder's Offered Item & Specification)
54	High range Solar powered Mesh WiFi hotspot	<p>Pole with at least 5 meters height; very rugged material (e.g. aluminium); zero cabling, zero trenching; Mesh network, 100% powered by solar energy.</p> <p>Solar energy generated during the day, stored in lithium batteries, curved vertically integrated solar panels, wind-resistant and self-cleaning; technology must be in-built inside the poles. No external mounting of devices permitted.</p> <p>Embedded 4G/LTE/3G router:No  Recommended # of users:250+  Redundant SIM slot:–  Ethernet ports:2 LAN  Simultaneous Dual Band:2.4 GHz &amp; 5 GHz  2.4 GHz speed:450 Mbps  2.4 GHz MIMO:3x3  5 GHz speed:1300 Mbps  5 GHz MIMO:3x3  Antenna:Built-in  WiFi range:183m / 600ft  WiFi standards:802.11a/b/g/n/ac  Wireless security:WEP, WPA-PSK, WPA-Enterprise (WPA/WPA2, TKIP/AES)  BSSID:Up to 4  VLAN:802.1Q  Advanced QoS:Individual bandwidth limit  USB charge station:Up to 6 USB ports  Battery:6.4V/72Ah lithium-ion  Number of solar modules:2  Operating temperature:-40°C to 70°C</p>	Piece	27	Y	<p>[Manufacturer/Brand]  [Model]  [Offered specifications]</p>

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		Hardware delivery must include: - construction work for setting up the poles and Mesh network - connectivity to the 4G router - 3 x 4G router connected to the Internet				

<b>Technical specifications Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
55	Mesh wifi maintenance training	On-site ICT training ( 3 days) - hardware maintenance - substitution of components - software configuration - trouble shooting The training must be available as video files for self-study, too.	Service	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]
56	Mesh wifi maintenance contract, 3 years extended warranty	Services include: - a support chat hotline and a video talk hotline for field support - spare parts, delivery by express shipping - training of local staff to perform maintenance work - service availability (e.g. 8am - 4pm, 5 days / week excluding public holidays) - quarterly remote quality and security check and reporting - on-site emergency support in case local staff provide for solutions.	Service	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]
N/A	N/A	Items 57 – 63 not included in this Lot.	N/A	N/A	N/A	N/A
64	MFP Colour Printer	Fast printing in B&W and Colour, Toner Cartridge Yield, Black: Estimated 29,000 @ 5% of A4 Toner Cartridge Yield, Color: C/M/Y: Estimated 26,000 @ 5% of A4, Developer Yield, Black: Estimated 570,000 Pages Developer Yield, Color: C/M/Y: Estimated 115,000 Pages Drum Yield, Black: Estimated 70,000 Pages, Drum Yield, Color: C/M/Y: Estimated 55,000 Pages, Pages per Minute 36, First Page Print Time: 7.7 sec color/5.8 sec black, Two-Sided Printing: Auto, Tray 1-2: 500 Sheets, Bypass Tray 150 Sheets. AC Input 230~240 V (50/60 Hz).	Piece	11	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
N/A	N/A	Items 1 – 9 not included in this Lot.	N/A	N/A	N/A	N/A

10	All-in-One Cabinet	<p>Power Type :220/230/240Vac, 50/60Hz, 1Ph+N+PE  Temperature: 0-40 Degrees Celsius  Humidity : 5-95%  Altitude : 0-4000m (1000 meters or more to reduce capacity)  CERTIFICATES  Certificates :CE, ROHS, REACH  USER SPACE  ICT Space :Up to 36U  FEATURES  Cabinet size: 600*1400*2000mm(W*D*H) (build-in PDU)  UPS 6KVA  Smart Power Distribution ( compatible with 4KW and 7KW)  3.5kW rack-mount cooling (constant temperature )  Atmosphere lighting (1 set per cabinet)  Monitoring: 10 Inch LCD display ,monitoring unit (humidity &amp; temperature sensors ,smoke sensor)  Battery packs matching with 6kva UPS ,Standard 3U  Inrow Cooling Applicable for Containment  Fire extinguisher and early detection system.  Rack mount power distribution, metering, and management for all the power lines  All in one monitoring host collects, displays and reports system status, locally and remotely.  Power Section  UPS 6Kva  Mount Type Rack Mount  Input Power Type 220V/1 Ph/50Hz  Input Breaker 63A/1 P  Backup Time 15 Minutes  Available Space 20U  Batteries 20 Pieces of 9AH/12V  Cooling Section  Rated cooling capacity(KW) 3.5 Kw  Dimension ( Wx D x H) mm 440 X 940 X 356</p>	Piece	1	Y	<p>[Manufacturer/Brand]  [Model]  [Offered specifications]</p>
----	--------------------	---	-------	---	---	--

		<p>Cooling Type Packaged DX                  Monitoring Section                  Display on site 10 Inch touch screen                  Temperature/humidity sensor Yes                  Smoke sensor Yes                  Water leakage detection Sensor Yes                  UPS Sensor Yes                  Precision power distribution monitor Yes                  Air conditioner Sensor Yes                  Emergent ventilation Yes</p>				
--	--	--	--	--	--	--

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
11	Storage	Storage Capacity : 10 TB Useable, on RAID 6 Storage Sytem Type : All-Flash Maximum Number of Controllers :16 System Cache: 1024 GB Supported Interface Protocols :FC, iSCSI, FC-NVMe, NVMe over RoCE Front-End Port Types :8/16/32 Gbps FC/FC-NVMe and 10/25/40/100 Gbps Ethernet, 25Gbps NVMe over RoCE Back-End Port Types: 100G RDMA/SAS 3.0 Maximum Number of Hot-Swappable I/O Modules per Controller Enclosure 6 Maximum Number of Front-End Ports per Controller Enclosure 40 Maximum Number of SSDs : 1200 Supported SSDs : 1.92TB/3.84TB/7.68TB/15.36TB palm-sized NVMe SSD 960GB/1.92TB/3.84TB/7.68TB/15.36TB SAS SSD Number of LUNs: 8192 Supported SCM : 800GB/1.6TB Supported RAID Levels : RAID 5, RAID 6, and RAID-TP (tolerates simultaneous failure of 3 SSDs) Warranty: 3 Years.	Set	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]
12	Computer - Server	CPU:At least 2 CPUs, 16 core Memory : 64GB HDD Hardisk : 4TB, SSD HDD Hardisk : 1TB, SSD NVMe OS Ports :At least 2x 10/100/1000 ports and Fiber ports At least 1x 10/100/1000 port for Management The servers should be supplied with 2 SFP 1GE multimode fiber	Piece	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		transceivers. Warranty : 3 Years.				

13	3kVA UPS	<p>Output power capacity *3 kVA  Output power *2700 W  Input frequency *50/60 Hz  Surge energy rating365 J  Emergency Power Off (EPO)Yes  Noise level53 dB  Audible alarm(s)Yes  Ports &amp; interfaces  USB 2.0 ports quantity1  Serial ports quantity1  Battery  Battery technologySealed Lead Acid (VRLA)  Typical backup time at full load5.5 min  Typical backup time at half load13.6 min  Battery recharge time3 h  Design  Product colour *Black  LED indicatorsYes  CertificationC-tick,CE,EN 50091-1,EN 50091-2,GOST,VDE, RoHS 7b  Operational conditions  Operating temperature (T-T)0 - 40 °C  Storage temperature (T-T)-15 - 45 °C  Operating relative humidity (H-H)0 - 95%  Storage relative humidity (H-H)0 - 95%  Operating altitude0 - 3000 m  Non-operating altitude0 - 15000 m  Weight &amp; dimensions  Weight upto 55.9 kg  Package weight upto 65 kg  Logistics data  Products per pallet3 pc(s)  Other features  InterfaceUSB  Output connections8 x IEC 320 C13 1 x IEC 320 C19 2 x IEC Jumpers</p>	Piece	10	Y	<p>[Manufacturer/Brand]  [Model]  [Offered specifications]</p>
----	----------	--	-------	----	---	--

		<p>Input connection type IEC-320 C20, CEE 7 / EU1-16P, BS1363A Dimensions (WxDxH) 196 x 546 x 432 mm Nominal output voltage 230 V Output voltage note 220 - 240 Filtering description 0.3% IEEE/UL 1449 Nominal input voltage 230 V Package dimensions (WxDxH) 380 x 760 x 680 mm Warranty 5 Years</p>				
--	--	--	--	--	--	--

Technical specifications Lot 2: Data Center, CCTV, Access Control						
Item No.	Item Name	Specifications	Unit	Quantity	Major Item	Statement of Compliance
					(Yes / No)	(Bidder's Offered Item & Specification)
14	Cooling for All-in-One Cabinet	Cooling Mode Air cooled Total cooling capacity (kW) upto 13kW Air Volume 3600cubic meters/hour Air Supply Mode Upflow Pipe routing Bottom and side pipe routing Number of compressor (pcs) 1 Certification CQC, CE, CCC, RoHS, REACH, WEEE, SAS Frequency (Hz) 50/60-Hz Power Specifications 380–415 V AC, 50 Hz or 60 Hz 3Ph+N+PE Voltage tolerance: –15% to 10%; frequency tolerance: ±3 Hz Power supply mode Single Power Supply  OUTDOOR UNIT Power Specifications 220–240 V AC, 50 Hz or 60 Hz 1Ph+N+PE Voltage tolerance: –15% to 10%; frequency tolerance: ±3 Hz certification CQC, CE, CCC, RoHS, REACH, WEEE, SASO Maximum Current upto 30A Number of fans 2 Protection Level IPX4 Environmental Class Class B Altitude 0–4000 m, derating at above 1000 m.	Piece	1	Y	[Manufacturer/Brand] [Model] [Offered specifications]
N/A	N/A	Items 15 not included in this Lot.	N/A	N/A	N/A	N/A

16	Bullet Camera	<p>Camera  Image Sensor 1/1.8" Progressive Scan CMOS  Min. Illumination Color: 0.003 Lux @ (F1.4, AGC ON), B/W: 0 Lux with IR  Shutter Speed 1/3 s to 1/100,000 s  Slow Shutter Yes  P/N P/N  Wide Dynamic Range 120 dB  Day &amp; Night IR cut filter  Power-off Memory Yes  Angle Adjustment Pan: 0° to 355°, tilt: 0° to 90°, rotate: 0° to 360°  Lens  Focal Length &amp; FOV 2.8 to 12 mm, horizontal FOV 108° to 46°, vertical FOV 58° to 26°, diagonal FOV 127.4° to 52°  Lens Type Varifocal lens, motorized lens, 2.8 to 12 mm  Aperture F1.4  Iris Type Fixed  Lens Mount Ø14  DORI  2.8 to 12 mm:  DORI Wide: D: 86.0 m, O: 34.1 m, R: 17.2 m, I: 8.6 m  Tele: D: 214.0 m, O: 84.9 m, R: 42.8 m, I: 21.4 m  Illuminator  Supplement Light Type IR  Smart Supplement Light Yes  IR Range Up to 60 m  Wavelength 850 nm  Video  Max. Resolution 3840 × 2160  50 Hz: 25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)  Main Stream 60 Hz: 24 fps (3840 × 2160)  30 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)  Sub Stream 50 Hz: 25 fps (640 × 480, 640 × 360)</p>	Piece	68	Y	[Manufacturer/Brand] [Model] [Offered specifications]
----	---------------	--	-------	----	---	---

	<p>60 Hz: 30 fps (640 × 480, 640 × 360)  50 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)  Third Stream 60 Hz: 10 fps (1920 × 1080, 1280 × 720, 640 × 480, 640 × 360)  *Third stream is supported under certain settings.  Main stream: H.265/H.264/H.264+/H.265+ Sub-stream:  H.265/H.264/MJPEG  Third stream: H.265/H.264  Video Compression *Third stream is supported under certain settings.  Video Bit Rate 32 Kbps to 16 Mbps  H.264 Type Baseline Profile/Main Profile/High Profile  H.265 Type Main Profile  H.264+ Main stream supports  H.265+ Main stream supports  Bit Rate Control CBR/VBR  Scalable Video Coding (SVC) H.264 and H.265 encoding  Region of Interest (ROI) 1 fixed region for main stream and sub-stream  Audio  Audio Type Mono sound  Environment Noise Filtering Yes  Audio Sampling Rate 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz  Audio Compression  G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC  Audio Bit Rate 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps (MP3)/16 to 64 Kbps (AAC)  Network  Simultaneous Live View Up to 6 channels  API Open Network Video Interface (PROFILE S, PROFILE G, PROFILE T), ISAPI, SDK  Protocols TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS, RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP, Bonjour, SSL/TLS, PPPoE, SNMP, ARP  User/Host Up to 32 users. 3 user levels: administrator, operator and</p>				
--	---	--	--	--	--

	<p>user                  Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, basic and digest authentication for HTTP/HTTPS, TLS 1.1/1.2, WSSE and digest authentication for Open Network Video Interface                  Security                  MicroSD/SDHC/SDXC card (256 GB) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)                  Network Storage                  Plug-in required live view: IE 10+                  Web Browser Plug-in free live view: Chrome 57.0+, Firefox 52.0+ Local service: Chrome 57.0+, Firefox 52.0+                  Image                  Image Parameters Switch Yes                  SNR ≥ 52 dB                  Target Cropping Yes                  Day/Night Switch Day, Night, Auto, Schedule                  Image Enhancement BLC, HLC, 3D DNR                  Image Settings Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser                  Interface                  1 input (line in), 3.5 mm connector, max. input amplitude: 3.3 Vpp, input impedance:                  4.7 KΩ, interface type: non-equilibrium;                  Audio 1 output (line out), 3.5 mm connector, max. output amplitude: 3.3 Vpp, output impedance: 100 Ω, interface type: non-equilibrium                  Alarm 1 input, 1 output (max. 24 VDC/24 VAC, 1 A)                  On-board Storage Built-in micro SD slot, up to 256 GB                  Hardware Reset Yes                  Communication Interface 1 RJ45 10 M/100 M self-adaptive Ethernet port                  Event                  Basic Event Motion detection (human and vehicle targets classification),</p>				
--	--	--	--	--	--

	<p>video tampering alarm, exception  Smart Event Scene change detection  Deep Learning Function  Face Capture Yes  Line crossing detection, intrusion detection, region entrance detection, region exiting detection  Perimeter Protection Supports human and vehicle targets classification  General  Linkage Method Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger recording, trigger capture, trigger alarm output, audible warning  Firmware Version V5.5.112  Software Reset Yes  Power Interface Two-core terminal block  General Function Anti-flicker, heartbeat, mirror, privacy mask, flash log, password reset via email, pixel counter  Storage Conditions -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)  Startup and Operating Conditions -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)  Power Supply 12 VDC ± 25%, reverse polarity protection PoE: 802.3at, Class 4  Power Consumption and Current 12 VDC, 1.08 A, max. 13 W  PoE (802.3at, 42.5 V to 57 V), 0.36 A to 0.27 A, max. 15 W  Camera Material Metal  Approval  FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); KC (KN 32: 2015, KN 35: 2015)  Safety UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013)  Environment CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach</p>				
--	---	--	--	--	--

		(Regulation (EC) No 1907/2006) Protection IP66 (IEC 60529-2013), IK10 (IEC 62262:2002)				
--	--	---	--	--	--	--

17	Dome Camera	<p>Camera  Image Sensor 1/1.8" Progressive Scan CMOS  Min. Illumination Color: 0.003 Lux @ (F1.6, AGC ON), B/W: 0 Lux with IR  Shutter Speed 1/3 s to 1/100,000 s  Slow Shutter Yes  P/N P/N  Wide Dynamic Range 120 dB  Day &amp; Night IR cut filter  Angle Adjustment Pan: 0° to 360°, tilt: 0° to 75°, rotate: 0° to 360°  Lens  Lens Type Fixed focal lens, 2.8, 4, and 6 mm optional  2.8 mm, horizontal FOV 111°, vertical FOV 59°, diagonal FOV 131°  4 mm, horizontal FOV 87°, vertical FOV 47°, diagonal FOV 102°  Focal Length &amp; FOV 6 mm, horizontal FOV 51°, vertical FOV 28°, diagonal FOV 60°  Lens Mount M12  Iris Type Fixed  Aperture F1.6  DORI  2.8 mm: D: 89.2 m, O: 35.4 m, R: 17.8 m, I: 8.9 m  DORI 4 mm: D: 99.4 m, O: 39.4 m, R: 19.9 m, I: 9.9 m  6 mm: D: 140.0 m, O: 55.6 m, R: 28.0 m, I: 14.0 m  Illuminator  Supplement Light Type IR  Smart Supplement Light Yes  IR Wavelength 850 nm  IR Range Up to 30 m  Video  Max. Resolution 3840 × 2160  50 Hz: 25 fps (3840 × 2160, 3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)  Main Stream 60 Hz: 24 fps (3840 × 2160)  30 fps (3200 × 1800, 2688 × 1520, 1920 × 1080, 1280 × 720)</p>	Piece	20	Y	[Manufacturer/Brand] [Model] [Offered specifications]
----	-------------	---	-------	----	---	---

	<p>Sub-Stream 50 Hz: 25 fps (640 x 480, 640 x 360)  60 Hz: 30 fps (640 x 480, 640 x 360)  50 Hz: 10 fps (1920 x 1080, 1280 x 720, 640 x 480, 640 x 360)  Third Stream 60 Hz: 10 fps (1920 x 1080, 1280 x 720, 640 x 480, 640 x 360)  *Third stream is supported under certain settings.  Main stream: H.265/H.264/H.264+/H.265+ Sub-stream:  H.265/H.264/MJPEG  Third stream: H.265/H.264  Video Compression *Third stream is supported under certain settings.  Video Bit Rate 32 Kbps to 16 Mbps  H.264 Type Baseline Profile/Main Profile/High Profile  H.265 Type Main Profile  H.264+ Main stream supports  H.265+ Main stream supports  Bit Rate Control CBR/VBR  Scalable Video Coding (SVC) H.264 and H.265 encoding  Region of Interest (ROI) 1 fixed region for main stream and sub-stream  Audio  Audio Type -U: mono sound  Audio Compression -U:  G.711ulaw/G.711alaw/G.722.1/G.726/MP2L2/PCM/MP3/AAC  Audio Bit Rate -U: 64 Kbps (G.711ulaw/G.711alaw)/16 Kbps  (G.722.1)/16 Kbps (G.726)/32 to 192 Kbps (MP2L2)/8 to 320 Kbps  (MP3)/16 to 64 Kbps (AAC)  Audio Sampling Rate -U: 8 kHz/16 kHz/32 kHz/44.1 kHz/48 kHz  Environment Noise Filtering -U: Yes  Network  Protocols TCP/IP, ICMP, HTTP, HTTPS, FTP, DHCP, DNS, DDNS,  RTP, RTSP, NTP, UPnP, SMTP, IGMP, 802.1X, QoS, IPv4, IPv6, UDP,  Bonjour, SSL/TLS, PPPoE, SNMP, ARP  Simultaneous Live View Up to 6 channels  API Open Network Video Interface (PROFILE S, PROFILE G, PROFILE  T), ISAPI, SDK</p>				
--	---	--	--	--	--

	<p>User/Host Up to 32 users. 3 user levels: administrator, operator and user</p> <p>Password protection, complicated password, HTTPS encryption, IP address filter, Security Audit Log, basic and digest authentication for HTTP/HTTPS, TLS 1.1/1.2, WSSE and digest authentication for Open Network Video Interface</p> <p>Security</p> <p>MicroSD/SDHC/SDXC card (256 GB) local storage, and NAS (NFS, SMB/CIFS), auto network replenishment (ANR)</p> <p>Network Storage</p> <p>Plug-in required live view: IE 10+</p> <p>Web Browser Plug-in free live view: Chrome 57.0+, Firefox 52.0+ Local service: Chrome 57.0+, Firefox 52.0+</p> <p>Image</p> <p>Image Parameters Switch Yes</p> <p>Image Settings Rotate mode, saturation, brightness, contrast, sharpness, gain, white balance adjustable by client software or web browser</p> <p>Day/Night Switch Day, Night, Auto, Schedule</p> <p>SNR <math>\geq</math> 52 dB</p> <p>Image Enhancement BLC, HLC, 3D DNR</p> <p>Target Cropping Yes</p> <p>Interface</p> <p>Ethernet Interface 1 RJ45 10 M/100 M self-adaptive Ethernet port</p> <p>On-Board Storage Built-in micro SD/SDHC/SDXC slot, up to 256 GB</p> <p>Built-in Microphone -U: Yes</p> <p>Hardware Reset Yes</p> <p>Event</p> <p>Basic Event Motion detection (human and vehicle targets classification), video tampering alarm, exception</p> <p>Smart Event Scene change detection</p> <p>Deep Learning Function</p> <p>Face Capture Yes</p> <p>Line crossing detection, intrusion detection, region entrance detection,</p>				
--	--	--	--	--	--

		<p>region exiting detection  Perimeter Protection Supports human and vehicle targets classification  General  Linkage Method Upload to FTP/NAS/memory card, notify surveillance center, send email, trigger recording, trigger capture  Camera Material Metal  Storage Conditions -30 °C to 60 °C (-22 °F to 140 °F). Humidity 95% or less (non-condensing)  Startup and Operating Conditions -30 °C to 60 °C (-22 °F to 140 °F), humidity 95% or less (non-condensing)  General Function Anti-flicker, heartbeat, mirror, privacy mask, flash log, password reset via email, pixel counter  Firmware Version V5.5.112  Software Reset Yes  Power Consumption and Current 12 VDC, 0.48 A, max. 5.8 W  PoE (802.3af, 36 V to 57 V), 0.19 A to 0.12 A, max. 6.8 W  Power Supply 12 VDC ± 25%, reverse polarity protection PoE: 802.3af, Class 3  Power Interface Ø5.5 mm coaxial power plug  Approval  FCC (47 CFR Part 15, Subpart B); CE-EMC (EN 55032: 2015, EN 61000-3-2: 2014, EN 61000-3-3: 2013, EN 50130-4: 2011 +A1: 2014); RCM (AS/NZS CISPR 32: 2015); KC (KN 32: 2015, KN 35: 2015)  Safety UL (UL 60950-1); CB (IEC 60950-1:2005 + Am 1:2009 + Am 2:2013); CE-LVD (EN 60950-1:2005 + Am 1:2009 + Am 2:2013)  Environment CE-RoHS (2011/65/EU); WEEE (2012/19/EU); Reach (Regulation (EC) No 1907/2006)  Protection IP67 (IEC 60529-2013)</p>				
--	--	---	--	--	--	--

18	Network Video Recorders	<p>Video and Audio Input</p> <p>IP Video Input 64-ch</p> <p>Incoming/Outgoing Bandwidth 512 Mbps/512 Mbps</p> <p>Incoming/Outgoing Bandwidth (RAID Mode) 512 Mbps/512 Mbps</p> <p>TLS Outgoing Bandwidth 128 Mbps, or better (when RAID is enabled)</p> <p>Protocol ACTi, ARECONT, AXIS, BOSCH, BRICKCOM, CANON, HUNT, ONVIF (Version 2.5), PANASONIC, PELCO, RTSP, SAMSUNG, SONY, VIVOTEK, ZAVIO, HIKVISION</p> <p>Video and Audio Output</p> <p>HDMI Output Two independent 4K resolution HDMI outputs. Resolution: 4K (4096 x 2160), 4K (3840 x 2160)/30 Hz, 2K (2560 x 1440)/60 Hz, 1080p (1920 x 1080)/60 Hz, UXGA (1600 x 1200)/60 Hz, SXGA (1280 x 1024)/60 Hz, 720p (1280 x 720)/60 Hz, XGA (1024 x 768)/60 Hz</p> <p>VGA Output 1-channel resolution: 1080p (1920 x 1080)/60 Hz, UXGA (1600 x 1200)/60 Hz, SXGA (1280 x 1024)/60 Hz, 720p (1280 x 720)/60 Hz, XGA (1024 x 768)/60 Hz</p> <p>Audio Output 1-channel RCA (2.0 Vp-p, 1K <math>\Omega</math>)</p> <p>Video and Audio Decoding</p> <p>Decoding Format H.265, H.265+, H.264, H.264+, MPEG4, MJPEG (for Hikvision IP camera only)</p> <p>Video Resolution 12 MP/8 MP/7 MP/6 MP/5 MP/4 MP/3 MP /1080p /UXGA /720p /VGA /4CIF /DCI F/2CIF /CIF/ QCIF</p> <p>Synchronous Playback Up to 16 channels</p> <p>Capability 3-ch @ 12 MP (30 fps), 5-ch @ 8 MP (30 fps), 6-ch @ 6 MP (30 fps), 10-ch @ 4 MP (30 fps), 20-ch @ 1080p (30 fps)</p> <p>HDD</p> <p>Interface 16 SATA interfaces supporting hot-plug</p> <p>Capacity Up to 10 TB for each HDD</p> <p>Storage Extension 1x eSATA interface, 2x mini SAS interface (optional)</p> <p>RAID</p> <p>RAID Type RAID 0, RAID 1, RAID 5, RAID 6, and RAID 10</p>	Piece	3	Y	<p>[Manufacturer/Brand]</p> <p>[Model]</p> <p>[Offered specifications]</p>
----	-------------------------	--	-------	---	---	--

		<p style="text-align: center;">Network Management</p> <p>Protocol IPv6, HTTPS, UPnP, SNMP, NTP, SADP, SMTP, NFS, iSCSI, PPPoE, DDNS</p> <p>Network Interface 4x RJ-45 10M/100M/1000M self-adaptive Ethernet interface</p> <p style="text-align: center;">External Interface</p> <p>Two-Way Audio Input 1-channel RCA (2.0 Vp-p, 1K Ω)</p> <p>Serial Port RS-232; RS-485; keyboard</p> <p>USB Interface Front Panel: 2x USB 2.0; rear panel: 2x USB 3.0</p> <p>Alarm Input/Output 16/8</p> <p>Extension Board (Optional) One extension board is supported with four 10M/100M/1000M optical interfaces (1.25 Gbps SFP module), eight RS-485 interfaces, and alarm interface of 32 alarm inputs and 16 alarm outputs</p> <p style="text-align: center;">General</p> <p>Power Supply 100 to 240 VAC, 50 to 60 Hz, 5 A.</p> <p>Fan Redundant dual ball bearing fan, speed adjustable</p> <p>Consumption (without HDD) ≤140 W</p> <p>Working Temperature 0° C to + 50° C (32° F to 122° F)</p> <p>Working Humidity 10% to 90%</p> <p>Warranty 3 Years.</p>				
--	--	--	--	--	--	--

19	Display Screen	<p>Screen Size :54.6 inch  Active Display Area : 1209.6 (H) mm x 680.4 (V) mm  Resolution : 3840 x 2160  Backlight : D-LED  Pixel Pitch : 0.315 (H) mm x 0.315 (V) mm  Brightness : 450 cd/m<sup>2</sup>  Viewing Angle : 178° (H) / 178° (V)  Color Depth : 10 bit, (8bit+FRC)  Contrast Ratio : 5700 : 1  Response Time : 6.5 ms  Refresh Rate : 60 Hz  Haze : Haze 2%, 3H  Reliability : 7 x 24 H  Color Gamut : 72% NTSC</p> <p>Interface  Video &amp; Audio Input: HDMI2.0 x 1, DP1.2 x 1, VGA x 1, Audio in x 1  Video &amp; Audio Output :Speaker (8Ω 5W) x 2, Audio-Out x 1  Data Transmission Interface: USB 2.0 x 1  Control Interface :RS232-In x 1, RS232-Out x 1</p> <p>Power  Power Supply : 100~240 VAC, 50/60Hz  Power Consumption :≤ 145 W  Standby Consumption : ≤ 0.5 W</p> <p>Working Environment  Working Temperature: 0°C to 40 °C (32 °F to 104 °F)  Working Humidity :10% to 80% RH (Non-Condensing)  Storage Temperature : -20 °C to 60 °C (-4 °F to 140 °F)  Storage Humidity : 5% to 90% RH (Non-Condensing)</p> <p>General  Casing Material 17/10/2023 Plastic  VESA : 400 mm x 400 mm, (4 x M6 - 10 mm)  Bezel Width : 11.8 mm (top/left/right/bottom)  Product Dimensions (W x H x D) 1237.2 (W) mm x 708 (H) mm x 83.44 (D) mm(48.71" x 27.87" x 3.29").</p>	Piece	6	N	[Manufacturer/Brand] [Model] [Offered specifications]
----	----------------	---	-------	---	---	---

20	Software Specifications - Video Management System	<p>Cameras 64                  Alarm Inputs 64                  Alarm Outputs 64                  Recording Servers 64                  Streaming Servers 64                  Areas 64                  Cameras per Area 64                  Alarm Inputs per Area 64                  Alarm Outputs per Area 64</p> <p>Recording                  Recording Schedule 3,000                  Recording Schedule Template 200                  Event and Alarm Rules 3,000                  Storage of Events or Alarms without Pictures 100/s                  Event &amp; Alarm                  Events or Alarms Sent to Clients 120/s                  The clients include Control Clients and Mobile Clients. 100 Clients/s                  Notification Schedule Templates 200                  Picture                  Picture Storage 20/s (Stored in SYS Server)                  120/s (Stored in Recording Server)                  Reports                  Regular Report Rules 100                  Event or Alarm Rules in One Event/Alarm Report Rule 32                  Records in One Sent Report 10,000 or 10 MB                  Resources Selected in One Report                  Users and Roles                  Concurrent Accesses via Web Clients, Control Clients, and OpenAPI Clients 100                  Concurrent Accesses via Mobile Clients and OpenAPI Clients 100                  Users 3,000                  Roles 3,000                  Streaming Server's Maximum Performance                  Video Input Bandwidth 300 x 2 Mbps</p>	Piece	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]
----	---	---	-------	---	---	---

		Video Output Bandwidth per Streaming Server Warranty 3 Years.	300 x 2 Mbps				
--	--	--	--------------	--	--	--	--

Technical specifications Lot 2: Data Center, CCTV, Access Control						
Item No.	Item Name	Specifications	Unit	Quantity	Major Item	Statement of Compliance
					(Yes / No)	(Bidder's Offered Item & Specification)
21	Workstations - CCTV	<p>Processor 12th Generation Intel® Core™ i7-12700 Processor (2.10 GHz, 18MB Cache, 12Cores, 20Threads, up to 4.90 GHz Max turbo)</p> <p>Motherboard Intel Alder Lake B660</p> <p>DIMM Memory 16GB DDR4-3200MHz (UDIMM)</p> <p>Max Memory Up to 64GB DDR4-3200; Two DDR4 UDIMM Memory slots, dual-channel capable</p> <p>Storage Selection: 1TB SSD M.2 2280 PCIe Gen4 TLC Opal</p> <p>Optical Drive: Slim DVD burner (DVD±RW), SATA 1.5Gb/s,</p> <p>Graphics Integrate:d Intel UHD 770 Graphics</p> <p>Internal Speakers: Internal Speaker</p> <p>Media Card Reader 3 in 1 Card Reader</p> <p>Onboard Ethernet : Gigabit Ethernet, Intel Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN</p> <p>Wireless LAN: Intel® Wi-Fi 6 AX201 2x2 AX &amp; Bluetooth® 5.0 or above</p> <p>Front Ports • 2x USB 3.2 Gen 1</p> <ul style="list-style-type: none"> <li>• 2x USB 3.2 Gen 2</li> <li>• 1x USB-C 3.2 Gen 1 (support data transfer and 5V@3A charging)</li> <li>• 1x headphone / microphone combo jack (3.5mm)</li> </ul> <p>Rear Ports • 4x USB 2.0</p> <ul style="list-style-type: none"> <li>• 1x VGA</li> <li>• 1x HDMI 1.4b</li> <li>• 1x DisplayPort™ 1.4</li> <li>• 1x serial (9-pin)</li> <li>• 1x Ethernet (RJ-45)</li> <li>• 1x headphone (3.5mm)</li> </ul> <p>Keyboard USB, Wired Calliope, Black - English (UK)</p> <p>Mouse USB Wired Calliope Mouse Black</p> <p>Power Supply: 260W Adapter, 92% Efficiency</p> <p>Form Factor Tower (13.6L)</p>	Piece	3	Y	<p>[Manufacturer/Brand]</p> <p>[Model]</p> <p>[Offered specifications]</p>

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		Preload OS Windows 11 Pro 64 English Warranty: 3Y Courier/Carry-in Monitor 21.5" Monitor, Resolution - 1920 x 1080, Input connectors - VGA + HDMI 1.4, Cables included - VGA, 3 Years warranty Warranty 3 Years.				

22	Entry / Exit Biometric Reader	<p>Entry Access Reader: RF Card, PIN, Bluetooth. IP65, IK06, Mifire Card Support, Read/Write Card Type. Display 3.5" IPS Display, Gorilla Glass 3, 480*320. Capacity Max Users: 50,000, Buffer 500,000 Events. Communication: Wi-Fi 802.11 b/g/n, Ethernet: Yes, POE: Yes, RS-232: Yes, Connectivity: Yes 3G/4G/LTE. USB: Yes, Bluetooth: Yes. Interface: Exit Switch Port: Yes, Door Status: Yes, Door Lock Relay: 30V DC at 2A, 12V DC at 0.5A and 30V DC @ 2A Power to lock external Source. Hardware: OS: Embeded OS LINUX or equivelant, CPU: 800MHz, Memory: 512 MB Flash and 512 MB DDR3 RAM, Mounting Options: Wall Mounting, Flush Mounting, Tamper Detection: Yes, Power: 12V DC @2A. User Display: Yes, Buzzer: Yes. Certifications: CE, BIS and FCC, Compliance: RoHS. Exit Access Reader: Credential Support BLE, PIN, and Card. RF Option Mifare Classic Support DESFire EV1 and 2 / NFC Tag or equivelant Read and Write. Interface: Communication inbuilt bluetooth, RS-232: Yes, RS-485: Yes. Hardware: Dimesions: approximately 101mm*60mm*19mm, Weight approximately 140gms, Gorilla Glass 3, CPU 23bit, Tamper Detection: Yes, Buzzer: Yes, LEDs: Yes Tri-Colour, IP Protection: IP65, Vandalism Proof: IK07, Keypad: Yes, Certifications CE, FCC and BIS, Compliance: RoHS. Access Control: Max User: 25,000, Buffer: 500,000. Wi-Fi: IEEE 802.11 b/g/n, Bluetooth: Yes, Ethernet: Yes: RS-485: Yes, USB: Yes, SD Card: Yes. Access Controller: Max Users: 25,000, Even Buffer: 500,000, Communication: Wi-Fi 802.11 b/g/n. Bluetooth: Yes. Ethernet: Yes. RS-485. USB: Yes. SD Card: Yes. Interface: Aux-In: Yes Various States: Short, Open, Activated, Non-Activated. Aux-Out: Form C and SPDT Relay. Hardware: CPU 800MHz, Flash Memory: 256MB. RAM: 256MB DDR3 SDRAM. Operating System: Linux or equivelant. Tamper Detection: Yes. RTC: Yes. A/V: Tricolour LED. Buzzer: Yes. Power: External Power Adapter: 12 VDC @ 2A. Certifications: FCC, CE, Compliance: RoHS. Compatibility: API for Software integration; Network and Standalone. Warranty: 2 Years.</p>	Piece	7	Y	<p>[Manufacturer/Brand] [Model] [Offered specifications]</p>
----	-------------------------------	---	-------	---	---	--

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
23	Software Application - Access Control Management System	<p>MULTIPLE CREDENTIALS SUPPORT : Biometric - Face Recognition, and Fingerprint (Multispectral and Optical)            RF Cards - Smart Cards and Proximity Cards            MULTIPLE CONNECTIVITY :Wired and Wireless Connectivity            VoLTE/4G/3G, Wi-Fi, PoE, BLE, Ethernet and USB            COMPREHENSIVE AND FLEXIBLE POLICIES :Fully Configurable to Meet Diverse Needs            CUSTOMIZED REPORTS GENERATION :300+ Customized Reports using Multiple Filters            Report Builder Utility for Custom Reports            EASY INTEGRATION :Direct Integration with Payroll, ERP, HRM, Active Directory and Third-Party Hardware            API Integration at Three Levels - Function, Platform, and Device            Integration using Export, Import, and Sharing Database Tables            AUTOMATIC ALERTS AND SCHEDULER SERVICES :Automatic SMS and Email Notifications on Pre-defined Events            Scheduler Services like Backup, Leave Credit, Report on Email at Configured Time            WEB BASED MANAGEMENT: Real-time Monitoring and Control from One Place            Automatic Data Push from Devices to Central Server            Host either On-premise or On Cloud            EASY SCALABILITY AND FLEXIBILITY: Scalable and Modular Architecture to Meet Future Requirements            Flexible and Configurable to Match Organizations' Exact Needs.</p>	Piece	3	Y	<p>[Manufacturer/Brand]            [Model]            [Offered specifications]</p>

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
24	Workstation - Access Control	Processor 12th Generation Intel® Core™ i7-12700 Processor (2.10 GHz, 18MB Cache, 12Cores, 20 Threads, up to 4.90 GHz Max turbo) Motherboard Intel Alder Lake B660 DIMM Memory 16GB DDR4-3200MHz (UDIMM) Max Memory Up to 64GB DDR4-3200; Two DDR4 UDIMM Memory slots, dual-channel capable Storage Selection 1TB SSD M.2 2280 PCIe Gen4 TLC Opal Optical Drive Slim DVD burner (DVD±RW), SATA 1.5Gb/s, Graphics Integrated Intel UHD 770 Graphics Internal Speakers Internal Speaker Media Card Reader 3 in 1 Card Reader Onboard Ethernet Gigabit Ethernet, Intel Ethernet Connection I219-V, 1x RJ-45, supports Wake-on-LAN Wireless LAN Intel® Wi-Fi 6 AX201 2x2 AX & Bluetooth® 5.0 or above Front Ports • 2x USB 3.2 Gen 1 • 2x USB 3.2 Gen 2 • 1x USB-C 3.2 Gen 1 (support data transfer and 5V@3A charging) • 1x headphone / microphone combo jack (3.5mm) Rear Ports • 4x USB 2.0 • 1x VGA • 1x HDMI 1.4b • 1x DisplayPort™ 1.4 • 1x serial (9-pin) • 1x Ethernet (RJ-45) • 1x headphone (3.5mm) Keyboard USB, Wired Calliope, Black - English (UK) Mouse USB Wired Calliope Mouse Black Power Supply 260W Adapter, 92% Efficiency Form Factor Tower (13.6L)	Piece	3	N	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		Preload OS Windows 11 Pro 64 English Warranty 3Y Courier/Carry-in Monitor 21.5" Monitor, Resolution - 1920 x 1080, Input connectors - VGA + HDMI 1.4, Cables included - VGA, 3 Years warranty.				

25	Fire Suppression System	<p>Supply, install, testing and commissioning fire suppression system complete gas and the following items to the satisfaction of the Engineer. The installation is to be integrated within data centre's server racks (4No.) for close proximity application. The tenderer to submit the technical brochures and working calculations together with the tender for evaluation. Alternative and approved systems utilising inert gases or a mixture of such gases may be provided. The system Must conform to NFPA OR EN54 Standards and all components must be either UL Listed or FM approved with engravings of the Certifying body (Note: Fire Suppression should cover also cover underfloor/void as a result of raised floor).</p> <p>Fire Alarm Control Panel Should be ULFM approved. Power:230 VAC, 50 Hz, 3.0 A. or 240 VAC, 50 Hz, 1.5 A Wire size: Minimum 14 AWG (2.00 mm<sup>2</sup>) with 600 V insulation. Non-power-limited, supervised. Battery : Two 12 V 18 AH TU SMF batteries Battery: Charger Capacity 7-18AH (cabinet holds maximum of two 18 AH batteries.)</p> <p>Gas Release Panel Brand: Internationally recognized, matured brand, in existence for at least 10 years (bidder must specify brand) Finish: Powder coated finish Power: 220V, A.C supply Power Back-up: Battery backup with built in charging Display 16 X 2 LCD Dot Matrix Functions: Evacuate and Key pad Enable, Disable Facility. Low battery visual warning with audible tone. Relay output for actuators. Remote fire indication with Audible Tone. Compatible to all types of conventional detectors. Three 24V Hooter Output (Fire, after Cross zone, after gas release). Two mode operation facility (Auto / Manual) Programmable FAP input selection Facility. Programmable Solenoid Output with On and OFF Timer. Main / Standby Cylinder output Facility (Optional). Gas Inhibition and Instant release</p>	Piece	3	Y	<p>[Manufacturer/Brand] [Model] [Offered specifications]</p>
----	-------------------------	--	-------	---	---	--

	<p>facility. Manual Gas Release with or without timer. Actuator pressure low sensing facility. Pressures switch facility  Photoelectric Smoke Detectors  UL Listed FM Approved  Voltage range: 15 – 32 VDC (peak).  Standby current: 300 <math>\mu</math>A @ 24 VDC.  LED current: 6.5 mA @ 24 VDC (latched "ON").  Air velocity: 4,000 ft. /min. (20 m/sec.) maximum.  Diameter: Approx. 6.1" (15.5 cm) installed in B350LP base.  Height: Approx. 2.1" (5.33 cm) installed in B350LP base.  Weight: Approx. 3.6 oz. (102 g).  Operating temperature range: 0°C to 49°C (32°F to 120°F) or 0°C to 38°C (32°F to 100°F).  Temperature: 0°C – 49°C (32°F – 120°F).  Relative humidity: 10% – 93%, non-condensing.  Hooter / Mini-Horns  UL and ULC Listed CSFM, MEA and FM Approved  Operating Temperature Range: 0°C to 49°C (32°F to 120°F).  Mounting: Surface: Deep single-gang backbox (2- 3/4" deep)</p> <p>Electrical Specifications  Input Terminals: 12 to 18 AWG  Nominal Voltage: Regulated 12DC / FWR or 24DC / FWR  Operating Voltage: 8-33  Operating Voltage with MDL3R/W: 9-33  Control Module  UL Listed FM Approved  Normal operating voltage: 15 to 32 VDC.  Maximum SLC current draw: 6.5 mA (LED on).  Average operating current: 350 <math>\mu</math>A direct poll (CLIP mode), 375 <math>\mu</math>A group poll (Lite Speed mode) with LED flashing.  External supply voltage: maximum 80 volts (RMS or DC).  Drain on external supply: 2 mA maximum (using internal EOL relay).</p>				
--	--	--	--	--	--

	<p>EOL resistance: 47K ohms.  Temperature range: 32°F to 120°F (0°C to 49°C). t. Humidity range: 10% to 93% non-condensing.  Two (2) 36Kg normal charged capacity FM200 approved cylinders complete with discharge valves, gauges, hoses for connection to the manifold and initial FM200 gas agent.  Cylinder support bracket system  40mm diameter connecting hoses and connectors.  Discharge head complete with plain nut, solenoid valve and manual release valve assembly.  20mm brass multijet nozzle with 360 degrees coverage pattern.  Allow for motorized vent damper including pressure relief damper.  Pipework  Allow for extinguishant distribution pipework including pipe fittings, supports, couplings, reducers etc. for the proper and satisfactory functioning of the installation. Pipe schedule (class 40) shall depend on the type of agent used and tenderer shall submit working drawings and manufacturer's instructions when tendering.  Allow for pipework anchorage/hangers  Allow for painting system pipework with signal red colour  Fire installation approved 12V - 7AH battery complete with charging kit  Optical smoke sensors complete with wiring to control unit by 2.5mm<sup>2</sup> single core fire resistant cabling drawn through 25mm diameter galvanised steel conduit and inclusive of the conduit and all accessories.  Surface mounted detectors base.150mm wall mounted bell for indoor use and 24VDC.  Sounders with visual strobe with high and low decibels sound and 24V.  Allow for pipework anchorage/hangers  Double action pull station complete with toggle activated SPST</p>				
--	---	--	--	--	--

		<p>releasing switch provided at exit of the protected area complete with red back box.</p> <p>Fire suppression abort switch complete with back box.</p> <p>Approved key operated maintenance switch with low voltage warning lamp in a weather-proof stainless-steel container complete with red back box.</p> <p>Extension of the detection signal from control panel to remote fire alarm indicator panel (Supplied by Electrical sub-contractor) at the entrance complete with cabling and conduits.</p> <p>Allow for all associated electrical and earthing works comprising of fire-resistant cables in galvanised steel conduits, connection to mains power and standby power supply.</p> <p>"Breakglass" push switches complete with conduit and wiring.</p> <p>Labelling and warning signs - inside and outside the room</p> <p>Allow for 2 sets of working drawings and calculations from system manufacturer.</p> <p>Allow for 2 sets of installed drawings, operation and maintenance manuals both in soft copy in 32GB flash disk and Printed Formats.</p> <p>List any other items necessary for complete installation of the entire fire suppression system.</p> <p>Allow for testing and commissioning of the System</p> <p><b>PORTABLE EXTINGUISHERS</b></p> <p>Supply, deliver, install, test and commission the following portable fire extinguishers and conforming to BS EN 3 / BS 1449.</p> <p>Carbon Dioxide Gas Fire Extinguisher</p> <p>9kg dry chemical powder portable fire extinguisher complete with pressure gauge, initial charge and mounting brackets.</p>				
--	--	---	--	--	--	--

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
26	Server Room Renovation	Panel Coating - Galvanized Steel Tray Certified - PSA Heavy Grade Protection - Protected from corrosion by a E- coated steel top sheet and hot-dipped galvanized steel bottom sheet. It must also be antistatic. Allow for Civil Works and blanking. Fire rating - Class 0	Piece	1	Y	[Manufacturer/Brand] [Model] [Offered specifications]

27	Fire Rated Door	<p>Door Material: Fire Rated for At least 1 hour  Brand: Internationally recognized, matured brand, in existence for at least 10 years (bidder must specify brand)  Size: Approx. 1100mm (length) x2100mm (height) x44mm (thickness)  Face: 1.2mm galvanized steel interlocked to the back face and fixed on the top and bottom edge of the door blade, powder coated to standard RAL colour range of the customer's choice  Sub frame: 2mm folded galvanized steel (25 x 41 x 25) u-channel to perimeter of door and three channels vertically positioned over the width of the door blade  Back: 1.2mm galvanized steel interlocked to the front face and fixed on the top and bottom edge of the door blade, powder coated to standard RAL colour range of the customer's choice  Frame: 1.2mm galvanised frame options: Clamp/Wrap-around – suitable for panel and stud applications  Fixed single or double rebate frame for blockwork applications  Architrave frame – for a cosmetically pleasing finished architrave  Gasket (s): 488S Teardrop self-adhesive silicon cold smoke seal pre-fitted to the internal rebate of the frame to BS476: Part 31.1 and BS EN 1634-3.  Core: Dufaylite corrugated cardboard type D170 10  Furniture: Standard furniture Sets 1 -12 in a brushed stainless steel finish  Hinges 3 - 4 Number template drilled CE marked and tested to EN 1935 : 2002 Grade 13 or 14 in satin stainless steel, shrouded or concealed bearing type fitted to each leaf  Closer: Certifire approved Dorma TS72/TS83/TS93/ITS96 Vision panels DDA compliant  Glazing: Firelite 5mm 240 minute fire rated Louvre Fireblock 240 minute fire rated unit max size 500mm x 500mm  Kickplates: Stainless Steel Brush finish – standard height 200mm (other heights available to order) Finish: Powder coating - Standard RAL colour range, paint finish 30% gloss (matt) minimum 40 microns  Pre-finished steel – 1.2mm Wood Grain Laminate</p>	Piece	2	Y	[Manufacturer/Brand] [Model] [Offered specifications]
----	-----------------	---	-------	---	---	---

	<p>Water Leak Detection  Technical Specifications  Water Leak Detection Module  Water leak detection module with Webpage interface for viewing conditions and modifying configurations,  Optimal scalability sensing cable easy integration with existing systems via protocols such as Modbus, BACnet, SMTP, SNMP and/or dry contact outputs,  Highly precise pinpointing and displaying in feet or meters,  Logging capabilities of event and trend data,  Simple installation with NO calibration required,  Compact and light-weight,  Supervised system with facility to map with Graphic Display on PC.  RoHS compliant,  UL-Approved, and SMS / Email alert facility through the DCIM System.  Water Leak Detection sensor cables.  Digital addressable water leak detection cable sensor with non-conductive polymers used in the leak detection cable's construction. This helps eliminate irritating alarms that could result from contact with metal, such as raised floor pedestals. An abrasion resistant polymer core increases the strength of the cable.  Pressure on the sensing cable will not create a false alarm, with Pre-Connected Connectors,  Dries quickly without external drying devices,  Complete - Plenum rated,  UL listed, &amp; RoHS compliant.  Pre laminated Leak detection reference plan / Map  Pre laminated leak detection reference plan/map to identify the actual location of any water leak detection in the protected area.  The leak detection plan/map shall identify protected room layout, cable routing and distance shall be marked in feet or meters.  Technical Specifications  The temperature ranges to be monitored shall be -5C to + 50 C with resolution of 0.5C.</p>				
--	---	--	--	--	--

		<p>The humidity monitoring range should be 0 – 100% none condensing. Temperature and Humidity controls should be as recommended by the manufacturers. Temperature and humidity monitoring should be for both at the front and the back of the racks. Monitoring of other dry contact sensors like door status sensor.</p>				
--	--	---	--	--	--	--

28	Air Conditioning	<p>Supply, Delivery and installation of close control air-conditioning unit at TVET Data Centre.</p> <p>Precision air conditioning system shall be split type for data room direct rack cooling. The units to be set on duty, alternate and/or assist mode 35kw (119,400Btu/h) floor mounted close control in-row split air conditioner inclusive of outdoor unit complete with support brackets. Should be designed and built to provide precision temperature and humidity control. The system shall be complete and factory run-tested before shipment. The unit shall be air cooled direct expansion type with top inlet and base outlet. The indoor unit shall be installed on either end of the server racks with air flow rate of minimum 5500 m<sup>3</sup>/hr. It shall have microprocessor controls that monitor status of unit components and environmental parameters like temperature and humidity. It shall be equipped with a signalling alarm to indicate deterioration of conditions, electronic expansion valve, a status display panel and all other necessary control devices. It shall operate on R410A refrigerant or any other non-ozone depleting refrigerant and shall be Energy Star Rated Refrigeration Pipework</p> <p>Allow for condensate flow discharge using relevant copper piping from specified and indicated indoor unit positions to the external outdoor unit with actual pipe sizes that must be approved prior to installation and thus:</p> <p>7/8" refrigerant pipes and lagging (gas line)  3/4" refrigerant pipes and lagging (liquid line)  Refrigerant pipe trunking  Associated transformation pieces of various sizes necessary to complete above installations.  Refrigerant  Allow R410A refrigerant for charging air conditioning systems.  Drain  25mm PVC condensate drainage pipework, class D, including bends, clips, joints and tees in the running lengths of the pipe.  Allow for sundry items like relevant builder's work involving drilling of holes through concrete, making of associated plinths, chisseling of</p>	Piece	4	Y	[Manufacturer/Brand] [Model] [Offered specifications]
----	------------------	--	-------	---	---	---

		<p>walls, making good of disturbed surfaces to the data center etc. necessary to complete the air conditioning installations.</p> <p><b>Electrical Works</b> Allow for associated electrical works from the local isolator provided by others within one meter to the air conditioning units and from indoor unit to outdoor unit.</p> <p><b>Mounting Bracket</b> Mounting bracket for the outdoor unit complete all anchoring accessories including rawl bolts and anti- vibration rubber mountings to engineer's approval. <b>Wall Mounted Wired Remote Controller</b> Fully wired wall mounted remote controller panel, wiring and conduit works including but not limited to interconnecting cable between the outdoor and indoor units.</p> <p><b>Water Leakage Detection System.</b> Digital Addressable Water leak detection cable sensor with Non-conductive polymers used in the leak detection cable's construction. Integrated emergency ventilation fans of min. capacity 0.4m<sup>3</sup>/s against 150pa or as per equipment manufacturer's specification on emergency ventilation.</p> <p><b>Trunking</b> 150x50mm approved PVC trunking for concealing the refrigerant pipework.</p> <p><b>Testing and Commissioning</b> Allow for setting to works testing and commissioning to the approval of the project manager.</p>				
--	--	---	--	--	--	--

<b>Technical specifications Lot 2: Data Center, CCTV, Access Control</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
29	Rodent Repellant	The system proposed should protect all the equipment with relevant type of transducers. Once powered up, these transducers should produce very high frequency variable sound waves (above 20 Kilo Hertz) continuously which irritate the rodents and are forced to evacuate. The plinth area to be covered shall be based on the site survey visit. The system should comply with EN 60255-26:2009 and BS EN 60255-22- 7:2003 standards.	Piece	7	Y	[Manufacturer/Brand] [Model] [Offered specifications]
N/A	N/A	Items 28 – 64 not included in this Lot.	N/A	N/A	N/A	N/A
65	Server Operating System	Server Operating System for Data Center (Microsoft Server 2019 or equivalent) designed to share services with multiple users and provide extensive administrative control of data storage, applications, and corporate networks. Key features include a User Directory, which automates the management of user data, security and distributed resources, and enables interoperation with other directories; and have a Server Manager, which is a utility to administer server roles and make configuration changes to local or remote machines.	Piece	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
N/A	N/A	Items 1 – 29 not included in this Lot.	N/A	N/A	N/A	N/A
30	Commissioning and Training	Installation, Testing, And Commissioning Including Training Of Ict Equipment And Software	Piece	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]
31	Computer Keyboard	Suitable with item: Desktop Computer; standard Computer keyboard (UK layout), wired (USB plug), with thin, sleek design to keep hands in a relaxed neutral position for effortless typing; it has a durable, spill-resistant design and sturdy, adjustable tilt legs.	Piece	40	N	[Manufacturer/Brand] [Model] [Offered specifications]
32	Computer Mouse	Suitable with item: Desktop Computer; standard Computer Mouse: wired, with USB cable; precise optical tracking with or without a mouse pad; designed to keep either hand happy; high-definition optical tracking; responsive, smooth cursor control, precise tracking and easy text selection thanks to high-definition optical tracking (1000 dpi).	Piece	40	N	[Manufacturer/Brand] [Model] [Offered specifications]
33	Computer Monitor 27"	With 3-side virtually borderless design; with Tilt/Height/Pivot/Swivel adjustable stand; Picture Quality: Size 27", Display Type IPS, Response Time 5ms, Refresh Rate 75Hz, Display Resolution 4K UHD (3840x2160 @ 60 Hz); Inputs/Outputs: 2 x HDMI, 1 x DisplayPort, 1 x USB Type-C Aspect Ratio 16:9; Brightness (Min.) 240cd/m <sup>2</sup> ; Brightness (Typ.) 300cd/m <sup>2</sup> ; Contrast Ratio (Min.) 700:1; Contrast Ratio (Typ.) 1000:1; Viewing Angle (CR≥10): 178° (R/L), 178° (U/D); Surface Treatment: Anti-Glare, Smart Energy Saving, Free Sync, Super Resolution+, On Screen Control; wall mountable 100 x 100 mm; weight without stand (max.): 5,5 kgs; Accessories included: HDMI cable, USB Type C cable, DisplayPort cable, power cable with British plug; Power: AC Input 100~240 V (50/60 Hz), Power Consumption (Typ.) less than 45 W, Power Consumption (Max.) 100W, Power	Piece	40	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		Consumption (Sleep Mode) less than 0.5W; min. 1 Year Warranty; Energy Star certified product (or better energy efficiency); with instruction manual in English and CE-marking; British power plug.				
34	Desktop Computer	Small Form Factor Desktop PC; meets MIL-STD-810G US military standards and offers a highly expandable-chassis, ensuring long-term reassurance and easy future upgrades; Intel Core i7-10700 (10th Generation) or equivalent, eight-core processor (16M Cache, up to 4.7 GHz); 64GB DDR4 2933 MHz RAM (expandable up to 128 GB), 512GB PCIe NVMe M.2 SSD; UHD 630 integrated graphics card or equivalent; connectivity with Gig + Dual-Band Wi-Fi 6 (802.11ax) and Bluetooth 5.0; Front I/O: 1x Headphone jack, 1x 3.5 mm combo audio jack, 1x USB 3.2 Type-C (Gen 1), 4x USB 3.2 Type-A (Gen 1), 1x Smartcard Reader, 1x SD Card Reader; Optical Disc Driver Bay (DVD-RW); Rear I/O: 1x RJ45 Gigabit LAN, 1x HDMI 1.4, 1x DisplayPort, 1x DVI-D, 2x PS2 (mouse and keyboard), 4x USB 2.0 Type-A (Gen 1), 3 x Audio jacks (microphone port, line out port, line in port; Expansion slots include 1x PCIe 3.0 x16, 1x PCI, 2x PCIe 3.0 x1, 1x M.2 connector for Wi-Fi (occupied), 2x M.2 connector for storage (1x occupied), 4x DDR4 U-DIMM slot (2x occupied); English Keyboard (qwerty) and mouse included; with Kensington security slot to prevent theft; TPM 2.0 Security for secure data encryption, min. 1 Year Onsite Service / Warranty, Wi-Fi 6, Windows 11 Professional or equivalent,	Piece	40	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		Black, Energy Star certified product and 80 Plus Platinum (or better energy efficiency); weight less than 7 kg; product dimensions appr. (LxWxH): 31.4 x 3.7 x 11.5 inches; with instruction manual in English and CE-marking; British power plug.				
35	LCD Projector	Classroom projector; 1.6x optical zoom; 3,800 lumens of color/white brightness or better; native WUXGA resolution (1920 x 1200) Full HD resolution (16:10 format) or better; long-lasting lamp, which delivers up to 12,000 hours in ECO Mode; enhanced wireless display technology and built-in RJ-45 connectivity offer advanced network control and support simultaneous display of multiple screens (up to 4) - including from multiple Chromebooks, Mac, PC, iOS and Android devices; with two-way content sharing (teachers can push content from the projector to wirelessly connected devices and control which device screens to display; students can make notes and send their work back to the projector); Projection System: 3LCD, 3-chip technology; Native Resolution: 1920 x 1200 (WUXGA); 2x HDMI - connect multiple A/V devices; includes 1x MHL-enabled port; powerful, engaging sound - includes a built-in 16 W speaker or more and microphone input; or, use external speakers, even in Standby Mode; Eco features: RoHS compliant;, recyclable product; Throw Ratio Range: 1.39 (Zoom:Wide),	Piece	9	Y	[Manufacturer/Brand] [Model] [Offered specifications]

Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing						
Item No.	Item Name	Specifications	Unit	Quantity	Major Item	Statement of Compliance
					(Yes / No)	(Bidder's Offered Item & Specification)
		2.23 (Zoom:Tele); Size - projected distance: 30" – 300" (0.76 – 7.62 m) (Zoom:Wide); Keystone Correction: Vertical: ±30 degrees (Automatic), Horizontal: ±30 degrees (Slider); USB Plug 'n Play:compatible with PC and Mac computers; Contrast Ratio: 15000:1; Color Processing: 10 bit; Color Reproduction: 1 billion colors; Projection Lens: Manual focus, F-number: 1.51 – 1.99, Focal Length: 20.3 – 32.5 mm, Zoom Ratio: 1.0 – 1.6; Fan Noise: ECO mode: 28 dB, Normal mode: 37 dB or better; min. 1 Year Warranty; AC 100-240 V, 50 Hz; Energy Star certified product (or better energy efficiency)with English instruction manual; CE-marking; with British power plug. Include Wireless Access Accessory to enable screen casting via Wi-Fi.				
36	Projection Screen for LCD Projector	Size:120"Projection area:2,4 x 1,8 mDiagonal:3,05 m, Motor:Yes, Remote:Yes (RF frequency 433 Hz), Cassette colour:White, Cassette material:Aluminium, Surface:Matte white, Border:4,5 cm, Weight:14 kg, Black drop:30 cm, Cassette measurements:257 x 8.2 x 7.2 cm (L*W*H).8K / 4K Ultra HD and Active 3D Ready; Projection Screen Material featuring a 180° Viewing Angle; Fully Black Backed and Easy to Clean Surface; compatible with Standard UHD/HD projectors; 2-inch interval auto-lock mechanism that allow for various height settings and a screen lanyard for easy pull down; with mounting materials such as 6" and/or 12" L brackets; instruction manual in English.	Piece	9	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
37	Interactive TV with Touch-Screen	Digital flipchart, 65 inch, 3,840 x 2,160 pixels (landscape format) 2,160 x 3,840 pixels (portrait format), Temperature sensor, pivot display, time and date memory (168 hours), integrated loudspeaker (2x 10W), integrated WiFi module; 2x HDMI, 1x USB, 1x Touch Out (USB Upstream Type), 1x Audio Out, 1x Screen Share (HDMI Out); Scope of delivery: passive pen (2x), power cable, touch-out cable (USB upstream); AC 230V, 50Hz with British power plug; instruction manual in English; CE-marking	Piece	7	Y	[Manufacturer/Brand] [Model] [Offered specifications]
38	Mobile TV Stand / Rack	Sturdy mobile TV Stand / Rack for 32-70 inch TV's; height adjustable; VESA 600x400; Suitable for most screens from 32" - 70"; supports 45 kg or more; Adjustable screen height from 1100 to 1600 mm; Supports 200x100mm, 200x200mm, 300x200mm, 300x300mm, 400x300mm, 400x400mm, 500x300mm, 500x400mm, 600x300mm, 600x400mm hole spacing according to VESA standards; Four heavy-duty swivel and locking wheels for effortless mobility; Made of high-quality aluminium with hard-wearing powder coating; adjustable viewing angles -2° to +10° tilt; preferable with AV shelf, height adjustable and holds up to 5 kg; with cable management; instruction manual in English.	Piece	7	N	[Manufacturer/Brand] [Model] [Offered specifications]
39	2 Tray Docking Station	2 Tray Docking station suitable for (Interactive TV with Touch-Screen); with USB, USB in and USB out (external); Touch Out, HDMI in; Screen Share; with instruction manual in English.	Piece	4	Y	[Manufacturer/Brand] [Model] [Offered specifications]
40	Tablet Computer	Standing screen display size 10.4 inch or slightly larger; Screen Resolution min: 1920 x 1200 pixels; Processor min. 2.5 GHz; Internal Memory: 8 GB RAM + 265 GB; Graphics Coprocessor Adreno 730, or equivalent; Card Description: Integrated; Wireless Type: 802.11a/b/g/n/ac/6e, Bluetooth; with fast charging USB-C port; Number of USB 2.0 Ports: 1; Average Battery Life (in hours) min. 10	Piece	23	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		Hours; Operating System suitable for tablets: Android or equivalent; rear webcam resolution min.: 8 MP; Audio: Dolby Atmos; with Active Pen included, min. 1 year warranty; charger AC 100-240 V, 50 Hz with British power plug; weight approximately 850 grams; with instruction manual in English; CE-marking. Include Book cover.				
41	Laptop Computer	2-in-1 laptop(fully foldable); 15.6-inch UHD (3840 x 2160) Touch Narrow Border WVA Display with Active Pen support; 11th Generation Intel Core i7-1165G7 Processor or equivalent (12MB Cache, up to 4.7 GHz); Windows 11 Professional or equivalent in English; video card Xe MAX integrated graphics card 4GB, LPDDR4x memory; memory 16GB, onboard, LPDDR4x, 3200MHz; hard drive 1TB PCIe NVMe Solid State Drive; MicroSD Card Reader; 2 x USB; Headphone and Microphone Combo Jack; HDMI 2.0; Thunderbolt 4 with Power Delivery & DisplayPort; Wi-Fi 6; keyboard with back-lit; weight less than 2 kgs; including power adapter with 230V, 50Hz with British power plug; including active pen; instruction manual in English; CE-marking.	Piece	19	Y	[Manufacturer/Brand] [Model] [Offered specifications]
42	30-Bay Mobile School Charging Cart Station	For Chromebooks, Tablets, Laptop Computers; with power strip included; charge and store for 30-32 devices; two padded inside shelves store to charge 30-32 devices at once and the additional top shelf hold the cables & adaptor; cabinet is equipped with internal locking mechanism to allow the front and back door to be locked for the device security; cord management: plastic cord clips are attached at the bottom of shelves to manage the device cords in order when charging; soft pad on shelves and rubber-coated dividers prevent your devices from accidental scratches and damage; material: steel; with comfortable grip side handle for convenient moving; Slot dimension:	Piece	1	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		1"(W) x 11-5/8"(D) x 10-1/2"(H) inch Caster Specification: 4" TPR non-marring casters; 2 fixed and 2 swivel with brake Product Dimension (appr.): 20-7/8"(W) x 20-1/8"(D) x 38-5/6"(H)with CE-marking, instruction manual in English language; with British socket outlets (for charging) and British plug.				

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
43	Colour Laser Printer Large (all-in-one)	<p>Main function:Copy, Print, Scan, Fax (Optional),Writing Method: Semiconductor Laser, CPU: QorIQ T1024 (Dual Core) 1.2GHz, Print Speed (A4) (Mono/Color): 80/70 ppm,Memory Standard 4.5GB (Max. 4.5GB), SSD/HDD Capacity: SSD 8GB (Standard)/HDD 320GB (Standard), Warm Up Time: 44 seconds or less, Paper Capacity:Standard -4,150 sheets [ 2 x 500 sheets (Cassette) + 2 x 1,500 sheets (Cassette) + 150 sheets (MPT)], Maximum-7,650 sheets (Main Unit + 2 x 1,500 sheets PF-740(B) x1 + 500 sheets PF-7130 x 1 +MPT), Document Processor :Standard / Dual Scan / 270 Sheets, Duplex Printing :Paper size: A5R - 12" x 18" (304mm x 457mm); Paper weight: 60 - 256 g/m2, Output Capacity :Max. 420 sheets, Control Panel :10.1 inch Color Touch LCD Panel, Dimension (W x D x H) (Main Unit) 750mm x 822mm x 1,234mm (with DP) Weight (Main Unit) Approx. 182 kg (Excluding toner), Copy Size Max. A3 (Legal) – Min. A6R, Resolution :600 x 600 dpi, Zoom Ratio: 25% – 400% (1% per Step), Multiple Copy :1 – 9999, Resolution :1200 x 1200 dpi, 4,800 Equivalent x 1200 dpi</p> <p>PDL PRESCRIBE, PCL6 (PCL-XL, PCL5c), KPDL3 (Postscript 3 compatible), XPS, Open XPS, PDF Direct Print, PPML First Print Out Time (Mono/Color) 4.9 sec / 6.1 sec, Supported Protocol :TCP/IP, NetBEUI, IPv4, IPv6, IPsec, HTTP, LPD, FTP, IPP, RawPort, LLTD, SNTP, DHCP, SMTP, POP3, DNS, SNMPv1/v2, WSD Scan/Print, Operating System Supported Windows: 7/8.1/10, Server:2008/2008 R2/2012/2012 R2/2016; Apple Macintosh: OS X 10.9 or later; Linux, Interface :USB 2.0 High Speedx1; Ethernet 10BASE-T/100BASE-TX/1000BASE-T; USB Host Interface (USB Host)x4; NFC TAGx1; Expansion Slotx2; 802.11 b/g/n/Wireless LAN/WiFi Direct (Optional),USB Memory Printing ,Supported Mobile, Printing , NFC, Color Selection: Auto Color (Color/Gray); Auto Color</p>	Piece	5	Y	[Manufacturer/Brand] [Model] [Offered specifications]

Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing						
Item No.	Item Name	Specifications	Unit	Quantity	Major Item	Statement of Compliance
					(Yes / No)	(Bidder's Offered Item & Specification)
		(Color/B&W); Full Color; Grayscale; Black & White Resolution :600dpi, 400dpi, 300dpi, 200dpi, 200x100dpi, 200x400dpi File Format :TIFF, JPEG, XPS, Open XPS, PDF (MMR/JPG compression/High compression PDF), Searchable PDF, MS Office File Image Type Mode: Text, Photo, Text + Photo, Text (Fine Line), OCR Transmission Type: Scan to SMB; Scan to E-mail; Scan to FTP or FTP over SSL; Scan to USB; TWAIN Scan; WSD Scan Address Storage:2000 addresses (Common address list), 500 groups (Group address list), Original Size Max. A3 (Ledger) - Min. A6 (Statement) / Scanning length: max. 1,600mm, Coding Method :MMR, MR, MH, JBIG, Transmission Speed / Modem Speed :Less than 3 seconds / 33.6 Kbps, Memory :170MB,Fax Functions :Network Fax, Duplex Transmission and Reception, Encrypted Transmission and Reception, Polling Transmission and Reception, Broadcast, Fax Server Integration, Fax Dedicated Paper Feed tray.				
44	Supplies for Photocopy Machine	Supplies suitable for item: Colour Photocopy Machine with Finisher; one each: Black Toner Cartridge, Cyan Toner Cartridge, Magenta Toner Cartridge, Yellow Toner Cartridge, Black Developer,	Set	6	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		Cyan/Magenta/Yellow Developer, Drum Unit, Toner Collection Container.				
45	External Hard Disc	1TB SSD External Portable Solid State Drive, up to 1,050 MB/s, USB 3.2 Gen-2 and USB-C Compatible (USB-A for Older Systems); Password enabled 256-bit AES hardware encryption; shock and vibration resistant; drop resistant up to 6.5ft (1.98m).	Piece	11	Y	[Manufacturer/Brand] [Model] [Offered specifications]
46	Visualizer / Document Camera	Supports Windows 10 System; connection via USB port; 12MP High-definition camera; 12MP CMOS sensor captures live images more clearly; with supplemental LED light allowing to capture images in both dark and bright environments; document scanner is designed for foldability and portability; the extension stand can capture and display images between A3 and A4 size freely; auto-focus lens can quickly shifts focus between objects; camera equipped with the paint tool function, contrast function; using the paint tool while screen sharing, it can allow you to type text and make draws, shapes and lines; using the contrast function, you can realize the function of split screen (multiple pictures can be compared on the same screen); it also has the intelligent continuous shoot/timed: continuous shooting, real-time shooting, OCR, automatic correction, merge pdf etc. OS Compatibility:windows, macOS and chromebook, Upto 4K at 30fps video and 12MP stills, USB 3.0 interface and power connection to a PC/USB Bus-Powered Port, Auto-focusing, auto-focus locking, and selected region focus, Up to 25x zoom, Minimum focusing distance:5.0cm, Built-in screen resolution:800*400, Capture Area:11 x 17" / 27.9 x 43.2 cm, Video I/O :1 x HDMI Output, Other I/O: 1 x USB-C 3.0 / 3.1/3.2 Gen 1, Focus Modes:Auto, Manual, Supported File	Piece	14	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		Formats:JPEG, MP4, PNG, instruction manual in English; CE-marking.				
47	Smart TV	Size 65 inch; 4K UHD, Flat, LED TV, Frameless; Black colour; Resolution 3.840 x 2.160 Pixel (4K/Ultra HD) 60Hz, UHD Dimming, Auto Game Mode, Clean Cable Solution;, 2x HDMI, 1x USB, 1x LAN, WLAN, 1x antenna input; classic remote control, power cable, manual in English; AC 230V, 50Hz with British power plug; CE-marking.	Piece	6	N	[Manufacturer/Brand] [Model] [Offered specifications]
48	Video-Conference Webcam	Video Conferencing Webcam, Ultra HD 4K, 120° Field of View, Motorised Tilt, Built-in Speakers, Full Duplex & Advanced Beamforming Microphones, Video capture resolution 4K; Connectivity technology USB and Bluetooth; Max. Focal length 15; Minimum focal length 15; Optical sensor technology CMOS; Optical zoom 5 x; with a wider field of view ensuring that every single person in the room is in view, even those close to the camera; camera supports multiple resolutions, including 4K (Ultra HD), 1080p (Full HD) and 720p (HD); The three omnidirectional microphones with broadside beamforming and reverb suppression - combined with a fine-tuned speaker; compact all-in-one design takes up less space and creates no cable clutter; with adapter Compatible with Apple iMac and	Piece	5	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
		MacBook, converts Mini DisplayPort to HDMI input, supported resolution: up to 1920 x 1200; with English instruction manual; CE-marking.				
49	Document Shredder	10-Sheet Super Micro Cut; High Security Level P-5; Heavy Duty Paper/CD/Card Ultra Quiet Shredder; low noise level max. 55 dB(A); alloy steel cutter shreds through staples, paper clips; credit cards; working time up to 30 minutes; waste bin capacity min. 15 liter; feed entrance 220 mm or more; AC 230V, 50Hz, with British Plug; with instruction manual in English; CE-marking.	Piece	6	N	[Manufacturer/Brand] [Model] [Offered specifications]
N/A	N/A	Items 50 – 58 not included in this Lot.	N/A	N/A	N/A	N/A
<b>59</b>	<b>Mobile e-learning Production labs</b>					

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
59.1	Action Cam	27.13MP + SuperPhoto with HDR 5.3K60 HyperSmooth 5.0 1.4" Color LCD with Live Preview and Status Voice control Live streaming webcam model Processor GP2 Connection to Quik App HDMI out Ski-Mo 8x (2.7K, 1080p) included: Rechargeable Battery, curved Adhesive Mount, mounting Buckle, USB-C Cable, Thumb Screw, Camera Case	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.2	Wireless Microphone	Mountable on the actioncam Pre-polarised pressure transducer Polar Pattern Omnidirectional 50Hz – 20kHz 100 dB SPL (1kHz @ 1m) dBu Maximum Input Level (3.5mm) -20dBV Microphone Preamp Gain 20dB Equivalent Noise Level (A-Weighted) 22dBA In-built rechargeable lithiumion battery charged via USB 5V, 0.3A Operating Time Up to 7 hours 3.5mm TRS (lavalier microphone input) Analog Outputs 3.5mm TRS Transmission Range 200m (line of sight) USB Type-C OS Requirements macOS 10.11 above Windows 10 and above	Piece	6	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
59.3	Interview hand adaptor for Wireless Microphone	The hand adaptor must be suitable for this microphone: Microphone Preamp Gain 20dB Equivalent Noise Level (A-Weighted) 22dBA In-built rechargeable lithiumion battery charged via USB 5V, 0.3A Operating Time Up to 7 hours 3.5mm TRS (lavalier microphone input) Analog Outputs 3.5mm TRS Transmission Range 200m (line of sight) USB Type-C OS Requirements macOS 10.11 above Windows 10 and above Mountable on the actioncam Pre-polarised pressure transducer Polar Pattern Omnidirectional 50Hz – 20kHz 100 dB SPL (1kHz @ 1m) dBu Maximum Input Level (3.5mm) -20dBV	Piece	6	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.4	Action Cam Kit	A Grip (Battery/Tripod/Remote), with Media Mod + Light Mod Built-in directional mic reduces wind and ambient noise 2 cold-shoe mounts to attach lights, mics or LCD screens 3.5mm mic port to add an external mic HDMI-out port to monitor or play back of footage 4 hours of continuous 4K/30 recording Built-in tripod legs for stable shots Easy one-handed control of the camera LED light with diffuser Directional mic for enhanced voice capture Remote control the camera from up to 98 ft (30m) away	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
59.5	Dual Battery charger + 2 batteries	The batteries must fit in this action cam: 27.13MP + SuperPhoto with HDR 5.3K60 HyperSmooth 5.0 1.4" Color LCD with Live Preview and Status Voice control Live streaming webcam model Processor GP2 Connection to Quik App HDMI out Ski-Mo 8x (2.7K, 1080p) included: Rechargeable Battery, curved Adhesive Mount, mounting Buckle, USB-C Cable, Thumb Screw, Camera Case	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.6	Ergonomic camera grip / tripod	Integrated ball joint that lets you change the camera angle without having to reposition the mount. Built-in tripod quickly folds out to provide a stable shooting platform for time lapse shots, group photos and more Folding extension arm acts as a handheld boom for selfies, follow-cam footage and getting closer to the action Measures 19.5in (49.53cm) when fully extended and collapses to 8in (20.32cm)	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.7	Extreme 256GB microSDXC	UHS Speed Class 1 (U3) and Class 10 to record 4K video, Full HD video (1080p)	Piece	24	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.8	Chest mount for	The action cam (specification, see above) can be mounted on the chest for point of view videos.	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
Item No.	Item Name	Specifications	Unit	Quantity	Major Item	Statement of Compliance
					(Yes / No)	(Bidder's Offered Item & Specification)
	Action Camera					
59.9	Head Strap for Action Camera	The action cam (specification, see above) can be mounted on the head for point of view videos. A Clip for caps, belts must be added.	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.10	SNAP Mounts PRO – Magnetic Action Camera Mount	The action cam (specification, see above) can be mounted on any surface and the body (point of view video)	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.11	Semi Hard Camera Case for the action cam and accessories	The action cam (specification, see above) and basic accessories can be stored securely in the case.	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.12	94" Inch tripod	360 Degree Ball Head Quick Release Plate max. 240 cm height folded size 57cm/22 inch	Piece	6	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.13	14.6" Tablet inch mount adapter for	The tablet can be mounted securely on the 94inch tripod, e.g. for recording preview.	Piece	6	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
	tripod 94inch					
59.14	Flexible tripod	Aluminum, Rubber, Stainless steel, ABS Plastic, TPE supports up to 3kg 7.7 x 5.3 x 30 cm less than 470 grams Ballhead Smartphone holder	Piece	6	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.15	Accessory kit	Carrying Case, Suction Cup, Floating Handle Grip, Strap, 360° Rotation Clip, Insurance Tether Strap, Wrist Strap, Handheld Monopod, Handlebar Mount, Chest Strap, Headstrap Mount, Wrench, Wrist Mount with Screw, Tripod Mount Adapter, Helmet Extension Arm, Helmet Strap Mount, Mini Tripod, Switch Support, Surface J-Hook Buckle, Basic Mount, Flat Mount, Curved Mount, Screw, Adhesive Pad.	Piece	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.16	Tablet	14.6" Inch, 512 GB Internal Storage, 16GB RAM. Keyboard case included USB-C connection; compatible with actioncam for video loading and editing Protective bag	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.17	External HDs	4 TB. USB-C technology Protective case 2,5 Zoll less than 300 grams	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
59.18	Broadcast Lighting Kit, 2-Pack	2-Point Lighting - Eliminate glare on glasses to be seen through your lenses on video calls Professional-Quality Light - best in virtual meetings or on any live stream Adjustable Color & Brightness 12" - 30" Telescoping Stand with ballhead mount to reach any angle Ultra-Portable  Panel Go bicolor LED lights Adjustable Desktop Stands USB Adapter Cables Softening Silicone Diffusers Suction Cup Mounts 6-foot USB Cables	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.19	Screencast -o-matic	This screen recording software must be purchased for a minimum of 5 years per license.	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.20	Durable Waterproof Photographer Gear Case with Hard Plastic	Minimum internal dimension, 750 x 600 x 350mm filled with foam for compartementing with locks	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
59.21	Heavy Duty Storage Box	Protects against dust, it must be lockable, and have a min. volume of 100 liter , e.g. to store accessories like tripods.	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
59.22	Manual Rubber bulb dust blower and cleaning kit	A manual rubber bulb is pressed manually and the airpressure released helps to remove dust e.g. from technical deviced. It fits in a a hand usually. include weight and product dimensions	Piece	12	Y	[Manufacturer/Brand] [Model] [Offered specifications]
60	Office Productivity	All in one bundle software application, Documents, Spreadsheet, Presentation, eMail Client, Note taking, one time license preferably 2021 version equivalent or higher.	License	66	Y	[Manufacturer/Brand] [Model] [Offered specifications]
61	All in One Tablet	Lightweight starting at approx 879 g, SQ3 Processor, 3GHz, 2 x USB-C, 5G high-speed connectivity 1 x nano SIM and eSIM support, Graphics Adreno Gen 3, 8GB RAM, 512GB SSD, Touch: 10-point multi-touch, Gorilla Glass 5, Screen: 13", Accelerometer, Gyroscope, Magnetometer, Ambient Colour sensor, Up to 19 hours of typical device usage, Front-facing camera with 1080p full HD video, 10.0MP rear-facing autofocus camera with 1080p HD and 4k video, WiFi 6E: 802.11ax compatible, Operating System: Windows 11 Professional or equivalent.	Piece	18	Y	[Manufacturer/Brand] [Model] [Offered specifications]
62	Accounting Application	Software application should meet the financial/accounting needs of the TVET Institution. Should track sales, expenses and profits, create and send unlimited invoices, track and manage tax including VAT, works on PC, MAC and Mobile, manage and pay bills, transact in multiple currencies, generate sales quotes, track inventory, create purchase orders, track project or job probability and recurring transactions; manage budgets. Should be the latest Version. Training and Maintenance Plan.	License	60	Y	[Manufacturer/Brand] [Model] [Offered specifications]
N/A	N/A	Items 63 – 65 not included in this Lot.	N/A	N/A	N/A	N/A

<b>Technical specifications Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
66	Desktop Operating system	Key features: Enable interoperability across multiple devices, such as desktop computers, tablets, and smartphones. Have a Menu that provides quick access to settings, folders, and programs and includes tiles. The bottom of the Menu includes a search bar that allows you to search both your local PC and the web. Other features include Continuum, which automatically optimizes the user interface, supports multiple desktops on a single monitor and provides a feature that helps organize tiles on the screen.	Piece	66	Y	[Manufacturer/Brand] [Model] [Offered specifications]

<b>Technical specifications Lot 4: Internet Connectivity</b>						
<b>Item No.</b>	<b>Item Name</b>	<b>Specifications</b>	<b>Unit</b>	<b>Quantity</b>	<b>Major Item</b>	<b>Statement of Compliance</b>
					<b>(Yes / No)</b>	<b>(Bidder's Offered Item &amp; Specification)</b>
N/A	N/A	Items 1 – 57 not included in this Lot.	N/A	N/A	N/A	N/A
58	Internet connectivity (5 years)	Latest Satellite Technology Internet Connection + Satellite Dish and Electronics; the supplier provides for the Satellite hardware and installation. Satellite unit must be installed for a fixed price. Other legacy Satellite providers are not permitted. Average download speed 200 MB, average upload speed 20 MB (both proven by measurement of local installations); unlimited data volume flat rate (bandwidth restriction after 10 TB is acceptable).	Service	3	Y	[Manufacturer/Brand] [Model] [Offered specifications]

## 4. Drawings

These Bidding Documents include **no** drawings.

## 5. Inspections and Tests

The following inspections and tests shall be performed:

**(i) The Purchaser or its representative shall have the right to inspect and/or to test the Goods to confirm their conformity to the Specifications. The Special Conditions of Contract and/or the Specifications shall specify what inspections and tests the Purchaser requires and where they are to be conducted. The Purchaser shall notify the Supplier in writing of the identity of any representatives retained for these purposes.**

**(ii) The inspections and tests may be conducted on the premises of the Supplier or its subcontractor(s), at point of delivery and at the Goods' final destination. Where conducted on the premises of the Supplier or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.**

**(iii) Should any inspected or tested Goods fail to conform to the Specifications, the Purchaser may reject them, and the Supplier shall either replace the rejected Goods or make all alterations necessary to meet the requirements of the Specifications, free of cost to the Purchaser.**

**(iv) The Purchaser's right to inspect, test and, where necessary, reject the Goods after the Goods' arrival in the Purchaser's country shall in no way be limited or waived by reason of the Goods' having previously been inspected, tested and passed by the Purchaser or its representatives prior to the Goods' shipment from the country of origin.**

**(v) Nothing in this Clause shall in any way release the Supplier from any Warranty or other obligations under the Contract.**

## 6. Distribution of Goods

The Goods shall be distributed to the following recipients and destinations:

<b>List of Recipients</b>			
<b>Recipient</b>			
<b>No.</b>	<b>Official Name</b>	<b>Address &amp; Communication</b>	<b>Contact Person</b>
1	<b>Kiambu Institute of Science and Technology (KIST)</b>	<b>P.O BOX 414 00900 KIAMBU KENYA</b>	<b>Persons to be specified at time of contract.</b>
2	<b>Nairobi Technical Training Institute (NTTI)</b>	<b>P.O. BOX 30039 00100 GPO, NAIROBI KENYA</b>	<b>Persons to be specified at time of contract.</b>
3	<b>Thika Technical Training Institute (TTTI)</b>	<b>P.O BOX 91 01000 THIKA KENYA</b>	<b>Persons to be specified at time of contract.</b>

**Distribution List:**

<b>Lot 1: LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP</b>							
<b>Item No.</b>	<b>Item Name</b>	<b>Unit</b>	<b>Total Quantity</b>	<b>Recipient 1</b>	<b>Recipient 2</b>	<b>Recipient 3</b>	<b>Lot</b>
1	LAN Access Switches	Piece	9	3	3	3	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
1.1	Lan Aggregation Switches	Piece	3	1	1	1	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
2	Routers	Piece	3	1	1	1	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP

3	Indoor WiFi	Piece	50	25	11	14	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
4	Backhaul Radio	Piece	9	3	3	3	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
5	Firewall	Piece	3	1	1	1	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
6	AntiVirus	Units	510	170	170	170	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP

7	Structured Cabling	Boxes	54	18	18	18	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
8	Single Faceplate + Keystone Jack	Piece	95	31	31	33	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
9	5 Meter UTP Cable	Piece	95	31	31	33	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
50	IP Telephony (Executive)	Piece	15	5	5	5	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP

50.1	IP Telephony (Operator Console) and Executive Phone Type II	Piece	6	2	2	2	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
51	IP Telephony (Standard)	Piece	27	10	8	9	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
52	IP Telephony (Server)	Piece	3	1	1	1	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
53	IP Telephony Conference Phone	Piece	7	2	2	3	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP

54	High range Solar powered Mesh WiFi hotspot	Piece	27	9	9	9	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
55	Mesh wifi maintenance training	Service	3	1	1	1	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
56	Mesh wifi maintenance contract, 3 years extended warranty	Service	3	1	1	1	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP
64	MFP Colour Printer	Piece	11	3	3	5	LAN, Ent. Security, Structured Cabling, Outdoor Wi-Fi, VOIP

<b>Lot 2: Data Center, CCTV, Access Control</b>							
<b>Item No.</b>	<b>Item Name</b>	<b>Unit</b>	<b>Total Quantity</b>	<b>Recipient 1</b>	<b>Recipient 2</b>	<b>Recipient 3</b>	<b>Lot</b>
10	All-in-One Cabinet	Piece	1	0	0	1	Data Center, CCTV, Access Control
11	Storage	Set	3	1	1	1	Data Center, CCTV, Access Control
12	Computer - Server	Piece	3	1	1	1	Data Center, CCTV, Access Control
13	3kVA UPS	Piece	10	4	2	4	Data Center, CCTV, Access Control
14	Cooling for All-in-One Cabinet	Piece	1	0	0	1	Data Center, CCTV, Access Control

16	Bullet Camera	Piece	68	24	22	22	Data Center, CCTV, Access Control
17	Dome Camera	Piece	20	16	2	2	Data Center, CCTV, Access Control
18	Network Video Recorders	Piece	3	1	1	1	Data Center, CCTV, Access Control
19	Display Screen	Piece	6	2	2	2	Data Center, CCTV, Access Control
20	Software Specifications - Video Management System	Piece	3	1	1	1	Data Center, CCTV, Access Control
21	Workstations - CCTV	Piece	3	1	1	1	Data Center, CCTV, Access Control

22	Entry / Exit Biometric Reader	Piece	7	3	2	2	Data Center, CCTV, Access Control
23	Software Application - Access Control Management System	Piece	3	1	1	1	Data Center, CCTV, Access Control
24	Workstation - Access Control	Piece	3	1	1	1	Data Center, CCTV, Access Control
25	Fire Suppression System	Piece	3	1	1	1	Data Center, CCTV, Access Control
26	Server Room Renovation	Piece	1	0	0	1	Data Center, CCTV, Access Control
27	Fire Rated Door	Piece	2	1	0	1	Data Center, CCTV, Access Control

28	Air Conditioning	Piece	4	2	1	1	Data Center, CCTV, Access Control
29	Rodent Repellant	Piece	7	3	2	2	Data Center, CCTV, Access Control
65	Server Operating System	Piece	3	1	1	1	Data Center, CCTV, Access Control

<b>Lot 3: Computers, Smart Classroom , Learning Automation and software licensing</b>							
<b>Item No.</b>	<b>Item Name</b>	<b>Unit</b>	<b>Total Quantity</b>	<b>Recipient 1</b>	<b>Recipient 2</b>	<b>Recipient 3</b>	<b>Lot</b>
30	Commissioning and Training	Piece	3	1	1	1	Computers, Smart Classroom , Learning Automation and software licensing
31	Computer Keyboard	Piece	40	10	20	10	Computers, Smart Classroom , Learning Automation and software licensing
32	Computer Mouse	Piece	40	10	20	10	Computers, Smart Classroom , Learning Automation and software licensing

33	Computer Monitor 27"	Piece	40	10	20	10	Computers, Smart Classroom , Learning Automation and software licensing
34	Desktop Computer	Piece	40	10	20	10	Computers, Smart Classroom , Learning Automation and software licensing
35	LCD Projector	Piece	9	2	3	4	Computers, Smart Classroom , Learning Automation and software licensing
36	Projection Screen for LCD Projector	Piece	9	2	3	4	Computers, Smart Classroom , Learning Automation and

							software licensing
37	Interactive TV with Touch-Screen	Piece	7	1	5	1	Computers, Smart Classroom , Learning Automation and software licensing
38	Mobile TV Stand / Rack	Piece	7	1	5	1	Computers, Smart Classroom , Learning Automation and software licensing
39	2 Tray Docking Station	Piece	4	1	2	1	Computers, Smart Classroom , Learning Automation and software licensing
40	Tablet Computer	Piece	23	10	11	2	Computers, Smart Classroom ,

							Learning Automation and software licensing
41	Laptop Computer	Piece	19	9	5	5	Computers, Smart Classroom , Learning Automation and software licensing
42	30-Bay Mobile School Charging Cart Station	Piece	1	0	1	0	Computers, Smart Classroom , Learning Automation and software licensing
43	Colour Laser Printer Large (all-in-one)	Piece	5	3	1	1	Computers, Smart Classroom , Learning Automation and software licensing

44	Supplies for Photocopy Machine	Set	6	2	2	2	Computers, Smart Classroom , Learning Automation and software licensing
45	External Hard Disc	Piece	11	4	5	2	Computers, Smart Classroom , Learning Automation and software licensing
46	Visualizer / Document Camera	Piece	14	2	10	2	Computers, Smart Classroom , Learning Automation and software licensing
47	Smart TV	Piece	6	2	2	2	Computers, Smart Classroom , Learning Automation and

							software licensing
48	Video-Conference Webcam	Piece	5	1	2	2	Computers, Smart Classroom , Learning Automation and software licensing
49	Document Shredder	Piece	6	2	2	2	Computers, Smart Classroom , Learning Automation and software licensing
<b>59</b>	<b>Mobile e-learning Production labs</b>						Computers, Smart Classroom , Learning Automation and software licensing
59.1	Action Cam	Piece	12	4	4	4	Computers, Smart Classroom ,

							Learning Automation and software licensing
59.2	Wireless Microphone	Piece	6	2	2	2	Computers, Smart Classroom , Learning Automation and software licensing
59.3	Interview hand adaptor for Wireless Microphone	Piece	6	2	2	2	Computers, Smart Classroom , Learning Automation and software licensing
59.4	Action Cam Kit	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing

59.5	Dual Battery charger + 2 batteries	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.6	Ergonomic camera grip / tripod	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.7	Extreme 256GB microSDXC	Piece	24	8	8	8	Computers, Smart Classroom , Learning Automation and software licensing
59.8	Chest mount for Action Camera	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and

							software licensing
59.9	Head Strap for Action Camera	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.10	SNAP Mounts PRO – Magnetic Action Camera Mount	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.11	Semi Hard Camera Case for the action cam and accessories	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.12	94" Inch tripod	Piece	6	2	2	2	Computers, Smart Classroom ,

							Learning Automation and software licensing
59.13	14.6" Tablet inch mount adapter for tripod 94inch	Piece	6	2	2	2	Computers, Smart Classroom , Learning Automation and software licensing
59.14	Flexible tripod	Piece	6	2	2	2	Computers, Smart Classroom , Learning Automation and software licensing
59.15	Accessory kit	Piece	3	1	1	1	Computers, Smart Classroom , Learning Automation and software licensing

59.16	Tablet	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.17	External HDs	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.18	Broadcast Lighting Kit, 2-Pack	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.19	Screeencast-o-matic	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and

							software licensing
59.20	Durable Waterproof Photographer Gear Case with Hard Plastic	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.21	Heavy Duty Storage Box	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
59.22	Manual Rubber bulb dust blower and cleaning kit	Piece	12	4	4	4	Computers, Smart Classroom , Learning Automation and software licensing
60	Office Productivity	License	66	22	22	22	Computers, Smart Classroom ,

							Learning Automation and software licensing
61	All in One Tablet	Piece	18	9	5	4	Computers, Smart Classroom , Learning Automation and software licensing
62	Accounting Application	License	60	20	20	20	Computers, Smart Classroom , Learning Automation and software licensing
66	Desktop Operating system	Piece	66	22	22	22	Computers, Smart Classroom , Learning Automation and software licensing

<b>Lot 4: Internet Connectivity</b>							
<b>Item No.</b>	<b>Item Name</b>	<b>Unit</b>	<b>Total Quantity</b>	<b>Recipient 1</b>	<b>Recipient 2</b>	<b>Recipient 3</b>	<b>Lot</b>
58	Internet connectivity (5 years)	Service	3	1	1	1	Internet Connectivity

## **PART 3 - Contract**

# **Section VIII. General Conditions of Contract**

## **Table of Clauses**

<b>1. Definitions</b> .....	<b>199</b>
<b>2. Contract Documents</b> .....	<b>200</b>
<b>3. Fraud and Corruption</b> .....	<b>200</b>
<b>4. Interpretation</b> .....	<b>200</b>
<b>5. Language</b> .....	<b>201</b>
<b>6. Joint Venture, Consortium or Association</b> .....	<b>201</b>
<b>7. Eligibility</b> .....	<b>201</b>
<b>8. Notices</b> .....	<b>201</b>
<b>9. Governing Law</b> .....	<b>201</b>
<b>10. Settlement of Disputes</b> .....	<b>201</b>
<b>11. Inspections and Audit by the KfW</b> .....	<b>202</b>
<b>12. Scope of Supply</b> .....	<b>202</b>
<b>13. Delivery and Documents</b> .....	<b>202</b>
<b>14. Supplier's Responsibilities</b> .....	<b>202</b>
<b>15. Contract Price</b> .....	<b>202</b>
<b>16. Terms of Payment and Reimbursement</b> .....	<b>203</b>
<b>17. Taxes and Duties</b> .....	<b>203</b>
<b>18. Performance Security</b> .....	<b>203</b>
<b>19. Copyright</b> .....	<b>204</b>
<b>20. Confidential Information</b> .....	<b>204</b>
<b>21. Subcontracting</b> .....	<b>205</b>
<b>22. Specifications, Standards and Spare Parts</b> .....	<b>205</b>
<b>23. Packing and Documents</b> .....	<b>206</b>
<b>24. Insurance</b> .....	<b>206</b>

---

<b>25. Transportation .....</b>	<b>206</b>
<b>26. Inspections and Tests .....</b>	<b>207</b>
<b>27. Liquidated Damages.....</b>	<b>208</b>
<b>28. Warranty.....</b>	<b>208</b>
<b>29. Patent Indemnity.....</b>	<b>209</b>
<b>30. Limitation of Liability.....</b>	<b>210</b>
<b>31. Change in Laws and Regulations .....</b>	<b>210</b>
<b>32. Force Majeure .....</b>	<b>210</b>
<b>33. Change Orders and Contract Amendments.....</b>	<b>211</b>
<b>34. Extensions of Time.....</b>	<b>211</b>
<b>35. Termination .....</b>	<b>212</b>
<b>36. Assignment.....</b>	<b>213</b>
<b>37. Export Restriction .....</b>	<b>213</b>

## Section VIII. General Conditions of Contract<sup>1</sup>

### 1. Definitions

1.1 The following words and expressions shall have the meanings hereby assigned to them:

- (a) “KfW” means the KfW Entwicklungsbank;
- (b) “Contract” means the Contract Agreement entered into between the Purchaser and the Supplier, together with the Contract Documents referred to therein, including all attachments, appendices, and all documents incorporated by reference therein;
- (c) “Contract Documents” means the documents listed in the Contract Agreement, including any amendments thereto;
- (d) “Contract Price” means the price payable to the Supplier as specified in the Contract Agreement, subject to such additions and adjustments thereto or deductions therefrom, as may be made pursuant to the Contract;
- (e) “Day” means calendar day;
- (f) “Completion” means the fulfillment of the Related Services by the Supplier in accordance with the terms and conditions set forth in the Contract;
- (g) “GC” means the General Conditions of Contract;
- (h) “Goods” means all of the commodities, raw material, machinery and equipment, and/or other materials that the Supplier is required to supply to the Purchaser under the Contract;
- (i) “Purchaser’s Country” is the country **specified in the Particular Conditions of Contract (PC)**;
- (j) “Purchaser” means the entity purchasing the Goods and Related Services, as **specified in the PC**;
- (k) “Related Services” means the services incidental to the supply of the goods, such as insurance, installation, training and initial maintenance and other such obligations of the Supplier under the Contract;
- (l) “PC” means the Particular Conditions of Contract;
- (m) “Subcontractor” means any natural person, private or state entity, or a combination of the above, to whom any part of the Goods to be supplied or execution of any part of the Related Services is subcontracted by the Supplier;
- (n) “Supplier” means the natural person, private or state entity, or a combination of the above, whose bid to perform the Contract has been accepted by the Purchaser and is named as such in the Contract Agreement;

---

<sup>1</sup> [Text in this Section shall not be modified.]

- (o) "The Named Place of Destination"/"Project Site," where applicable, means the place(s) **named in the PC**.
- 2. Contract Documents** 2.1 Subject to the order of precedence set forth in the Contract Agreement, all documents forming the Contract (and all parts thereof) are intended to be correlative, complementary, and mutually explanatory. The Contract Agreement shall be read as a whole.
- 3. Fraud and Corruption** 3.1 The KfW requires compliance with its policy in regard to corrupt and fraudulent practices as set forth in Appendix 1 to the PC.
- 4. Interpretation** 4.1 If the context so requires it, singular means plural and vice versa.
- 4.2 Incoterms
- (a) 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 Incoterms;
- (b) The terms CIP and other similar terms, when used, shall be governed by the rules prescribed in the current edition of Incoterms **specified in the PC** and published by the International Chamber of Commerce in Paris, France.
- 4.3 Entire Agreement
- The Contract constitutes the entire agreement between the Purchaser and the Supplier and supersedes all communications, negotiations and agreements (whether written or oral) of the parties with respect thereto made prior to the date of Contract.
- 4.4 Amendment
- No amendment or other variation of the Contract shall be valid unless it is in writing, is dated, expressly refers to the Contract, and is signed by a duly authorized representative of each party thereto.
- 4.5 Nonwaiver
- (a) Subject to GC Sub-Clause 4.5(b) below, no relaxation, forbearance, delay, or indulgence by either party in enforcing any of the terms and conditions of the Contract or the granting of time by either party to the other shall prejudice, affect, or restrict the rights of that party under the Contract, neither shall any waiver by either party of any breach of Contract operate as waiver of any subsequent or continuing breach of Contract;
- (b) Any waiver of a party's rights, powers, or remedies under the Contract must be in writing, 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.

- 4.6 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.
5. Language
- 5.1 The Contract as well as all correspondence and documents relating to the Contract exchanged by the Supplier and the Purchaser, shall be written in the language **specified in the PC**. Supporting documents and printed literature that are part of the Contract may be in another language provided they are accompanied by an accurate translation of the relevant passages in the language specified, in which case, for purposes of interpretation of the Contract, this translation shall govern.
- 5.2 The Supplier shall bear all costs of translation to the governing language and all risks of the accuracy of such translation, for documents provided by the Supplier.
6. Joint Venture, Consortium or Association
- 6.1 If the Supplier is a joint venture, consortium, or association, all of the parties shall be jointly and severally liable to the Purchaser for the fulfillment of the provisions of the Contract and shall designate one party to act as a leader with authority to bind the joint venture, consortium, or association. The composition or the constitution of the joint venture, consortium, or association shall not be altered without the prior consent of the Purchaser. The designated party to act as lead firm with full authority shall be **specified in the PC**.
7. Eligibility
- 7.1 All Goods and Related Services to be supplied under the Contract and financed by the KfW shall have their origin in any eligible source as **specified in the PC**. For the purpose of this Clause, origin means the country where the goods have been grown, mined, cultivated, produced, manufactured, or processed; or through manufacture, processing, or assembly, another commercially recognized article results that differs substantially in its basic characteristics from its components.
8. Notices
- 8.1 Any notice given by one party to the other pursuant to the Contract shall be in writing to the address **specified in the PC**. The term "in writing" means communicated in written form with proof of receipt.
- 8.2 A notice shall be effective when delivered or on the notice's effective date, whichever is later.
9. Governing Law
- 9.1 The Contract shall be governed by and interpreted in accordance with the laws of the Purchaser's Country, unless otherwise **specified in the PC**.
10. Settlement of Disputes
- 10.1 The Purchaser and the Supplier shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the Contract.

- 10.2 If, after twenty-eight (28) days, the parties have failed to resolve their dispute or difference by such mutual consultation, then either the Purchaser or the Supplier may give notice to the other party of its intention to commence arbitration, as hereinafter provided, as to the matter in dispute, and no arbitration in respect of this matter may be commenced unless such notice is given. Any dispute or difference in respect of which a notice of intention to commence arbitration has been given in accordance with this Clause shall be finally settled by arbitration. Arbitration may be commenced prior to or after delivery of the Goods under the Contract. Arbitration proceedings shall be conducted in accordance with the rules of procedure **specified in the PC**.
- 10.3 Notwithstanding any reference to arbitration herein,
- (a) The parties shall continue to perform their respective obligations under the Contract unless they otherwise agree; and
  - (b) The Purchaser shall pay the Supplier any monies due the Supplier.
- 11. Inspections and Audit by the KfW**
- 11.1 The Supplier shall keep, and shall make all reasonable efforts to cause its Subcontractors to keep accurate and systematic accounts and records, in respect of the Goods in such form and details as will clearly identify relevant time changes and costs.
- 11.2 The Supplier shall permit, and shall cause its Subcontractors and consultants to permit, the KfW and/or persons appointed by the KfW to inspect the Supplier's offices and all accounts and records relating to the performance of the Contract and the submission of the bid, and to have such accounts and records audited by auditors appointed by the KfW if requested by the KfW.
- 12. Scope of Supply**
- 12.1 The Goods and Related Services to be supplied shall be as specified in the Schedule of Requirements.
- 13. Delivery and Documents**
- 13.1 Subject to GC Sub-Clause 33.1, the Delivery of the Goods and Completion of the Related Services shall be in accordance with the Delivery and Completion Schedule specified in the Schedule of Requirements. The details of shipping and other documents to be furnished by the Supplier are **specified in the PC**.
- 14. Supplier's Responsibilities**
- 14.1 The Supplier shall supply all the Goods and Related Services included in the Scope of Supply in accordance with GC Clause 12, and the Delivery and Completion Schedule, as per GC Clause 13.
- 15. Contract Price**
- 15.1 Prices charged by the Supplier for the Goods supplied and the Related Services performed under the Contract shall not vary from the prices quoted by the Supplier in its bid, with the exception of any price adjustments **authorized in the PC**.

- 16. Terms of Payment and Reimbursement**
- 16.1 The Contract Price, including any Advance Payments, if applicable, shall be paid as **specified in the PC**.
- 16.2 The Supplier's request for payment shall be made to the Purchaser in writing, accompanied by invoices describing, as appropriate, the Goods delivered and Related Services performed, and by the documents submitted pursuant to GC Clause 13 and upon fulfillment of all other obligations stipulated in the Contract.
- 16.3 Payments shall be made promptly by the Purchaser, but in no case later than sixty (60) days after submission of an invoice or request for payment by the Supplier, and after the Purchaser has accepted it.
- 16.4 The currencies in which payments shall be made to the Supplier under this Contract shall be those in which the bid price is expressed.
- 16.5 In the event that the Purchaser fails to pay the Supplier any payment by its due date or within the period **set forth in the PC**, the Purchaser shall pay to the Supplier interest on the amount of such delayed payment at the rate **shown in the PC**, for the period of delay until payment has been made in full, whether before or after judgment or arbitrage award.
- 16.6 In the event of any reimbursement, guarantee or similar claimable payments and any insurance payments under this Contract, payment shall be effected as **specified in the PC**.
- 17. Taxes and Duties**
- 17.1 For goods manufactured outside the Purchaser's Country, the Supplier shall be entirely responsible for all taxes, stamp duties, license fees, and other such levies imposed outside the Purchaser's Country.
- 17.2 For goods manufactured within the Purchaser's country, the Supplier shall be entirely responsible for all taxes, duties, license fees, etc., incurred until delivery of the contracted Goods to the Purchaser.
- 17.3 If any tax exemptions, reductions, allowances or privileges may be available to the Supplier in the Purchaser's Country as **specified in the PC**, the Purchaser shall use its best efforts to enable the Supplier to benefit from any such tax savings to the maximum allowable extent.
- 18. Performance Security**
- 18.1 The Supplier shall, within twenty-eight (28) days of the notification of contract award, provide a performance security for the performance of the Contract in the amount **specified in the PC**.
- 18.2 The proceeds of the Performance Security shall be payable to the Purchaser pursuant to GC 16.6 (reimbursement) as compensation for any loss resulting from the Supplier's failure to complete its obligations under the Contract.

18.3 The Performance Security shall be denominated in the currency(ies) of the Contract, and shall be in one of the format **stipulated by the Purchaser in the PC**, or in another format acceptable to the Purchaser.

18.4 The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations, unless **specified otherwise in the PC**.

## 19. Copyright

19.1 The copyright in all drawings, documents, and other materials containing data and information furnished to the Purchaser by the Supplier herein shall remain vested in the Supplier, or, if they are furnished to the Purchaser directly or through the Supplier by any third party, including suppliers of materials, the copyright in such materials shall remain vested in such third party.

## 20. Confidential Information

20.1 The Purchaser and the Supplier shall keep confidential and shall not, without the written consent of the other party hereto, divulge to any third party any documents, data, or other information furnished directly or indirectly by the other party hereto in connection with the Contract, whether such information has been furnished prior to, during or following completion or termination of the Contract. Notwithstanding the above, the Supplier may furnish to its Subcontractor such documents, data, and other information it receives from the Purchaser to the extent required for the Subcontractor to perform its work under the Contract, in which event the Supplier shall obtain from such Subcontractor an undertaking of confidentiality similar to that imposed on the Supplier under GC Clause 20.

20.2 The Purchaser shall not use such documents, data, and other information received from the Supplier for any purposes unrelated to the contract. Similarly, the Supplier shall not use such documents, data, and other information received from the Purchaser for any purpose other than the performance of the Contract.

20.3 The obligation of a party under GC Sub-Clauses 20.1 and 20.2 above, however, shall not apply to information that:

- (a) The Purchaser or Supplier need to share with the KfW or other institutions participating in the financing of the Contract;
- (b) Now or hereafter enters the public domain through no fault of that party;
- (c) Can be proven to have been possessed by that party at the time of disclosure and which was not previously obtained, directly or indirectly, from the other party; or

- (d) Otherwise lawfully becomes available to that party from a third party that has no obligation of confidentiality.
- 20.4 The above provisions of GC Clause 20 shall not in any way modify any undertaking of confidentiality given by either of the parties hereto prior to the date of the Contract in respect of the Supply or any part thereof.
- 20.5 The provisions of GC Clause 20 shall survive completion or termination, for whatever reason, of the Contract.
- 21. Subcontracting**
- 21.1 The Supplier shall notify the Purchaser in writing of all subcontracts awarded under the Contract if not already specified in the bid. Such notification, in the original bid or later shall not relieve the Supplier from any of its obligations, duties, responsibilities, or liability under the Contract.
- 21.2 Subcontracts shall comply with the provisions of GC Clauses 3 and 7.
- 22. Specifications, Standards and Spare Parts**
- 22.1 Technical Specifications and Drawings
- (a) The Goods and Related Services supplied under this Contract shall conform to the technical specifications and standards mentioned in Section VII, Schedule of Requirements and, when no applicable standard is mentioned, the standard shall be equivalent or superior to the official standards whose application is appropriate to the Goods' country of origin.
- (b) The Supplier shall be entitled to disclaim responsibility for any design, data, drawing, specification or other document, or any modification thereof provided or designed by or on behalf of the Purchaser, by giving a notice of such disclaimer to the Purchaser.
- (c) Wherever references are made in the Contract to codes and standards in accordance with which it shall be executed, the edition or the revised version of such codes and standards shall be those specified in the Schedule of Requirements. During Contract execution, any changes in any such codes and standards shall be applied only after approval by the Purchaser and shall be treated in accordance with GC Clause 33.
- 22.2 Spare Parts
- (a) The Supplier shall carry sufficient inventories to assure ex-stock supply of consumables and consumable spares. Other spare parts and components shall be supplied as promptly as possible but in any case within the number of days **specified in the PC** of placement of order.
- (b) The Supplier shall be for a period of years **specified in the PC** from the date of delivery and commissioning under obligation to supply spare parts. However, the

Supplier shall, in the event of termination of production of the spare parts:

- (i) Send an advance notification to the Purchaser of the pending termination, in sufficient time to permit the Purchaser to procure needed requirements; and
- (ii) Furnish, following such termination, at no cost to the Purchaser, the blueprints, drawings and specifications of the spare parts, if and when requested.

- 23. Packing and Documents**
- 23.1 The Supplier shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their named place of destination, as indicated in the Contract. During transit, the packing shall be sufficient to withstand, without limitation, rough handling and exposure to extreme temperatures, salt and precipitation, and open storage. Packing case size and weights shall take into consideration, where appropriate, the remoteness of the goods' named place of destination and the absence of heavy handling facilities at all points in transit.
- 23.2 The packing, marking, and documentation within and outside the packages shall comply strictly with such special requirements as shall be expressly provided for in the Contract, including additional requirements, if any, **specified in the PC**, and in any other instructions ordered by the Purchaser.
- 24. Insurance**
- 24.1 Unless otherwise **specified in the PC**, the Goods supplied under the Contract shall be fully insured - in the currency(ies) of the Contract from an eligible country - against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery, in accordance with the applicable Incoterms or in the manner **specified in the PC**.
- 25. Transportation**
- 25.1 Unless otherwise **specified in the PC**, responsibility for arranging transportation of the Goods shall be in accordance with the specified Incoterms.
- 25.2 The Supplier may be required to provide any or all of the following services, including additional services, if any, **specified in PC**:
- (a) Performance or supervision of on-site assembly and/or start-up of the supplied Goods;
  - (b) Furnishing of tools required for assembly and/or maintenance of the supplied Goods;
  - (c) Furnishing of a detailed operations and maintenance manual for each appropriate unit of the supplied Goods;
  - (d) Performance or supervision or maintenance and/or repair of the supplied Goods, for a period of time agreed by the parties,

provided that this service shall not relieve the Supplier of any warranty obligations under this Contract; and

- (e) Training of the Purchaser's personnel, at the Supplier's plant and/or on-site, in assembly, start-up, operation, maintenance, and/or repair of the supplied Goods.

25.3 Prices charged by the Supplier for incidental services, if not included in the Contract Price for the Goods, shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

**26. Inspections and Tests**

26.1 The Supplier shall at its own expense and at no cost to the Purchaser carry out all such tests and/or inspections of the Goods and Related Services as are **specified in the PC**.

26.2 The inspections and tests may be conducted on the premises of the Supplier or its Subcontractor, and/or at the Goods' named place of destination, or in another place in the Purchaser's Country as **specified in the PC**. Subject to GC Sub-Clause 26.3, if conducted on the premises of the Supplier or its Subcontractor, all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Purchaser.

26.3 The Purchaser or its designated representative shall be entitled to attend the tests and/or inspections referred to in GC Sub-Clause 26.2, provided that the Purchaser bear all of its own costs and expenses incurred in connection with such attendance including, but not limited to, all traveling and board and lodging expenses.

26.4 Whenever the Supplier is ready to carry out any such test and inspection, it shall give a reasonable advance notice, including the place and time, to the Purchaser. The Supplier shall obtain from any relevant third party or manufacturer any necessary permission or consent to enable the Purchaser or its designated representative to attend the test and/or inspection.

26.5 The Purchaser may require the Supplier to carry out any test and/or inspection not required by the Contract but deemed necessary to verify that the characteristics and performance of the Goods comply with the technical specifications, codes and standards under the Contract, provided that the Supplier's reasonable costs and expenses incurred in the carrying out of such test and/or inspection shall be added to the Contract Price. Further, if such test and/or inspection impedes the progress of manufacturing and/or the Supplier's performance of its other obligations under the Contract, due allowance will be made in respect of the Delivery Dates and Completion Dates and the other obligations so affected.

26.6 The Supplier shall provide the Purchaser with a report of the results of any such test and/or inspection.

- 26.7 The Purchaser may reject any Goods or any part thereof that fail to pass any test and/or inspection or do not conform to the specifications. The Supplier shall either rectify or replace such rejected Goods or parts thereof or make alterations necessary to meet the specifications at no cost to the Purchaser, and shall repeat the test and/or inspection, at no cost to the Purchaser, upon giving a notice pursuant to GC Sub-Clause 26.4.
- 26.8 The Supplier agrees that neither the execution of a test and/or inspection of the Goods or any part thereof, nor the attendance by the Purchaser or its representative, nor the issue of any report pursuant to GC Sub-Clause 26.6, shall release the Supplier from any warranties or other obligations under the Contract.
- 27. Liquidated Damages**
- 27.1 Except as provided under GC Clause 32, if the Supplier fails to deliver any or all of the Goods by the Date(s) of delivery or perform the Related Services within the period specified in the Contract, the Purchaser may without prejudice to all its other remedies under the Contract, deduct from the Contract Price, as liquidated damages, a sum equivalent to the percentage **specified in the PC** of the delivered price of the delayed Goods or unperformed Services for each week or part thereof of delay until actual delivery or performance, up to a maximum deduction of the percentage **specified in those PC**. Once the maximum is reached, the Purchaser may terminate the Contract pursuant to GC Clause 35.
- 28. Warranty**
- 28.1 The Supplier warrants that all the Goods are new, unused, and of the most recent or current models, and that they incorporate all recent improvements in design and materials, unless provided otherwise in the Contract.
- 28.2 Subject to GC Sub-Clause 22.1(b), the Supplier further warrants that the Goods shall be free from defects arising from any act or omission of the Supplier or arising from design, materials, and workmanship, under normal use in the conditions prevailing in the country of named place of destination.
- 28.3 Unless otherwise **specified in the PC**, the warranty shall remain valid for twelve (12) months after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the named place of destination **indicated in the PC**, or for eighteen (18) months after the date of shipment from the port or place of loading in the country of origin, whichever period concludes earlier.
- 28.4 The Purchaser shall give notice to the Supplier stating the nature of any such defects together with all available evidence thereof, promptly following the discovery thereof. The Purchaser shall afford all reasonable opportunity for the Supplier to inspect such defects.

- 28.5 Upon receipt of such notice, the Supplier shall, within the period **specified in the PC**, expeditiously repair or replace the defective Goods or parts thereof, at no cost to the Purchaser.
- 28.6 If having been notified, the Supplier fails to remedy the defect within the period specified in the **PC**, the Purchaser may proceed to take within a reasonable period such remedial action as may be necessary, at the Supplier's risk and expense and without prejudice to any other rights which the Purchaser may have against the Supplier under the Contract.

## 29. Patent Indemnity

- 29.1 The Supplier shall, subject to the Purchaser's compliance with GC Sub-Clause 29.2, indemnify and hold harmless the Purchaser and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Purchaser may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract by reason of:
- (a) The installation of the Goods by the Supplier or the use of the Goods in the country where the Site is located; and
  - (b) The sale in any country of the products produced by the Goods.

Such indemnity shall not cover any use of the Goods or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Contract, neither any infringement resulting from the use of the Goods or any part thereof, or any products produced thereby in association or combination with any other equipment, plant, or materials not supplied by the Supplier, pursuant to the Contract.

- 29.2 If any proceedings are brought or any claim is made against the Purchaser arising out of the matters referred to in GC Sub-Clause 29.1, the Purchaser shall promptly give the Supplier a notice thereof, and the Supplier may at its own expense and in the Purchaser's name conduct such proceedings or claim and any negotiations for the settlement of any such proceedings or claim.
- 29.3 If the Supplier fails to notify the Purchaser within twenty-eight (28) days after receipt of such notice that it intends to conduct any such proceedings or claim, then the Purchaser shall be free to conduct the same on its own behalf.
- 29.4 The Purchaser 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.

- 29.5 The Purchaser shall indemnify and hold harmless the Supplier and its employees, officers, and Subcontractors from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of any nature, including attorney's fees and expenses, which the Supplier may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright, or other intellectual property right registered or otherwise existing at the date of the Contract arising out of or in connection with any design, data, drawing, specification, or other documents or materials provided or designed by or on behalf of the Purchaser.
- 30. Limitation of Liability**
- 30.1 Except in cases of criminal negligence or willful misconduct,
- (a) The Supplier shall not be liable to the Purchaser, whether in contract, tort, or otherwise, for any indirect or consequential loss or damage, loss of use, loss of production, or loss of profits or interest costs, provided that this exclusion shall not apply to any obligation of the Supplier to pay liquidated damages to the Purchaser; and
  - (b) The aggregate liability of the Supplier to the Purchaser, whether under the Contract, in tort or otherwise, shall not exceed the total Contract Price, provided that this limitation shall not apply to the cost of repairing or replacing defective equipment, or to any obligation of the supplier to indemnify the purchaser with respect to patent infringement
- 31. Change in Laws and Regulations**
- 31.1 Unless otherwise specified in the Contract, if after the date of twenty-eight (28) days prior to date of Bid submission, any law, regulation, ordinance, order or bylaw having the force of law is enacted, promulgated, abrogated, or changed in the place of the Purchaser's country where the Site is located (which shall be deemed to include any change in interpretation or application by the competent authorities) that subsequently affects the Delivery Date and/or the Contract Price, then such Delivery Date and/or Contract Price shall be correspondingly increased or decreased, to the extent that the Supplier has thereby been affected in the performance of any of its obligations under the Contract. Notwithstanding the foregoing, such additional or reduced cost shall not be separately paid or credited if the same has already been accounted for in the price adjustment provisions where applicable, in accordance with GC Clause 15.
- 32. Force Majeure**
- 32.1 The Supplier shall not be liable for forfeiture of its Performance Security, liquidated damages, or termination for default if and to the extent that it's delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.
- 32.2 For purposes of this Clause, "Force Majeure" means an event or situation beyond the control of the Supplier that is not

foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Supplier. Such events may include, but not be limited to, acts of the Purchaser in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.

32.3 If a Force Majeure situation arises, the Supplier shall promptly notify the Purchaser in writing of such condition and the cause thereof. Unless otherwise directed by the Purchaser in writing, the Supplier shall continue to perform its obligations under the Contract as far as is reasonably practical, and shall seek all reasonable alternative means for performance not prevented by the Force Majeure event.

**33. Change Orders and Contract Amendments**

33.1 The Purchaser may at any time order the Supplier through notice in accordance GC Clause 8, to make changes within the general scope of the Contract in any one or more of the following:

- (a) Drawings, designs, or specifications, where Goods to be furnished under the Contract are to be specifically manufactured for the Purchaser;
- (b) The method of shipment or packing;
- (c) The place of delivery; and
- (d) The Related Services to be provided by the Supplier.

33.2 If any such change causes an increase or decrease in the cost of, or the time required for, the Supplier's performance of any provisions under the Contract, an equitable adjustment shall be made in the Contract Price or in the Delivery/Completion Schedule, or both, and the Contract shall accordingly be amended. Any claims by the Supplier for adjustment under this Clause must be asserted within twenty-eight (28) days from the date of the Supplier's receipt of the Purchaser's change order.

33.3 Prices to be charged by the Supplier for any Related Services that might be needed but which were not included in the Contract shall be agreed upon in advance by the parties and shall not exceed the prevailing rates charged to other parties by the Supplier for similar services.

33.4 Subject to the above, no variation in or modification of the terms of the Contract shall be made except by written amendment signed by the parties.

**34. Extensions of Time**

34.1 If at any time during performance of the Contract, the Supplier or its subcontractors should encounter conditions impeding timely delivery of the Goods or completion of Related Services pursuant to GC Clause 13, the Supplier shall promptly notify the Purchaser in writing of the delay, its likely duration, and its cause. As soon as practicable after receipt of the Supplier's notice, the Purchaser shall evaluate the situation and may at its discretion extend the Supplier's time for performance, in

which case the extension shall be ratified by the parties by amendment of the Contract.

34.2 Except in case of Force Majeure, as provided under GC Clause 32, a delay by the Supplier in the performance of its Delivery and Completion obligations shall render the Supplier liable to the imposition of liquidated damages pursuant to GC Clause 27, unless an extension of time is agreed upon, pursuant to GC Sub-Clause 34.1.

## 35. Termination

### 35.1 Termination for Default

- (a) The Purchaser, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the Supplier, may terminate the Contract in whole or in part:
  - (i) If the Supplier fails to deliver any or all of the Goods within the period specified in the Contract, or within any extension thereof granted by the Purchaser pursuant to GC Clause 34;
  - (ii) If the Supplier fails to perform any other obligation under the Contract; or
  - (iii) If the Supplier, in the judgment of the Purchaser has engaged in fraud and corruption, as defined in GC Clause 3, in competing for or in executing the Contract.
- (b) In the event the Purchaser terminates the Contract in whole or in part, pursuant to GC Clause 35.1(a), the Purchaser may procure, upon such terms and in such manner as it deems appropriate, Goods or Related Services similar to those undelivered or not performed, and the Supplier shall be liable to the Purchaser for any additional costs for such similar Goods or Related Services. However, the Supplier shall continue performance of the Contract to the extent not terminated.

### 35.2 Termination for Insolvency

- (a) The Purchaser may at any time terminate the Contract by giving notice to the Supplier if the Supplier becomes bankrupt or otherwise insolvent. In such event, termination will be without compensation to the Supplier, provided that such termination will not prejudice or affect any right of action or remedy that has accrued or will accrue thereafter to the Purchaser.

### 35.3 Termination for Convenience

- (a) The Purchaser, by notice sent to the Supplier, may terminate the Contract, in whole or in part, at any time for its convenience. The notice of termination shall specify that termination is for the Purchaser's convenience, the extent to which performance of the

Supplier under the Contract is terminated, and the date upon which such termination becomes effective;

- (b) The Goods that are complete and ready for shipment within twenty-eight (28) days after the Supplier's receipt of notice of termination shall be accepted by the Purchaser at the Contract terms and prices. For the remaining Goods, the Purchaser may elect:
  - (i) To have any portion completed and delivered at the Contract terms and prices; and/or
  - (ii) To cancel the remainder and pay to the Supplier an agreed amount for partially completed Goods and Related Services and for materials and parts previously procured by the Supplier.

**36. Assignment**

36.1 Neither the Purchaser nor the Supplier shall assign, in whole or in part, their obligations under this Contract, except with prior written consent of the other party.

**37. Export  
Restriction**

37.1 Notwithstanding any obligation under the Contract to complete all export formalities, any export restrictions attributable to the Purchaser, to the country of the Purchaser, or to the use of the products/goods, systems or services to be supplied, which arise from trade regulations from a country supplying those products/goods, systems or services, and which substantially impede the Supplier from meeting its obligations under the Contract, shall release the Supplier from the obligation to provide deliveries or services, always provided, however, that the Supplier can demonstrate to the satisfaction of the Purchaser and of the KfW that it has completed all formalities in a timely manner, including applying for permits, authorizations and licenses necessary for the export of the products/goods, systems or services under the terms of the Contract. Termination of the Contract on this basis shall be for the Purchaser's convenience pursuant to Sub-Clause 35.3.

## Section IX. Particular Conditions of Contract

The following Particular Conditions of Contract (PC) shall supplement and / or amend the General Conditions of Contract (GC). Whenever there is a conflict, the provisions herein shall prevail over those in the GC.

<b>GC 1.1(i)</b>	The Purchaser's country is: <b>Kenya</b>
<b>GC 1.1(j)</b>	The Purchaser is: <b>Ministry of Education, State Department for Technical, Vocational Education and Training, Government of Kenya</b>
<b>GC 1.1 (o)</b>	<p>The Named Place of Destination(s) is/are:</p> <ul style="list-style-type: none"> <li>- <b>CIP Kiambu Institute of Science and Technology (KIST)</b></li> <li>- <b>CIP Nairobi Technical Training Institute (NTTI)</b></li> <li>- <b>CIP Thika Technical Training Institute (TTTI)</b></li> </ul> <p>The Project Site(s) is/are: <b>according to Bidding Document Section VII. Schedule of Requirements, 6. Distribution of Goods.</b></p>
<b>GC 4.2</b>	<p>The version edition of Incoterms shall be Incoterms 2010.</p> <p>However, the definition of the place and date associated with "delivery" is modified as follows:</p> <ul style="list-style-type: none"> <li>(a) Under "CIP" Incoterms defines "delivery" as the place and date where risk transfers from the seller to the buyer.</li> <li>(b) In these Bidding Documents, when using "CIP" and not referring to the transfer of risk, the term "delivery" shall be interpreted as the date and place where the Goods and Related Services arrive at the named place of destination, and this date shall be reflected in the Delivery and Completion Schedule.</li> </ul>
<b>GC 5.1</b>	The governing and communication language shall be English.
<b>GC 6.1</b>	The designated party to act as lead firm with full authority is: <i>[Insert complete legal name of the lead firm]</i>
<b>GC 7.1</b>	<p>Goods and services from countries under embargo from Germany, the European Union or the United Nations are not eligible.</p> <p>Goods and services from countries which are legally barred in the country of the contracting agency.</p>

<b>GC 8.1</b>	<p>For <b>notices</b>, the <b>Purchaser's</b> address shall be:  Attention: <i>[Insert full name of person, if applicable]</i>  Street Address: <b>Ministry of Education, State Department for Technical, Vocational Education and Training, Jogoo House B, Harambee Avenue</b>  City: <b>P.O.BOX 9583 00200 Nairobi</b>  Country: <b>Kenya</b>  Telephone: <i>[Include telephone number, including country and city codes]</i>  Electronic mail address: <i>[Insert e-mail address, if applicable]</i></p> <p>For <b>notices</b>, the <b>Supplier's</b> address shall be:  Attention: <i>[Insert full name of person, if applicable]</i>  Street Address: <i>[Insert street address and number]</i>  City: <i>[Insert name of city or town]</i>  ZIP Code: <i>[Insert postal ZIP code, if applicable]</i>  Country: <i>[Insert name of country]</i>  Telephone: <i>[Include telephone number, including country and city codes]</i>  Electronic mail address: <i>[Insert e-mail address, if applicable]</i></p>
<b>GC 9.1</b>	<p>The governing law shall be the law of: <b>Government of the Republic of Kenya</b></p>
<b>GC 10.2</b>	<p>The rules of procedure for arbitration proceedings pursuant to GC Clause 10.2 shall be as follows:</p> <p><i>"Clause 10.2 (a) shall be retained in the case of a Contract with a foreign Supplier and clause 10.2 (b) shall be retained in the case of a Contract with a national of the Purchaser's country."</i></p> <p><b>(a) Contract with foreign Supplier:</b></p> <p><b>GC 10.2—Any dispute, controversy or claim arising out of or relating to this Contract, or breach, termination or invalidity thereof, shall be settled by arbitration in accordance with the UNCITRAL Arbitration Rules as at present in force.</b></p> <p><b>(b) Contracts with Supplier national of the Purchaser's country:</b></p> <p>In the case of a dispute between the Purchaser and a Supplier who is a national of the Purchaser's country, the dispute shall be referred to adjudication or arbitration in accordance with the laws of the Purchaser's country.</p>
<b>GC 13.1</b>	<p><b>For Goods supplied from abroad:</b></p> <p>Upon shipment, the Supplier shall notify the Purchaser and the Insurance Company by cable or by electronic way previously agreed between the parties the full details of the shipment, including contract number, description of Goods, quantity, the mode of transport, the bill of lading number and date, place of loading, date of shipment, place of discharge,</p>

	<p>etc. The Supplier shall mail the following documents to the Purchaser, with a copy to the Insurance Company:</p> <ul style="list-style-type: none"> <li>(i) <b>Original and three (3) copies of the Supplier's invoice<sup>1</sup></b> showing Goods' and Related Services' description, quantity, unit price, total amount, number of packages, names of the exporter and the consignee; Goods and Related Services must be carefully described (accurate, specific, and complete description of merchandise);</li> <li>(ii) <b>Original negotiable and two (2) non-negotiable copies (stamped and dated according to the original) of the clean, on-board bill of lading marked "freight prepaid" or equivalent</b> (air waybill, road waybill, FCR, CMR), showing gross and net weights, volume of measurement, marks and identification, name and address of importer of consignee;</li> <li>(iii) <b>Original and three (3) copies of the packing list</b> identifying contents of each package; packing and weighing list shall describe accurately and in detail the contents of each package / case included in the shipment and give the net and gross weights;</li> <li>(iv) <b>Original insurance certificate;</b></li> <li>(v) <b>Original Manufacturer's or Supplier's warranty certificate;</b></li> <li>(vi) <b>Original inspection certificate</b>, issued by the nominated inspection agency, and the Supplier's factory inspection report;</li> <li>(vii) <b>Certified certificate of origin: original and two (2) copies;</b> origin to be certified by the Chamber of Commerce in the supplier's country; and</li> <li>(viii) Any other document that may be required in specific cases.</li> </ul> <p>The above documents shall be received by the Purchaser at least one week before arrival of the Goods at the place of arrival and, if not received, the Supplier will be responsible for any consequent expenses.</p> <p><b>For Goods from within the Purchaser's country:</b></p> <p>Upon delivery of the Goods EXW or to the transporter, the Supplier shall notify the Purchaser and submit the following documents to the Purchaser:</p> <ul style="list-style-type: none"> <li>(i) <b>Original and three (3) copies of the Supplier's invoice</b> showing Goods' and Related Services' description, quantity, unit price, and total amount;</li> <li>(ii) <b>Original delivery note, railway receipt, or truck receipt;</b></li> <li>(iii) <b>Original insurance certificate;</b></li> <li>(iv) <b>Original Manufacturer's or Supplier's warranty certificate;</b></li> <li>(v) <b>Original inspection certificate</b>, issued by the nominated inspection agency, and the Supplier's factory inspection report;</li> <li>(vi) <b>Certified certificate of origin: original and two (2) copies;</b> origin to be certified by the Chamber of Commerce in the supplier's country; and</li> <li>(vii) Any other document that may be required in specific cases.</li> </ul>
--	---

<sup>1</sup> If required for due process (e.g. customs clearance in the Purchaser's country), the invoice can be split into two invoices, one showing CIP values and the other local services (inland transportation, installation, training, etc.).

	The above documents shall be received by the Purchaser before shipping of the Goods and, if not received, the Supplier will be responsible for any consequent expenses.
<b>GC 15.1</b>	The prices charged for the Goods supplied and the related Services performed <b>shall not be adjustable</b> . If prices are adjustable, the following method shall be used to calculate the price adjustment: <b>not applicable</b> .
<b>GC 16.1</b>	GC 16.1—The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:  <b>Methods of Payment:</b> Payments shall be made using the KfW's <b>Simplified Direct Disbursement</b> procedure. <b>Payment for Goods supplied:</b> Payment of foreign currency portion shall be made in <b>Euro (EUR)</b> in the following manner:  (i) <b>Advance Payment<sup>2</sup> (optional): Twenty (20) percent of the Contract Price</b> shall be paid through the payment method stipulated above within sixty (60) days of signing of the Contract by both parties, against submission of a satisfactory Performance Guarantee, and upon submission of a claim and a satisfactory Advance Payment Guarantee for equivalent amount valid until the Goods are delivered to the final destination(s); guarantees shall be in the form provided in the bidding documents <b><i>The guarantees will have to be authenticated by the Central Bank of Kenya (CBK) through a local bank in Kenya.</i></b>  (ii) <b>On Delivery and acceptance: Eighty (80) percent of the Contract Price</b> of Goods and Related Services received shall be paid through the payment method stipulated above within sixty (60) days of receipt of the Goods and completion of the Related Services at the final destination(s) upon submission of claim supported by the presentation of the Purchaser's inspection certificate, issued by the Purchaser [which shall be issued by the Purchaser within fifteen(15) days from the successful distribution/installation/commission/training (whichever is the latter)], and subject to a satisfactory Performance Guarantee covering the warranty period.
<b>GC 16.1</b>	Payment to the Supplier of the amounts due in each currency shall be made into the following bank accounts:  <i>[Insert bank account details at the time of contract signing]</i> Account holder: _____ Account number: _____ Bank, branch: _____

<sup>2</sup> For off-the-shelf items with short EXW/CIP delivery time, this payment will be made together with the payment described in (ii); this also applies to smaller value contracts where the Supplier does not wish to receive an advance payment.

	Account number (IBAN): _____ SWIFT/BIC: _____ Bank address: _____ _____
<b>GC 16.5</b>	<b>GC 16.5 does not apply to this Contract, and no interest payments will be made.</b>
<b>GC 16.6</b>	Reimbursement payments shall be made to KfW to the following bank account: Account holder: KfW Entwicklungsbank Account number: 38 000 000 00 Branch code (BLZ): 500 204 00 Account number (IBAN): DE53 5002 0400 3800 0000 00 SWIFT/BIC: KFWIDEFF Payment to be made for the account of the <b>Ministry of Education of Kenya, for BMZ No. 2016 65 298.</b>
<b>GC 17.3</b>	The following taxes, duties and fees exemptions apply to the Contract: <b>The Project shall be exempt from indirect taxes, such as import duties, VAT and other public charges in accordance with the Kenyan law. The Project has a tax exemption certificate.</b>
<b>GC 18.1</b>	The amount of the Performance Security shall be: <b>Ten (10) percent of the Contract Price.</b>
<b>GC 18.3</b>	The Performance Security shall be in the form of: <b>A Performance Bond, to be authenticated by the Central Bank of Kenya (CBK) through a local bank in Kenya.</b> The Performance security shall be denominated in <b>the currencies of payment of the Contract, in accordance with their portions of the Contract Price.</b>
<b>GC 18.4</b>	Discharge of the Performance Security shall take place: <b>according to sub clause GC 18.4: The Performance Security shall be discharged by the Purchaser and returned to the Supplier not later than twenty-eight (28) days following the date of Completion of the Supplier's performance obligations under the Contract, including any warranty obligations</b>
<b>GC 22.2(a)</b>	The number of days shall be: <b>Fifteen (15) days from dispatch</b>
<b>GC 22.2 (b)</b>	The number of years shall be: <b>Five (5) years</b>
<b>GC 23.2</b>	The packing, marking and documentation within and outside the packages shall be: <b>Ministry of Education of Kenya</b> <b>Contract No.: ICB-09/MOE-VTT/TVET/KfW 2016 65 298/005/2023-2024</b> <b>Government of the Republic of Kenya</b>

<b>GC 24.1</b>	<p>The insurance coverage shall be as follows:</p> <p><b>Up to Kenya (final destination/s) in an amount equal to 110% of the Contract Price (CIP/EXW value plus all required local services)</b> from “warehouse to warehouse” on “All Risks” basis including War Risks and Strike Clauses. The Institute War Clauses do not apply for land transport (rail or road).</p> <p>Any payments of the insurer are to be made to KfW for the account of <b>Ministry of Education of Kenya</b> to the extent that the risk has already come to lie with the Purchaser. The insurance certificate/policy <b>must</b> include the following Clause:</p> <p>“In the event of any claim under this insurance policy, payment shall be effected to KfW, Frankfurt am Main (BIC: KFWIDEFF, BLZ/Branch Code 500 204 00), Account No. 38 000 000 00 (IBAN: DE53 5002 0400 3800 0000 00) for account of <b>Ministry of Education of Kenya, for BMZ No. 2016 65 298</b>”.</p>
<b>GC 25.1</b>	<p>Responsibility for transportations shall be as follows:</p> <p><b>The Supplier is required under the Contract to ship the Goods CIP point of entry / point of customs clearance and after completion of customs clearance by the Supplier to transport the Goods to a specified named place of destination within the Purchaser’s country, defined as the Project Site; transport to such named place of destination in the Purchaser’s country, including insurance and storage, as shall be specified in the Contract, shall be arranged by the Supplier, and related costs shall be included in the Contract Price.</b></p>
<b>GC 25.2</b>	<p>Incidental services to be provided are: <b>the selected services according to Bid Documents Section VII. Schedule of Requirements, included in the Contract Price.</b></p>
<b>GC 26.1</b>	<p>The inspections and tests shall be: <b>as specified in Bid Documents Section VII. Schedule of Requirements.</b></p>
<b>GC 26.2</b>	<p>The Inspections and tests shall be conducted at: <b>the premises of the Supplier or its subcontractor(s), at point of delivery and at the Goods’ final destination.</b></p>
<b>GC 27.1</b>	<p>The liquidated damage shall be: <b>0.5% per calendar week of the contract price.</b></p>
<b>GC 27.1</b>	<p>The maximum amount of liquidated damages shall be: <b>10% of the contract price.</b></p>
<b>GC 28.3</b>	<p>The period of validity of the Warranty shall be: <b>as per GC 28.3 (minimum period, except for items specified as requiring extended Warranty according to Bid Document Section VII. Schedule of Requirements 3. Technical Specifications).</b></p> <p>For purposes of the Warranty, the named place(s) of destination(s) shall be: <b>according to Bid Document Section VII. Schedule of Requirements 6. Distribution of Goods.</b></p>

<b>GC 28.5 and GC 28.6</b>	The period for repair or replacement shall be: <b>30 days.</b>
--------------------------------	--

## Attachment 1 to Particular Conditions of Contract

# KfW Policy – Sanctionable Practice – Social and Environmental Responsibility

### 1) Sanctionable Practice

The PEA and the Contractors (including all members of a Joint Venture and proposed or engaged Subcontractors) must observe the highest standard of ethics during the Tender Process and performance of the Contract.

By signing the Declaration of Undertaking the Contractors declare that (i) they did not and will not engage in any Sanctionable Practice likely to influence the Tender Process and the corresponding Award of Contract to the PEA's detriment, and that (ii) in case of being awarded a Contract they will not engage in any Sanctionable Practice.

Moreover, KfW requires to include in the Contracts a provision pursuant to which Contractors must permit KfW and in case of financing by the European Union also to European institutions having competence under European law to inspect the respective accounts, records and documents relating to the Tender Process and the performance of the Contract, and to have them audited by auditors appointed by KfW.

KfW reserves the right to take any action it deems appropriate to check that these ethics rules are observed and reserves, in particular, the rights to:

- (a) reject an Offer for Award of Contract if during the Tender Process the Bidder who is recommended for the Award of Contract has engaged in Sanctionable Practice, directly or by means of an agent in view of being awarded the Contract;
- (b) declare misprocurement and exercise its rights on the ground of the Funding Agreement with the PEA relating to suspension of disbursements, early repayment and termination if, at any time, the PEA, Contractors or their legal representatives or Subcontractors have engaged in Sanctionable Practice during the Tender Process or performance of the Contract without the PEA having taken appropriate action in due time satisfactory to KfW to remedy the situation, including by failing to inform KfW at the time they knew of such practices.

KfW defines, for the purposes of this provision, the terms set forth below as follows:

<b>Coercive Practice</b>	The impairing or harming, or threatening to impair or harm, directly or indirectly, any person or the property of the person with a view to influencing improperly the actions of a person.
<b>Collusive Practice</b>	An arrangement between two or more persons designed to achieve an improper purpose, including influencing improperly the actions of another person.
<b>Corrupt Practice</b>	The promising, offering, giving, making, insisting on, receiving, accepting or soliciting, directly or indirectly, of any illegal payment or undue advantage of any nature, to or by any person, with the intention of influencing the actions of any person or causing any person to refrain from any action.

- Fraudulent Practice** Any action or omission, including misrepresentation that knowingly or recklessly misleads, or attempts to mislead, a person to obtain a financial benefit or to avoid an obligation.
- Obstructive Practice** Means (i) deliberately destroying, falsifying, altering or concealing evidence material to the investigation or the making of false statements to investigators, in order to materially impede an official investigation into allegations of a Corrupt Practice, Fraudulent Practice, Coercive Practice or Collusive Practice, or threatening, harassing or intimidating any Person to prevent them from disclosing their knowledge of matters relevant to the investigation or from pursuing the investigation, or (ii) any act intended to materially impede the exercise of KfW's access to contractually required information in connection with an official investigation into allegations of a Corrupt Practice, Fraudulent Practice, Coercive Practice or Collusive Practice.
- Sanctionable Practice** Any Coercive Practice, Collusive Practice, Corrupt Practice, Fraudulent Practice or Obstructive Practice (as such terms are defined herein) which is unlawful under the Financing Agreement.

## **2) Social and Environmental Responsibility**

Projects financed in whole or partly in the framework of Financial Cooperation have to ensure compliance with international Environmental, Social, Health and Safety (ESHS) standards (including issues of sexual exploitation and abuse and gender based violence) Contractors in KfW-financed projects shall consequently undertake in the respective Contracts to:

- (a) comply with and ensure that all their Subcontractors and major suppliers, i.e. for major supply items comply with international environmental and labour standards, consistent with applicable law and regulations in the country of implementation of the respective Contract and the fundamental conventions of the International Labour Organisation<sup>3</sup> (ILO) and international environmental treaties and;
- (b) implement any environmental and social risks mitigation measures, as identified in the environmental and social impact assessment (ESIA) and further detailed in the environmental and social management plan (ESMP) as far as these measures are relevant to the Contract and implement measures for the prevention of sexual exploitation and abuse and gender-based violence..

---

<sup>3</sup> In case ILO conventions have not been fully ratified or implemented in the Employer's country the Applicant/Bidder/Contractor shall, to the satisfaction of the Employer and KfW, propose and implement appropriate measures in the spirit of the said ILO conventions with respect to a) workers grievances on working conditions and terms of employment, b) child labour, c) forced labour, d) worker's organisations and e) non-discrimination.

## **Attachment: Price Adjustment Formula<sup>1</sup>**

**Not applicable.**

---

<sup>1</sup> Delete if no price adjustment is permitted in GC 15.1.

## Section X. Contract Forms

This Section contains forms which, once completed, will form part of the Contract. The forms for Performance Security and Advance Payment Security, when required, shall only be completed by the successful Bidder after contract award.

### Table of Forms

<b>Letter of Acceptance .....</b>	<b>225</b>
<b>Contract Agreement .....</b>	<b>226</b>
<b>Performance Security .....</b>	<b>228</b>
<b>Advance Payment Security.....</b>	<b>230</b>

## Letter of Acceptance

*[Use letterhead paper of the Purchaser]*

*[Insert date]*

To: *[Insert name and address of the Supplier]*

Subject: **Notification of Award Contract No. *[Insert contract number]***

This is to notify you that your Bid dated *[Insert date]* for execution of the *[Insert name of the contract and identification number, as given in the PC]* for the Accepted Contract Amount of *[Insert contract price in numbers and words including code and name of currency]*, as corrected and modified in accordance with the Instructions to Bidders is hereby accepted by the undersigned Purchaser.

You are requested to furnish the Performance Security within twenty-eight (28) days in accordance with the Conditions of Contract, using for that purpose the Performance Security Form included in Section X, Contract Forms, of the Bidding Documents.

Authorized Signature:

---

Name and Title of Signatory:

---

Name of Institution:

---

**Attachment: Contract Agreement<sup>1</sup>**

---

<sup>1</sup> If the Purchaser cannot send the contract agreement together with the letter of acceptance, it must be sent electronically to the Supplier within a reasonable period of time not exceeding ten days; for the purpose of issuing the required Performance Guarantee, the supplier must be advised of the Contract date.

## Contract Agreement

THIS AGREEMENT made

the *[Insert number]* day of *[Insert: month]*, *[Insert: year]*.

BETWEEN

- (1) *[Insert complete name of Purchaser]*, a/an *[Insert description of type of legal entity, for example, an agency of the Ministry of .... of the State of {Insert name of Country of Purchaser}, or corporation incorporated under the laws of {Insert name of Country of Purchaser}]* and having its principal place of business at *[Insert address of Purchaser]* (hereinafter called "the Purchaser"), 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]* (hereinafter called "the Supplier").

WHEREAS the Purchaser invited bids for certain Goods and ancillary services, viz., *[Insert brief description of Goods and Services]* and has accepted a Bid by the Supplier for the supply of those Goods and Services in the sum of *[Insert Contract Price in words and figures, expressed in the Contract currency(ies)]* (hereinafter called "the Contract Price").

NOW THIS AGREEMENT WITNESSETH AS FOLLOWS:

1. In this Agreement words and expressions shall have the same meanings as are respectively assigned to them in the Contract documents referred to.
2. The following documents shall be deemed to form and be read and construed as part of this Agreement. This Agreement shall prevail over all other contract documents.
  - (a) The Letter of Acceptance;
  - (b) The Bid Submission Form and Appendix to Bid Submission Form (including the signed Declaration of Undertaking);
  - (c) The Addenda Nos. \_\_\_\_\_ (if any);
  - (d) Particular Conditions of Contract, including Annex 1;
  - (e) General Conditions of Contract;
  - (f) The Specification (including Schedule of Requirements and Technical Specifications);
  - (g) The completed Bidding Forms (including Price Schedules); and
  - (h) Any other document listed in GC as forming part of the Contract.
3. In the event of any discrepancy or inconsistency within the Contract documents, then the documents shall prevail in the order listed above.
4. In consideration of the payments to be made by the Purchaser to the Supplier as specified in this Agreement, the Supplier hereby covenants with the Purchaser to provide the Goods and Services and to remedy defects therein in conformity in all respects with the provisions of the Contract.
5. The Purchaser hereby covenants to pay the Supplier in consideration of the provision of the Goods and Services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the Contract at the times and in the manner prescribed by the Contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with the laws of *[Insert the name of the Contract governing law country]* on the day, month and year indicated above.

For and on behalf of the Purchaser<sup>2</sup>:

Signed: *[Insert signature]*

In the capacity of *[Insert title or other appropriate designation]*

In the presence of *[Insert identification of official witness]*

For and on behalf of the Supplier:

Signed: *[Insert signature of authorized representative(s) of the Supplier]*

In the capacity of *[Insert title or other appropriate designation]*

In the presence of *[Insert identification of official witness]*

---

<sup>2</sup> In cases where the Purchaser is different from the Beneficiaries of the Contract, it may be advisable to have authorized representatives from the Beneficiary Institutions sign as witnesses, accepting the Goods to be supplied.

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

## Performance Security

**Beneficiary:** *[Insert name and Address of Purchaser]*

**Date:** *[Insert date of issue]*

**PERFORMANCE GUARANTEE No.:** *[Insert guarantee reference number]*

**Guarantor:** *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[Insert name and address of supplier, which in the case of a joint venture shall be the name and address of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[Insert reference number of the contract]* dated *[Insert contract date]* with the Beneficiary, for the supply of *[Insert object of the contract and brief description of Goods and related Services]* (hereinafter called "the Contract"). Furthermore we understand that, according to the conditions of the Contract, a performance guarantee is required for *[Insert percentage in words and figures]* % of the contract price.

Waiving all objections and defences, we, as Guarantor, hereby irrevocably and independently undertake to pay the Beneficiary, any sum or sums not exceeding in total an amount of *[Insert guarantee amount and currency in words and figures]*<sup>3</sup> upon receipt by us of the Beneficiary's first demand, supported by the Beneficiary's statement, whether in the demand itself or 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 for the demand or the sum specified therein.

*[For guarantees issued in foreign currency insert the following:]*

In the event of any claim under this guarantee, payment shall be effected to KfW, Frankfurt am Main (BIC: KFWIDEFF, BLZ 500 204 00), account no. 38 000 000 00 (IBAN: DE53 5002 0400 3800 0000 00), for the account of *[Insert name of the Purchaser and the Purchaser's country]*.

*[For guarantees issued in local currency insert the following:]*

In the event of any claim under this guarantee, payment shall be effected to *[Insert the account on which payments are to be made]*, for the account of *[Insert name of the Purchaser and the Purchaser's country]*.

This guarantee shall expire not later than *[Insert expiry date]*<sup>4</sup>.

By this date we must have received any claims for payment by letter or encoded telecommunication.

It is understood that you will return this guarantee to us on expiry or after payment of the total amount to be claimed hereunder.

<sup>3</sup> This guarantee shall be issued in the contract currency only.

<sup>4</sup> Pursuant to GC Clause 18.4 the guarantee shall be valid for at least 28 days from the date of contractual contract completion (including warranty obligations).

*[As preferred option regarding guarantee rules insert<sup>5</sup>: 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.]*

---

Place, date

---

Guarantor's authorized signature(s)

---

<sup>5</sup> In the case the issuing bank will not add the preferred option, the following must be added instead: This guarantee is governed by the laws of *[Insert country of jurisdiction]*. Note: the country of jurisdiction shall be the country where the bank's branch issuing the guarantee is physically located.

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

## Advance Payment Security

**Beneficiary:** *[Insert name and Address of Purchaser]*

**Date:** *[Insert date of issue]*

**ADVANCE PAYMENT GUARANTEE No.:** *[Insert guarantee reference number]*

**Guarantor:** *[Insert name and address of place of issue, unless indicated in the letterhead]*

We have been informed that *[Insert name and address of supplier, which in the case of a joint venture shall be the name and address of the joint venture]* (hereinafter called "the Applicant") has entered into Contract No. *[Insert reference number of the contract]* dated *[Insert contract date]* with the Beneficiary, for the supply of *[Insert object of the contract and brief description of Goods and related Services]* (hereinafter called "the Contract"). Furthermore we understand that, according to the conditions of the Contract, an advance payment in the sum of *[Insert amount and currency in words and figures]*<sup>6</sup>, representing *[Insert percentage in words and figures]* % of the contract price, is to be made against an advance payment guarantee.

Waiving all objections and defences, we, as Guarantor, hereby irrevocably and independently undertake to pay the Beneficiary, any sum or sums not exceeding in total an amount of *[Insert guarantee amount and currency in words and figures]* upon receipt by us of the Beneficiary's first demand, supported by the Beneficiary's statement, whether in the demand itself or 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 for the demand or the sum specified therein.

The advance payment guarantee shall come into force and effect as soon as the advance payment has been credited to the Applicant on its account. Minor deductions of the above mentioned amount notably due to bank fees shall have no effect on the entry into force.

*[For guarantees issued in foreign currency insert the following:]*

In the event of any claim under this guarantee, payment shall be effected to KfW, Frankfurt am Main (BIC: KFWIDEFF, BLZ 500 204 00), account no. 38 000 000 00 (IBAN: DE53 5002 0400 3800 0000 00), for the account of *[Insert name of the Purchaser and the Purchaser's country]*.

*[For guarantees issued in local currency insert the following:]*

In the event of any claim under this guarantee, payment shall be effected to *[Insert the account on which payments are to be made]*, for the account of *[Insert name of the Purchaser and the Purchaser's country]*.

This guarantee shall expire not later than *[Insert expiry date]*.

By this date we must have received any claims for payment by letter or encoded telecommunication.

It is understood that you will return this guarantee to us on expiry or after payment of the total amount to be claimed hereunder.

---

<sup>6</sup> This guarantee must be issued in the contract currency only.

*[As preferred option regarding guarantee rules insert<sup>7</sup>: 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.]*

---

Place, date

---

Guarantor's authorized signature(s)

---

<sup>7</sup> In the case the issuing bank will not add the preferred option, the following must be added instead: This guarantee is governed by the laws of *[Insert country of jurisdiction]*. Note: the country of jurisdiction shall be the country where the bank's branch issuing the guarantee is physically located.