



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

**KfW Development Bank  
German Financial Cooperation with Kenya Promotion of Youth Employment and  
Vocational Training in Kenya – Phase II  
BMZ No. 2020 65 068**

**National Competitive Bidding**

**Bidding Documents for :**

**Supply, Delivery, Installation, Initial Training and Ancillary Services of Training  
Equipment for three (3) TVET Institutes  
KfW Procurement No. BMZ No. 511383**

**GOODS G01**

**Lot 1: Automotive & Mechatronics  
Lot 2: Solar & Photovoltaic**

**Purchaser:  
Ministry of Education (MoE)  
State Department of Technical, Vocational Education and Training  
Nairobi, Kenya**

**April 2025**

**NCB-01/MOE-TVET/TVET/KfW 2020 65 068/2024-2025**

## INVITATION FOR BIDS

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

Promotion of Youth Employment and Vocational Training in Kenya, Phase II

BMZ No. 2020 65 068

22nd April, 2025

Tender Reference: **NCB-G01/MOE-TVET/TVET/KfW 2020 65 068/2024-2025**

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, Phase II”, and intends to apply part of the proceeds toward payments under the contract(s) for *Supply, Delivery, Installation, Initial Training and Ancillary Services of Training Equipment for three (3) TVET Institutes*

Lot 1: Automotive & Mechatronics

Lot 2: Solar & Photovoltaic

The Ministry of Education, State Department for Technical, Vocational Education and Training, now invites sealed Bids from eligible Bidders for *the Supply, Delivery, Installation, Initial Training and Ancillary Services of Training Equipment*

*for three (3) TVET Institutes, including delivery, installation and related training at: Bumbe, Nyamira and Kitale. This tender includes 2 Lots. Lot 1 Automotive & Mechatronics; Lot 2: Solar & Photovoltaic.* Bidding will be conducted by means of the National 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: [Tender-TVET-II\\_Kenya@gopa-infra.de](mailto:Tender-TVET-II_Kenya@gopa-infra.de)

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>. 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: [Tender-TVET-II-Kenya@gopa-infra.de](mailto:Tender-TVET-II-Kenya@gopa-infra.de)

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 **11th June, 2025 at 11.00 am (East Africa Time)**. 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 the amounts** indicated below.

<b>G01 Lot 1 – Automotive &amp; Mechatronics:</b>	<b>10,000 EUR</b>
<b>G01 Lot 2 – Solar &amp; PV:</b>	<b>5,000</b>
<b>EUR</b>	

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*



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# **PART 1 – Bidding Procedures**

# Section I. Instructions to Bidders

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

### A. General

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|--|--|
| 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> <p style="padding-left: 20px;">(a) The term “in writing” means communicated in written form (e.g. by mail, e-mail, fax, telex) with proof of receipt;</p> <p style="padding-left: 20px;">(b) If the context so requires, “singular” means “plural” and vice versa; and</p> <p style="padding-left: 20px;">(c) “Day” means calendar day.</p> |
| 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</p>  |

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

business for and on behalf of Bidder and any and all its members, if the Bidder is a JV, 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 DDP (Delivered, Duty Paid), 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 DDP 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 DDP 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 DDP 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.

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| <b>36. Comparison of Bids</b>   | 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.  |
| <b>37. Purchaser's Right to Accept Any Bid, and to Reject Any or All Bids</b> | 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

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| <b>38. Award Criteria</b>  | 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.  |
| <b>39. Purchaser's Right to Vary Quantities at Time of Award</b> | 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 <b>specified in the BDS</b> , and without any change in the unit prices or other terms and conditions of the bid and the Bidding Documents.  |
| <b>40. Notification of Award</b>                                 | 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.

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<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.

*[Instructions for completing the Bid Data Sheet are provided, as needed, in the notes in italics mentioned for the relevant ITB Clauses.]*

ITB Clause Reference	A. General
ITB 1.1	The number of the Invitation for Bids is: <b>[NCB-01/MOE-TVET/TVET/KfW 2020 65 068/2024-2025]</b>
ITB 1.1	<p>The Purchaser is:</p> <p><b>Ministry of Education (MoE) State Department of Technical, Vocational Education and Training Jogoo House B, Harambe Avenue, Nairobi Kenya</b></p>
ITB 1.1	<p>The name and identification number of the NCB are:</p> <p><b>Supply, Delivery, Installation, Initial Training and Ancillary Services of Training Equipment for three (3) TVET Institutes</b></p> <p><b>KfW Procurement No. 511383 (BMZ No. 2020 65 068)</b></p> <p>The NCB comprises the following two (2) Lots:</p> <ul style="list-style-type: none"> <li>• <b>G01 Lot 1 – Automotive &amp; Mechatronics</b> equipment for the following institutes and workshops (WS) and labs:  <b>Kitale National Polytechnic (Kitale NP):</b> Metal Basic WS, Agricultural Mechatronics WS, Welding WS, and Hydraulics &amp; Pneumatics Lab  <b>Bumbe Technical Training Institute (Bumbe TTI):</b> Metal Basic WS, Small Engine WS, Automotive WS, and Welding WS  <b>Nyamira National Polytechnic (NP):</b> Mechanic Plant Metal WS</li> <li>• <b>G01 Lot 2 – Solar &amp; PV</b> equipment for the following institutes:  <b>Kitale NP:</b> PV Laboratory &amp; Training Field; and Thermal Solar Laboratory &amp; Training Field  <b>Bumbe TTI:</b> Thermal Solar Lab  <b>Nyamira NP:</b> Thermal Solar Lab</li> </ul> <p>Bidders shall submit Bids for one or both Lots. and may be awarded 1 (one) or more Lots. Refer to ITB 35.4.</p> <p>The number, identification and names of the lots (contracts) comprising this NCB are: <b>[NCB-G01/MOE-TVET/TVET/KfW 2020 65 068/2024-2025]</b></p>

ITB 2.1	<p>The name of the Project is:</p> <p><b>Promotion of Youth Employment and Vocational Training in Kenya – Phase II (BMZ No. 2020 65 068)</b></p>
	<p><b>B. Contents of Bidding Documents</b></p>
ITB 7.1	<p>For <b>clarification of bid purposes</b> only, the Purchaser's address is:</p> <p>Address: Principal Secretary State Department for TVET Jogoo Hse B 8<sup>th</sup> Floor Harambee Avenue</p> <p>City: Nairobi, Kenya</p> <p>ZIP Code: Box 9583 00200</p> <p>Country: Kenya</p> <p>Attention HSCM – Head Supply Chain Management Through room 703 Uchumi Hse 7<sup>th</sup> Floor</p> <p>Electronic mail address: <a href="mailto:Tender-TVET-II-Kenya@gopa-infra.de">Tender-TVET-II-Kenya@gopa-infra.de</a></p> <p>Only written communication is permitted. Requests for clarification should be received on the above email address no later than:</p> <p style="text-align: center;"><b>14 days before the deadline for Bid submission</b></p> <p>Site Visit: Though not mandatory, Bidders are encouraged to visit the 3 sites to check the local conditions, specifically the access conditions for heavy and lengthy delivery trucks. The locations of the 3 delivery sites are indicated below:</p> <p><b>Location 1: Kitale National Polytechnic (Kitale NP)</b> Address: Kitale Municipality along Elgon Rd, 1 km from Kitale town</p> <p><b>Location 2: Bumbe Technical Training Institute (Bumbe TTI)</b> Address: Funyula</p> <p><b>Location 3: Nyamira National Polytechnic (Nyamira NP)</b> Address: Itibo Ward, Nyamira North Sub-County, Nyamira</p>
ITB 7.1	<p>Web page: <a href="https://www.education.go.ke/">https://www.education.go.ke/</a></p>
	<p><b>C. Preparation of Bids</b></p>
ITB 10.1	<p>The language of the bid is: <b>English</b>.</p> <p>All correspondence exchange shall be in the English language. Language for translation of supporting documents and printed literature is</p>

	English.
<b>ITB 11.1 (k)</b>	<p>The Bidder shall submit the following mandatory documents in its bid:</p> <p>For all lots:</p> <ul style="list-style-type: none"> <li>• A <b>Power of Attorney</b> to sign and stamp the Bid on behalf of the Bidder/JV</li> <li>• A <b>company profile</b> of the Bidder or each JV partner (should not exceed 10 pages)</li> <li>• <b>Certificate of Incorporation / Registration</b></li> <li>• <b>JV / Consortium Agreement</b> with a clear indication of roles and responsibilities of each member (if any)</li> </ul> <p><b>Audited financial statements</b> for 2021, 2022, and 2023. If the Bidder is located outside of the Purchaser's country, an official local representative should be appointed</p>
<b>ITB 13.1</b>	Alternative Bids shall not be considered.
<b>ITB 14.5</b>	The prices quoted by the Bidder shall not be adjustable.
<b>ITB 14.7</b>	The Incoterms edition is Incoterms 2020.
<b>ITB 14.8 (b)</b> <b>(i)</b>	<p>Named Place of Destination:</p> <p><b>DDP Kitale National Polytechnic (Kitale NP)</b></p> <p><b>DDP Bumbe Technical Training Institute (Bumbe TTI)</b></p> <p><b>DDP Nyamira National Polytechnic (Nyamira NP)</b></p>
<b>ITB 15.1</b>	<p>The prices shall be quoted by the bidder in: <b>Euro (EUR)</b></p> <p>The Bidder is not 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.</p>
<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 required for major items as defined in Section VII, Schedule of Requirements.
<b>ITB 17.2 (b)</b>	After sales service is required for major items as defined in Section VII, Schedule of Requirements.
<b>ITB 18.1</b>	The bid validity period shall be 126 days.
<b>ITB 18.3 (a)</b>	The bid price shall be adjusted by the following factor: not applicable
<b>ITB 19.1</b>	<p>A Bid Security is required.</p> <p>If a Bid Security shall be required, the amount shall be:</p> <p><b>G01 Lot 1 – Automotive &amp; Mechatronics: 10,000 EUR</b></p> <p><b>G01 Lot 2 – Solar &amp; PV: 5,000 EUR</b></p> <p>Bidders have the option of submitting one Bid Security for all lots (for</p>

	the combined total amount of all lots) for which Bids have been submitted.
<b>ITB 19.3 (c)</b>	Other types of acceptable securities: none
<b>ITB 19.9</b>	Not applicable
<b>ITB 20.1</b>	<p>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></p> <ul style="list-style-type: none"> <li>• one (1) copy, and</li> <li>• one (1) electronic copy on USB stick: soft-copy of bid document</li> </ul> <p>Note: All documentation including technical specification provided on USB must be in pdf in searchable format.</p>
<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>ITB21.1</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 style="text-align: center;"><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><b>For bid submission purposes, the original Bid and Copy should be <u>delivered</u> to:</b></p> <p>Address: Principal Secretary  State Department for TVET  Jogoo Hse B 8<sup>th</sup> Floor  Delivered to Ground Floor, <b>Tender Box TVET II “State Department for technical, vocational education and training / KfW – Phase II”</b>  Harambee Avenue</p> <p>City: Nairobi  Country: Kenya</p> <p><b>The deadline for the submission of bids is:</b>  <b>Date: 11th June, 2025</b>  <b>Time: 11.00 a.m. East Africa Time (EAT)</b></p>
<b>ITB 25.2</b>	<p><b>The public bid opening session shall take place on/at:</b>  <b>Date: 11<sup>th</sup> June, 2025</b>  <b>Time: 11.00 am East Africa Time (EAT)</b></p>
<b>ITB 25.2</b>	The bid opening shall take place at:

	<p>Address:</p> <p>Ministry of Education          State Department for Technical, Vocational Education and Training,          Jogoo House B, Harambee Avenue,          10th Floor at the conference room          P.O.BOX 9583 00200 Nairobi, Kenya</p> <p>No minimum number of bids is required in order to proceed to bid opening.</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.</p> <p>For items other than major items, for which no bid price is provided in the respective price schedule(s), the bid price of the most expensive qualified and substantially responsive bidder for such items shall be used in the comparison of otherwise qualified and substantially responsive bids. In the absence of another bidder pricing these items, the Project Consultant may estimate the market value of such items if delivered to the Purchaser's country. This correction procedure is limited to a max. of five (5) per cent of the total bid price in any given lot.</p>
<b>ITB 33.1</b>	<p>The currency that shall be used for bid evaluation and comparison purposes shall be: <b>EURO (EUR)</b></p> <p>The source of exchange rate shall be: Not applicable.</p>
<b>ITB 34.1</b>	<p>A margin of domestic preference shall not apply.</p> <p>If domestic preference shall be a bid-evaluation factor, the application methodology shall be specified in Section III, Qualification and Evaluation Criteria.</p>
	<b>F. Award of Contract</b>
<b>ITB 39.1</b>	<p>The maximum percentage by which quantities may be increased is: <b>20 %</b></p> <p>The maximum percentage by which quantities may be decreased is: <b>20 %</b></p>
<b>ITB 41.3</b>	<p>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></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.*

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## 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. *[These requirements shall only be included if applicable, and those not required may be deleted from Section VII].*

## 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 (2019, 2020, 2021, 2022, and 2023).	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>Submission of audited balance sheets or if not required by the law of the Bidder's country, other financial statements acceptable to the Purchaser, for the last 3 years (2021, 2022, 2023) 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>  <math>((\text{Current Assets}) / (\text{Current Liabilities})) \geq 1.1</math></p> <p><b>b) Indebtedness ratio <math>\leq 80\%</math></b>  <math>((\text{Total Liabilities}) \times 100 / (\text{Total Assets})) \leq 80\%</math></p>	Must meet requirement	N/A	Must meet requirement	N/A	Form FIN – 3.1, with attachments

<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>							
3.2	<b>Average Annual Supplier Turnover</b>	Minimum average annual supplier turnover of equivalent to --..G01 Lot 1: 700,000 EUR --..G01 Lot 2: 280,000 EUR , calculated as total certified payments received for contracts in progress and/or completed within the last 3 years (2021, 2022, 2023), divided by 3 years	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>	The required liquidity / access to credit of a Bidder must be at least equal to the Bidder's Bid price; an original letter / statement by the Bidder's banker(s) must be attached for this purpose, showing the current available liquidity / access to credit; this statement must not be older than thirty (30) days at the date of Bid closing. If several lots are offered, access to liquidity shall be cumulative accordingly.	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)

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	<b>Similar Experience</b>	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 5 years (2019, 2020, 2021, 2022, 2023): 3 contracts, each of a minimum value, equivalent to: -..G01 Lot 1: 420,000 EUR -..G01 Lot 2: 200,000 EUR	Must meet requirement	Must meet requirement <sup>6</sup>	N/A	N/A	Form EXP - 4.1 (one per contract)

Table 5					
Qualification Criteria			Compliance Requirements		Documentation
No.	Subject	Requirement	Single Entity	Joint Venture (existing or intended)	Submission Requirements

<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.

				<b>All Parties Combined</b>	<b>Each Member</b>	<b>One Member</b>	
<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 Bidder's must have qualified personnel to satisfy the requirements.	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 must confirm availability of spare parts.	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

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

Not applicable

## 2. Evaluation (ITB 35)

### 2.1 Evaluation Criteria (ITB 35.6)

**Not applicable**

### 2.2 Multiple Contracts(ITB 35.4)

The Purchaser shall award contract to the Bidder that offers the lowest evaluated 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.

This is the Bid that meets the Qualification Criteria and has been determined to be:

- (a) substantially responsive to the Bidding document, and
- (b) the **lowest evaluated cost**.

## 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)	
2	ITB 11.1 (a)(ii)	Declaration of Undertaking	YES	(Section IV. Bidding Forms)	
3	ITB 11.1 (a)(iii)	Power of Attorney (authorized signatory)	NO	(free format)	
4	ITB 11.1 (b)(iii)	Bid Security	YES	(Section IV. Bidding Forms)	
5	ITB 11.1 (a)(iv)	Form ELI - 1.1: Bidder Information Form (and Attachments)	YES	(Section IV. Bidding Forms)	
6	ITB 11.1 (a)(iv)	Form ELI - 1.2: Bidder's JV Information Form (if applicable) (and Attachments)	YES	(Section IV. Bidding Forms)	
7	ITB 11.1 (a)(iv)	Form CON - 2: Historical Contract Non-Performance, Pending Litigation and Litigation History	YES	(Section IV. Bidding Forms)	
8	ITB 11.1 (a)(iv)	Form FIN - 3.1: Financial Situation and Performance (and Attachments: Financial Documents)	YES	(Section IV. Bidding Forms)	
9	ITB 11.1 (a)(iv)	Form FIN - 3.2: Average Annual Turnover	YES	(Section IV. Bidding Forms)	
10	ITB 11.1 (a)(iv)	Liquidity Letter issued by the Bidder's banker	NO	(free format)	
11	ITB 11.1 (a)(iv)	Form EXP - 4.1: Experience (One form per contract)	YES	(Section IV. Bidding Forms)	
12	ITB 11.1 (a)(iv)	Technical Capacity (CVs)	NO	(free format)	
13	ITB 16.4	Form SPA - 5.1: Spare Parts	YES	(Section IV. Bidding Forms)	
14	ITB 17.2 (b)	Local Agent (if applicable) (CVs, company description, certificate of registration, tax registration)	NO	(free format)	
15	ITB 11.1 (b)(ii)	Price Schedule: Goods Manufactured Outside the Purchaser's Country, to be Imported (if applicable) (One schedule per Lot)	YES	(Section IV. Bidding Forms)	
16	ITB 11.1 (b)(ii)	Price Schedule: Goods Manufactured Outside the Purchaser's Country, Already Imported (if applicable) (One schedule per Lot)	YES	(Section IV. Bidding Forms)	
17	ITB 11.1 (b)(ii)	Price Schedule: Goods Manufactured in the Purchaser's Country (if applicable) (One schedule per Lot)	YES	(Section IV. Bidding Forms)	
18	ITB 17.2 (a)	Manufacturer's Authorization (required for listed items specified in Technical Specifications > "Manufacturer's Authorization")	YES (MA)	(Section IV. Bidding Forms)	
		(General requirement: submit documentation as authorized dealer, distributor, reseller)	NO	(free format)	
19	GCC 13	List of Goods and Delivery Schedule	YES	(Section VII.	

				<i>Schedule of Requirements</i>	
20	ITB 11.1 (b)(ii)	Lot 1: Technical Specifications <i>(if applicable) (and Attachments: documentary evidence - catalogues/leaflets/literature)</i>	YES	<i>(Section VII. Schedule of Requirements)</i>	
21	ITB 11.1 (b)(ii)	Lot 2: Technical Specifications <i>(if applicable) (and Attachments: documentary evidence - catalogues/leaflets/literature)</i>	YES	<i>(Section VII. Schedule of Requirements)</i>	
22	-	<i>Any other supporting documentation, determined as relevant by the Bidder to their bid.</i>	NO	<i>(free format)</i>	

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## 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 (Appendix1 to the Declaration of Undertaking) in addition to the Declaration of Undertaking at the time of*

<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.

*award 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>: \_\_\_\_\_

<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.

Signature:

Dated:

**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))

**Appendix 1**

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

I hereby confirm with my signature that:

1. I make this declaration in my name/on my own account;
2. I duly pay taxes that I am obliged to pay under the tax law of my country of residence;
3. I am not currently involved in tax law court proceedings, nor have I been in the past;
4. I will duly pay taxes that may arise from the provision of contracted services;
5. I have filled in all the information and statements of this confirmation in full, accurately in terms of content and that they are up to date at this time.

.....	.....	.....
(Place)	(Date)	(Name of the person)
		.....
		(Signature)

## 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]*

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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>
1. Attached are copies of original documents of <i>[Check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association) and/or documents of registration of the legal entity named above, in accordance with ITB 4.5; <input type="checkbox"/> In case of JV, letter of intent to form JV or JV agreement, in accordance with ITB 4.1; <input type="checkbox"/> In case of a state-owned enterprise or institution, in accordance with ITB 4.3 documents establishing: a) Legal and financial autonomy; b) Operation under commercial law; c) Establishing that the Bidder is not dependent agency of the Purchaser.
2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

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]*

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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>
1. Attached are copies of original documents of <i>[Check the box(es) of the attached original documents]</i> <input type="checkbox"/> Articles of Incorporation (or equivalent documents of constitution or association) of the legal and/or documents of registration of the legal entity named above, in accordance with ITB 4.1 and ITB 4.5; <input type="checkbox"/> In case of a state-owned enterprise or institution, in accordance with ITB 4.3 documents establishing: a) Legal and financial autonomy; b) Operation under commercial law; c) Establishing that the Bidder is not dependent agency of the Purchaser. 2. Included are the organizational chart, a list of Board of Directors, and the beneficial ownership.

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]*

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Non-Performed Contracts in accordance with Section III, Qualification and Evaluation Criteria			
<input type="checkbox"/> Contract non-performance did not occur since 1st January <i>[insert current year number less 5]</i> specified in Section III, Qualification and Evaluation Criteria, Qualification, subclause 2.1. <b>Or <i>[Tick as appropriate]</i></b>			
<input type="checkbox"/> Contract(s) not performed since 1st January <i>[insert current year number less 5]</i> 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>

<b>Pending Litigation, in accordance with Section III, Qualification and Evaluation Criteria and Requirements</b>			
<input type="checkbox"/> No pending litigation in accordance with Section III, Qualification and Evaluation Criteria and Requirements, Qualification, subclause 2.3. <b>Or [Tick as appropriate]</b>			
<input type="checkbox"/> Pending litigation in accordance with Section III, Qualification and Evaluation Criteria, Qualification, subclause 2.3 as indicated below:			
<b>Year of dispute</b>	<b>Amount in dispute (currency)</b>	<b>Contract Identification</b>	<b>Total Contract Amount (currency), €-equivalent (exchange rate)</b>
<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]*

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### 1. Financial Data

Type of Financial Information in <i>[Insert Bidder's home currency]</i>	Historic information for last available three (3) years <sup>1</sup> (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			

<sup>1</sup> *[In circumstances where it is of utmost importance that Bidders have a longer company history, this requirement may be increased to up to five (5) years; if such a longer period is chosen, please amend the revised number of years throughout this table].*

## 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>2</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>2</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]*

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<b>Annual Turnover Data</b>			
<b>Year</b>	<b>Currency &amp; Amount</b>	<b>Exchange Rate</b>	<b>€-equivalent</b>
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]*

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

Similar Contract No. <i>[Insert specific number]</i> of <i>[Total number of contracts]</i> required	Information	
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]*

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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 90 days of placement of order; (ii) will be for a period of 5 (five) 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]*

NCB No.: 511383

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

(Group C bids, goods to be imported) <sup>1</sup> <b>Currencies in accordance with ITB Sub-Clause 15</b>						Date: <i>[Insert]</i>	
						NCB No.: 511383	
						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 DDP <i>[Insert destination (port-of-entry)]</i>	Quantity and Physical Unit	Unit Price & Currency DDP <i>[Insert named place of destination]</i> 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) DDP 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]*

<sup>1</sup> Delete if domestic preference is not applicable.

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

(Group C bids, goods already imported) <sup>1</sup>								Date: <i>[Insert]</i>	
<b>Currencies in accordance with ITB Sub-Clause 15</b>								NCB No.: 511383	
								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 <i>[Insert final destination(s) in the Purchaser’s country]</i>	Quantity and Physical unit	DDP 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) DDP 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

<sup>1</sup> Delete if domestic preference is not applicable.

(Group A and B bids) <sup>2</sup>							Date: <i>[Insert]</i>	
Currencies in accordance with ITB Sub-Clause 15							NCB No.: 511383	
							Lot No.: <i>[Insert, if applicable]</i>	
							Page <i>[Insert]</i> of <i>[Insert]</i>	
1	2	3	4	5	6	7 <sup>3</sup>	8	9
Line Item No.	Description of Goods	Delivery Time in Days at named place of destination	Quantity and Physical unit	Unit Price & Currency DDP	Unit Price & Currency Related Services (handling, commissioning, and where applicable installation and training in accordance with ITB 14.8(a)(ii))	Cost of local labor, raw materials, transportation, insurance and components with origin in the Purchaser's Country % of Col. 5	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 DDP unit price &amp; currency]</i>	<i>[Insert currency &amp; unit price for all required local services]</i>	<i>[Insert cost of local labor, raw material, transportation, insurance and components from within the Purchase's country as a % of the CIP price per line item]</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) DDP 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]*

<sup>2</sup> Delete if domestic preference is not applicable.

<sup>3</sup> This column is not required if domestic preference is not applicable.

*[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 National Competitive Bidding No. 511383.

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]*

NCB No.: 511383

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.
<b>Fraudulent Practice</b>	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

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<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

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## 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]
<i>[Insert item or lot no]</i>	<i>[Insert description of Goods]</i>	<i>[Insert quantity of item to be supplied]</i>	<i>[Insert physical unit for the quantity]</i>	<i>[Insert named place of destination, typically the point-of-entry / place of customs clearance]</i>	<i>[Insert the number of days following the date of signature of the Contract]</i>	<i>[Insert the number of days following the date of signature of the Contract]</i>	<i>[Insert the number of days following the date of signature of the Contract]</i>
G01-Lot 1	Metal Basic WS Agricultural Mechatronics WS Welding WS Hydraulic & Pneumatic WS Metal basic WS Smal Engine WS Automotive WS Welding WS	-	-	Kitale NP Kitale NP Kitale NP Kitale NP Bumbe TTI Bumbe TTI Bumbe TTI Bumbe TTI	90 days	150 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.

	Mechanical Plant Metal WS			Nyamira NP			
G01- Lot 2	Photovoltaic equipment Thermal solar equipment Thermal Solar equipment Thermal Solar equipment			Kitale NP Kitale NP Bumbe TTI Nyamira NP	90 days	150 days	

## 2. List of Related Services and Completion Schedule

*[This table shall be filled in by the Purchaser. The Required Completion Dates should be realistic, and consistent with the required Goods Delivery Dates]*

<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>
Lot 1 - 2	<i>Inland transportation</i>	As per ITB & BoQ		Place at relevant Institute	As per contract
Lot 1 - 2	<i>Installation</i>	As per ITB & BoQ		Place at relevant Institute	As per contract
Lot 1 - 2	<i>Commissioning</i>	As per ITB & BoQ		Place at relevant Institute	As per contract
Lot 1 - 2	<i>Initial training</i>	As per ITB & BoQ		Place at relevant Institute	As per contract
Lot 1 - 2	<i>[Servicing and maintenance]<sup>2</sup></i>	As per ITB & boQ		Place at relevant Institute	As per contract
	<i>[List of spare parts]<sup>2</sup></i>	None			
	<i>[List of consumables]<sup>2</sup></i>	None			

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

### 3. Technical Specifications

*[For each item or related services, a detailed technical specification shall be provided here. It shall specify whether installation, commissioning, initial training, user's manual, warranty period, servicing, maintenance, spare parts, consumables should be included or not in the Price.]*

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

List of Bid Packages		
Lot	Institute	Description
1	Kitale	Metal Basic (ME)
		Agricultural Mechatronics (AM)
		Welding (WE)
		Hydraulics & Pneumatics (HP)
2	Kitale	Photovoltaik (PV)
		Thermal Solar (TS)
Lot	Institute	Description
1	Bumbe	Metal Basic (ME)
		Automotive / small engine (AE)
		Welding (WE)
2	Bumbe	Thermal Solar (TS)
Lot	Institute	Description
1	Nyamira	Mechanic Metal Plant (ME)
2	Nyamira	Thermal Solar (TS)

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.

### Standards and Certifications

Standards and certifications can be a helpful requirement and complement specifications.

Standards typically refer to goods, and required goods' compliance with specific standards; if national standards are used, the Purchaser should add 'or equivalent'.

If specific items are to comply with certain standards, these standards shall be stated in the Purchaser's specifications for each applicable item. Purchasers shall refrain from requesting Bidders to state to which standards their products comply, but must instead specify specific standards if so required.

Certifications typically refer to manufacturers and/or bidders.

In some cases it may be beneficial to require either the bidder or the manufacturer, or both, to be certified; the most common certification is the ISO 9000 series, and ISO 9001 in particular; however, under ISO 9001 a variety of processes can be certified (e.g. management processes, production processes, etc.), which are not always relevant for the Purchaser, and do generally not reflect on the quality of Goods offered. For specific cases (example: medical

equipment/supplies: ISO 13485) manufacturer/bidder-specific certifications shall be required by the Purchaser.

### **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. In case mandatory consumables and/or spare parts are required for the proper functioning of equipment for an initial given period of time, these are clearly listed/specified in the technical specifications within the BoQ.

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

The bidder's local agent, in the Purchaser's country, 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 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**

The following table stipulates the responsibilities of the Purchaser and Supplier; the Supplier shall coordinate with the Beneficiary Institutions (with copy to the

Purchaser) all work preparations to be done by the Beneficiary Institutions before delivery takes place.

**For All Lots:**

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 DDP place of entry, and after customs clearance to each Project Site at the final locations in workshops, laboratories and class-rooms	Supplier
		Storage on site in an easily accessible storage room at the Purchaser's premises	Supplier
		Lifting and handling on site	Supplier
		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
4	Electric Wiring	Up to the required sockets at point of installation	Purchaser
		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

**Installation for Major Items**

All items must be brand new, fully assembled and functional while delivering at final destinations, or must be assembled on site.

**Initial User Training for Major Items**

As per BoQ and technical specifications

### **User Manuals**

User manuals are a standard and must be delivered by the supplier in English language.

### **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

#### Labour & Safety

Suppliers shall comply with and ensure that all their staff, local agents, subcontractors and subconsultants comply during installation/commissioning with core labour standards, consistent with applicable laws and regulations in the Purchaser's country, including the fundamental conventions of the International Labour Organisation (ILO).

During installation/commissioning the Supplier must ensure that all involved staff is wearing protective gear (hard hats, protective shoes, protective clothing, protective gloves, etc.).

#### Environment & Health

Suppliers shall comply with and ensure that all their staff, local agents, subcontractors and subconsultants comply during installation/commissioning with international environmental standards, consistent with applicable laws and regulations in the Purchaser's country, including international environmental treaties.

1.1	G01 - LOT 1	METAL BASIC WORKSHOP KNP_WS_ME_1	KITALE NP	
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.1.1	<b>Combination workbench</b>		6	pcs
	Workbench height: 850 mm Drawer load capacity at least: 75 kg Worktop dimension (L x D) 2000 x 750 Drawer extension (partial/full extension) min.: 90% With 2 times 4 drawers mirrored left and right Drawer height 2 x 2 x 150 mm and 2 x 2 x 200 mm, inner dimension (W x D) approx. 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity approx.: 800 kg Worktop 40 mm thick made of beech multiplex, waterproof glued			
1.1.2	<b>Bench vice 125 mm</b>		12	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
1.1.3	<b>Height adjuster for vice</b>		12	pcs
	Suitable for Bench vice Pos. 1.1.2. Built-in gas pressure spring for weight compensation during height adjustment of the vice. Quick clamping with safety clamping lever.			
1.1.4	<b>Tool set workbench</b>		12	set
	Workbench tool set including: • Vernier calliper 150 mm • Try square 100x70 mm • Protractor, measuring range 0° - 180°, sheet diameter 150 mm, length 200 mm • Spring dividers 150 mm • Scriber, Steel rule 300 mm, Tape measure 2 m • Hand files flat with handle, cut 1, 150 and 250 mm • Hand files flat with			

1.1	G01 - LOT 1	METAL BASIC WORKSHOP	KITALE NP	
		KNP_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<p>handle, cut 3, 150 and 250 mm• Three square file with handle, cut 1, 250 mm• Three square file with handle, cut 3, 200 mm• Square file with handle, cut 1, 250 mm• Square file with handle, cut 3, 150 mm• Round file with handle, cut 1, 250 mm• Round file with handle, cut 3, 200 mm• Set of key files 6 pcs• Hacksaw frame for 300 mm saw blades• File brush• Set of screwdrivers flat and PH• Set of hand tin snips (left, right, hole)• Flat chisel 150 mm• Pin punches dia 3 and 6 mm• Center punch 120 mm• engineer's hammer 500 g• Three edge hollow scraper 200 mm• Flat scraper 250 mm• Bench hand brush 280 mm• Safety goggles, clear, Leather working gloves</p>			
1.1.5	<b>Tool set team</b>		2	set
	<p>• 2 Vernier calliper 300 mm• 3 Open ended spanner sets, 10 pieces, 6x7 - 27x30 mm• 2 Double ended ring spanner sets, 10 pieces, 6x7 - 27x30 mm• 3 Hexagon ball-end key sets, 8 pieces, 2 - 10 mm• Socket set 1/2 inch, including drives accessories, 8 - 32 mm• 3 Combination pliers 180 mm• 3 Grooved water pump pliers 250 mm• 3 Side cutter 160 mm• 3 Taper punch set and center punch, 2 - 6 mm, 120 mm• 2 Number punch set, size 6 mm in box• 2 Letter punch set, size 6 mm in box• Set of radius gauges 1-7, 7,5-15,15,5-25 mm• 3 Soft mallet with polyurethane inserts• 5 Plastic oiler with brass tube 150 ml• 3 Jobber drill sets in case, 1 -13 mm, incremental step 0,5 mm, including core diameters for M4 - M12• Taper sheet and tube drill set in case, 3 pieces, 3 - 30,5 mm• 3 Countersink sets in case, 90°, size 6,3 - 25 mm• 3 Counterbore sets in case, M3 - M10, through hole size• 3 Hand reamer sets in case, size 3 - 10 H7• Machine reamer sets in case, size 3 - 10 H7• 3 Thread cutting sets in metal case, hand tap sets (3 pieces) size M3 - M12, dies size M3 - M12, tap wrenches size 1-2, die stocks suitable to all dies• Thread cutting set for fine threads, 8x1 - 20x1,5 mm, hand tap sets (2 pieces), dies, tap wrenches and die</p>			

1.1	G01 - LOT 1	METAL BASIC WORKSHOP KNP_WS_ME_1	KITALE NP	
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	stocks as mentioned above• Pipe thread cutting set, size 1/8' - 1', hand tap sets (2 pieces), dies, tap wrenches, and die stocks as mentioned above			
1.1.6	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	Double grinding machine for metal with base frame Technical data: • Wheel-ø: 200x25x32mm • Speed: 2850 rev/min • Motor appr.: 1,25 kW• 230V Accessories: • Corundum grinding wheel+spare wheel • Silicium carbide grinding wheel+ spare wheel • Safety shield • Solid Tool rest and adjustable on both wheels • Coolant container • Wheel dresser			
1.1.7	<b>Column drilling machine with machine vice</b>		1	pcs
	Drilling Performance in Steel E 335 St 60: 26 mm, Drilling Performance in Cast-iron 30 mm, Tapping Performance in Steel M 20, in Cast-iron: M24, Tool Taper (short spindle): MT 4 Table Clamping Area appr.: 400 x 420 mm, T-Slots, number x width at least: 2 x 14 mm, Distance spindle/table min./max. appr.: 65/800 mm, Column Diameter at least: 115 mm, Z-Travel of Spindle appr.: 125 mm, Feeds: 0,05-0,15 mm/Rev, Speed Range appr. 75 - 2000 rpm, 8 steps Performance approx.: 1,0 / 1,6 kW, With coolant pump device appr. 40 W Delivered with machine vice, Accuracy 0.1mm, Jaws hardened and with prism for round material clamping, Clamping range: 200mm Jaw width 150mm With clamping lever			

1.1	G01 - LOT 1	METAL BASIC WORKSHOP	KITALE NP	
		KNP_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.1.8	<b>Bench drilling machine</b>		1	pcs
	Drilling performance in steel 25 mmChuck 1 - 16 mm / B 18Morse cone MK 2Spindle speed appr. (16) 150 - 2800 rpmSwivel drilling table -45° to +45°Distance spindle / table max. 400 mmDistance spindle / base plate appr. 600 mmQuill stroke appr. 80 mmColumn diameter appr. 70 mmTable size / T-slot size appr. 300 x 300 mm / 16 mmMotor output power S1 100% appr. 0.75 kW / 400 VScope of delivery:Quick-action chuck 1 - 16 mm / B 18Chuck mandrel MK 2 / B 18Digital quill stroke indicatorLED machine lightClockwise-counterclockwise rotationT-slot stonesOperating toolsBase frame, height appr. 820 mm, with storage compartment, lockable door and chip trayDrill vice, jaw width 125 mm, opening 100 mm, Steel jaws with prisms			
1.1.9	<b>Electric hand drill machine</b>		4	pcs
	Impact drill, Forwards / reverse, appr. 600 W, impact, Metal quick-change chuck 1.5 - 13 mm, additional handle, drilling depth stop, transport case, speed range appr. 0-2800, bore Ø steel/concrete/ wood 10/13/25			
1.1.10	<b>Granite surface plate with stand</b>		1	pcs
	Natural granite control surface plate Width×length appr. 630 x 630 Accuracy class 0 Flatness 0,007 mm Plate thickness min. 70 mm delivered with underframe/cabinet, height 900 mm, load capacity min. 500 kg			
1.1.11	<b>Heigh gauge with scriber</b>		1	pcs

1.1	G01 - LOT 1	METAL BASIC WORKSHOP	KITALE NP	
		KNP_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Precision Vernier height gauge Solid rest with ground surface Scale hardened and ground Scribing needle tip made of carbide Scale: 0.02mm With adjustment screw and fine adjustable measuring scale Height: 300mm In wooden box			
1.1.12	<b>Steel cabinet 500 x 1000 x 2000</b>		9	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal. 3 x Metal Basic WS, 2 x Electric Basic WS, 4 x Electronics WS			
1.1.13	<b>First aid kit</b>		3	set
	Content Especially for construction and for the workshop: 1 x resuscitator 1 x splinter tweezers 8 cm 1 x Steri wash eyewash 5 x 20 ml 2 x aluminum compress 8 x 10 cm General First Aid Articles: 1x rescue blanket gold-silver 1x first aid scissors 18 cm 2x triangular cloth 1x disposable gloves vinyl powdered (pair) 1x non-woven cloth 10 pieces 1x color key 2x foil bag 2x FFP2 mouth-nose protection 1x wet wipes 1x cold instant compress 14 x 18 cm 1x safety sign first aid sticker 10 x 10 cm Assortment of plasters 3x 14-piece plaster set for case 1x adhesive plaster 2.5 cm x 5 m General Association Articles 1x bandage cloth 60 x 80 cm 1x quick wound dressing 6 x 8 cm 3x quick wound dressing 8 x 10 cm 1x quick wound dressing 10 x 12 cm 2x elastic fixation bandage 6 cm x 4 m 2x elastic fixation bandage 8 cm x 4 m 3x wound compress sterile 10 x 10 cm 2x eye compress 55 x 70 mm 2 x Metal Basic WS, 1 x Electric Basic WS			
1.1.14	<b>HSS bimetallic sawblade</b>		100	pcs
	wavy teeth 24TPI length 300 mm			

1.1	G01 - LOT 1	METAL BASIC WORKSHOP	KITALE NP	
		KNP_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.1.15	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.1.16	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.1.17	<b>Sheet metal guillotine shear</b>		1	pcs
	Manual sheet metal shears in sturdy steel construction incl. manual hold-down device and adjustable material stop Max. cutting length 1000 mm Sheet steel (St.37) max. 1.5 mm Material stop 0 - 600 mm			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<b>Metal Cutting</b>			
1.2.1.1	<b>Steel cabinet 500 x 1000 x 2000</b>		6	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			
1.2.1.2	<b>Drawer cabinet</b>		2	pcs
	Welded sheet steel construction Housing: Powder-coated 8 x drawer, height approx.in mm: 2×50, 3×100.2×150.1×200 Dimensions in mm (WxDxH) approx.: 700 x 740 x 1050 Single pull-out lock Drawer pull-out: 90% at least Drawer slides: ball bearings Load capacity drawer(s) in kg at least: Drawers with 50 mm height – 70 kg, Drawers from 75 mm cover height – 100 kg Drawer usable dimensions in mm approx.: 600 x 600			
1.2.1.3	<b>Combination workbench</b>		8	pcs
	Workbench height: 850 mm Drawer load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension) min.: 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) approx. 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity approx.: 200 kg Worktop 40 mm thick made of beech multiplex, waterproof glued 2 x AM WS, 6 x Electronics WS			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.1.4	<b>Bench vice 125 mm</b>		2	pcs
	<p>Bench vice, of cast iron (jaw width 125mm)</p> <ul style="list-style-type: none"> <li>• high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide.</li> <li>• spindle fully enclosed and protected from dirt</li> <li>• spindle with trapezoidal thread</li> <li>• hardened jaws, serrated/smooth ground, reversible and exchangeable.</li> <li>• with flat-milled anvil</li> <li>• delivered with a set of soft jaws</li> </ul>			
1.2.1.5	<b>Wet and dry vacuum cleaner</b>		1	pcs
	<p>Industrial vacuum cleaner (wet and dry)            Compact all-purpose vacuum cleaner            With socket and automatic switch-on for connection of an electric power tool (maximum 2000 W). Accessories and cable storage directly on the cleaner.            Supplied with suction hose, curved hand tube, wet filter and washable filter element (PET), hose storage, and cable storage.</p>			
1.2.1.6	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	<p>Double grinding machine for metal with base frame</p> <p>Technical data:</p> <ul style="list-style-type: none"> <li>• Wheel-ø: 200x25x32mm</li> <li>• Speed: 2850 rev/min</li> <li>• Motor appr.: 1,25 kW</li> <li>• 230V</li> </ul> <p>Accessories:</p> <ul style="list-style-type: none"> <li>• Corundum grinding wheel+spare wheel</li> <li>• Silicon carbide grinding wheel+ spare wheel</li> <li>• Safety shield</li> <li>• Solid Tool rest and adjustable on both wheels</li> </ul>			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• Coolant container</li> <li>• Wheel dresser</li> </ul>			
1.2.1.7	<b>Measuring tool set</b>		3	set
	1 Vernier calliper size 150 mm 1 Vernier calliper size 300 mm 1 Micrometer size 0 – 25 mm 1 Micrometer size 25 - 75 mm 1 Flat angle size 100×70 mm 1 Hair straightedge size 100 mm long 1 Flexible steel scale Gr. 200 mm long 1 Spring divider size 120 mm long, with interchangeable tips Delivered in wooden box			
1.2.1.8	<b>Safety goggles clear</b>		6	pcs
	Material: lens: Polycarbonate Color lens: clear Anti-scratch coated Rubberized, flexible straps Elastic noseband			
1.2.1.9	<b>Heavy-duty shelf</b>		4	pcs
	Height = 180 cm Width = 160 cm Depth = 60 cm Number of levels 5 with sturdy wooden floors Load capacity per level: 250 kg Frame galvanised, boltless assembly			
1.2.1.10	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid			

Deleted[Monteiro, Carolina]: ,

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.2.1.11	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.2.1.12	<b>Cooling lubricant</b>		2	pcs
	Mineral oil-containing, water-emulsifiable cooling lubricant concentrate Boric acid and amine-free cooling lubricant, free of - formaldehyde releasers Stable emulsions with preparation waters from 15 °dH to 25 °dH; hard water Stable up to approx. 60 °dH in use. Low-foaming emulsion in the recommended preparation waters. Good cooling and rinsing capacity. Canister with 20 liters of concentrate			
<b>1.2.2</b>	<b>Assembling/repair</b>			
1.2.2.1	<b>Battery charger</b>		1	pcs

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Phase type: Single-phase Voltage: 230 V Frequency: 50/60 Hz Power appr.: 1000 W Battery voltage: 12/24 V Maximum current: 45 A Charging current min.: 30 A Maximum surge current: 300 A Charging capacity: 450 Ah 15h			
1.2.2.2	<b>Bottle Jack</b>		3	pcs
	Capacity 10 t Minimum height 200mm Hydraulic lift at least 260 mm Extension screw at least 60 mm Maximum height at least 520 mm			
1.2.2.3	<b>Tripod axle stand</b>		8	pcs
	Capacity 6 t At least 5 height positions Height appr. (min/max) 400/750 mm			
1.2.2.4	<b>Workbench with drawers</b>		4	pcs
	Workbench with 5 drawers (lockable) Worktop multiplex, finished with clear UV varnish (L x D x T) approx. 1500 x 750 x 40 mm Steel underframe, powder coated 5 drawers, height 1 x 50 mm, 2 x 100 mm, 1 x 150 mm, 1 x 300 mm Load capacity drawers (50 mm height/ >50 mm height) at least 70 kg/100 kg			
1.2.2.5	<b>Bench vice 125 mm</b>		4	pcs

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Bench vice, of cast iron (jaw width 125mm) <ul style="list-style-type: none"> <li>• high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide.</li> <li>• spindle fully enclosed and protected from dirt</li> <li>• spindle with trapezoidal thread</li> <li>• hardened jaws, serrated/smooth ground, reversible and exchangeable.</li> <li>• with flat-milled anvil</li> <li>• delivered with a set of soft jaws</li> </ul>			
1.2.2.6	<b>Thread cutting set with tap sets, M3-20</b>		2	set
	Content: 1 each tap set, 3 pieces: Size M3; M4; M5; M6; M8; M10; M12; M14; M16; M18; M20 1 each die: Size M3; M4; M5; M6; M8; M10; M12; M14; M16; M18; M20 1 each adjustable tap wrench: Size 1.1/2; 3 1 each die stock: Size 20×5; 20×7; 25×9; 30×11; 38×14; 45×18 1 thread gauge: Size M/W 1 screwdriver: Size 3×60 1 tap wrench with ratchet: Size 85; 110			
1.2.2.7	<b>Fine thread cutting set in a metal case MF3-20</b>		1	set
	Content: 1 set each hand tap: Size 3×0.35; 4×0.5; 5×0.5; 6×0.75; 8×1; 10×1; 12×1.5; 14×1.5; 16×1.5; 18×1.5; 20×1.5; 1 each die: Size 4×0.5; 5×0.5; 6×0.75; 8×1; 10×1; 12×1.5; 14×1.5; 16×1.5; 18×1.5; 20×1.5; 1 each adjustable tap wrench: Size 1; 3 1 each die stock: Size 20×7; 25×9; 30×11; 38×10; 45×14			
1.2.2.8	<b>Pneumatic impact wrench</b>		4	pcs

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Drive square 3/4 " Release torque max. 1950 Nm Torque max. 1100 Nm Speed max. 7300 min <sup>-1</sup> Working pressure 6.3 bar Air flow appr. 150 l/min Cold-insulated handle One-handed operation for right- and left-handers Incl. coupling plug Exhaust air ducting downwards through the handle			
1.2.2.9	<b>Impact hexagon socket set</b>		4	pcs
	Sturdy shape especially for use with electric or compressed air impact wrenches. With cross hole and snap ring groove for securing sockets. Internal square Square drive 3/4 in 1 each hexagon socket: 19; 21; 22; 23; 24; 26; 27; 30; 32; 33; 36; 38; 41 mm Extension: 125 mm Universal joint: 1 pc. "O" ring / locking pin: 2 pcs./ 2 pcs Stored in a sturdy metal box.			
1.2.2.10	<b>Torque Wrench with ratchet 200 Nm</b>		2	pcs
	For right- and left-hand tightening Torque measuring accuracy max. ±3 % Overall length appr. 450 mm Torque range 40 Nm - 200 Nm Scale graduation, 1 graduation = 1 Nm Weight appr. 1,000 g Square drive 1/2 in Display analogue Release signalling acoustic and haptic			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.2.11	<b>Torque Wrench with ratchet 800 Nm</b>		2	pcs
	For right- and left-hand tightening Torque measuring accuracy max. $\pm 4$ % Overall length appr. 1000 mm Torque range 160 Nm - 800 Nm Scale graduation, 1 graduation = 5 Nm Square drive 3/4 in Display analogue Release signalling acoustic and haptic			
1.2.2.12	<b>Wheel cross wrench</b>		2	pcs
	3/4 inch mount, wrench sizes 24, 27, 32 mm Leg length appr. 375mm			
1.2.2.13	<b>Electric hand drill machine</b>		2	pcs
	Impact drill, Forwards / reverse, appr. 750 W, impact, Metal quick-change chuck 1.5 - 13 mm, additional handle, drilling depth stop, transport case, speed range 0-3250, bore $\emptyset$ steel/concrete/ wood 10/13/25			
1.2.2.14	<b>Blind riveting pliers</b>		3	set
	Set including mouthpieces, open-end wrenches, rivet nut pull mandrels Suitable for blind rivets, blind rivet nuts and cavity metal dowels Fold-out legs for increased force requirements 5 mouthpieces in different sizes can be stowed away in the fold-out handle Features: For blind rivet $\emptyset$ : 2.4 mm, 3.2 mm, 4.0 mm, 4.8 mm, 6.4 mm For rivet nuts: M4, M5, M6, M8, M10 Length: 510mm Delivery: incl. 5 mouthpieces, collection container, spare rivet head, 5			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	rivet nut pull mandrels, 3 open-end wrenches, hex wrench 6mm, plastic case			
1.2.2.15	<b>Blind rivets set</b>		5	set
	650 pieces, Ø 3.2-4.8mm x length 6-14mm Head made of aluminum, rivet mandrel made of galvanized steel In plastic sorting box			
1.2.2.16	<b>Jobber drill set</b>		3	set
	Drill range 1-13 mm HSS uncoated Drill type N, point angle 118 degrees Number of drills 29 Tapping hole dia. 3,3; 4,2; 6,8; 10,2 mm Incremental steps of drills 0,5 mm Delivered in case			
1.2.2.17	<b>Angle grinder</b>		2	pcs
	Disk diameter 125 mm Power min. 750 W Idle speed 11,000 rpm Thread of grinding shaft M14 Lockable switch			
1.2.2.18	<b>Steel cabinet 500 x 1000 x 2000</b>		2	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.2.19	<b>Hydraulic workshop press</b>		1	pcs
	Hydraulic press (pillar press) with base frame Working area Min force: 60 t Min. stroke: 380 mm Passage between stands 750 mm Maximum pressure 235 bar Table width 250 mm Press speed appr.: 2,2 mm/s Return speed appr.: 9,5 mm/s Manometer Adjustable work table Overload valve Sliding cylinder Drive Capacities Motor rating hydraulic pump appr.: 1.5 kW With manual hand lever pump for slow and high precision work tasks			
1.2.2.20	<b>Tire lever</b>		6	pcs
	Tire mounting irons for commercial vehicles, Special shape, 650 mm Made of chrome-vanadium steel For commercial vehicles, agricultural and construction machinery Heavy-duty design For pulling on and taking off the tires Extra rounded lever end for material-friendly use Dimensions appr.: 650 x 28 x 9 mm			
1.2.2.21	<b>Sledgehammer with hickory handle</b>		4	pcs
	Forged hammer head, hardened, tempered and ground on all faces.			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Surface painted, working faces finished. With hickory handle. Weight without handle approx. 5 kg Handle length approx. 800 mm			
1.2.2.22	<b>Workshop rolling board</b>		3	pcs
	Dimension appr. 100 x 50 cm Max. load 110 kg Ergonomic headrest 6 swivel castors Side storage compartments for tools and small parts			
1.2.2.23	<b>Shunting jack</b>		2	pcs
	Min height 180 mm Lifting height min. 950 mm Lifting capacity min. 8 t Quick stroke, additional foot pedal for quick elevation of the saddle Safety valve for a defined speed when draining			
1.2.2.24	<b>Feeler gauge</b>		20	pcs
	Feather-hard steel blades with clear lettering. Uniformly wide steel blades, collapsible by rivet joint. Conical tapered steel blades. In nickel-plated scabbard, clampable. Sheet thicknesses 0.05–0.25 (0.05 rising) 0.3–1.0 (0.1 rising) mm Number of sheets min. 13 Blade length 100 mm			
1.2.2.25	<b>Hand valve grinder</b>		6	pcs
	Valve grinder for grinding in valves when the cylinder head is dismantled by hand. Suction cups diameter 16 / 20 / 28 and 35 mm.			pcs

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.2.26	<b>Valve grinding paste</b>		2	pcs
	Abrasive paste for grinding valves. Can be diluted with oil (e.g. engine oil) Coarse = grain size P90 Fine = grain size P180			
1.2.2.27	<b>Trolley</b>		1	pcs
	Table trolley with two wooden loading areas Floor height appr.: 230/735 mm Surface texture: powder-coated Length (mm) appr.: 1120 Inner length (mm) appr.: 1000 Width (mm) appr.: 705 Inner width (mm) appr.: 700 Height (mm) appr.: 970 Load capacity at least (kg): 450 Front tires: 2 fixed castors, solid rubber, 160 mm Rear tires: 2 swivel castors, solid rubber, 160 mm, with brakes			
1.2.2.28	<b>Air hose</b>		10	pcs
	Rubber compressed air hose complete with coupling and plug-in nipple 10 meters Dimension: 6 mm inside Coupling and plug-in nipple made of brass Fully assembled and pressed, NW 7.2 Max. 20 bar Flexible material			
1.2.2.29	<b>Compressor air blow gun</b>		3	pcs
	Material: die-cast aluminum With connection nipple 1/4" female connection thread Operating pressure: 1-10bar Air consumption: 120-600 L/min.			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Nozzle tube length: approx. 8cm			
1.2.2.30	<b>Tire Inflator Pressure Gauge</b>		3	pcs
	Measuring range 0 bar - 10 bar Length of hose 400 mm Pressure gauge appr. ø 60 mm, protected by a plastic cap With steel nipple for coupling NW 7.2 – 7.8.			
1.2.2.31	<b>Tire mounting paste</b>		1	pcs
	1kg Premium Mounting Paste white Suitable for mounting any car, truck and motorcycle tires Excellent gliding properties with fast drying time Silicone- and solvent-free Processing temperature -15° C to +50° C			
1.2.2.32	<b>Brush for tire mounting paste</b>		1	pcs
	Brush for assembly paste - Suitable for the installation of all car, truck and motorcycle tires - for the application of assembly paste, assembly wax and assembly cream - sturdy wooden handle - total length appr. 28cm incl. head			
1.2.2.33	<b>Crimping pliers</b>		7	pcs
	For wire cutting, stripping of wires and crimping of insulated and uninsulated terminals and connectors and open connectors. With threaded holes for cutting off Cu or Ms grub screws with M 2.6; M 3; M 3.5; M 4 and M 5. Screwed joint for high stability and smooth running. Application: uninsulated, open connectors (6.3 mm connector width) Capacity square millimeters: 0.5 — 2.5 mm <sup>2</sup>			pcs

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.2.34	<b>Assortment of flat receptacles / flat plugs</b>		10	set
	Scope of delivery Flat receptacle 6.3x0.8, 0.50 <sup>2</sup> - 1.00 <sup>2</sup> : 25 pieces with snap hooks Flat receptacle 6.3x0.8, 0.50 <sup>2</sup> - 1.00 <sup>2</sup> : 25 pieces with locking hook/locking point Flat receptacle 6.3x0.8, 1.50 <sup>2</sup> - 2.50 <sup>2</sup> : 25 pieces with snap hooks Flat receptacle 6.3x0.8, 1.50 <sup>2</sup> - 2.50 <sup>2</sup> : 25 pieces with locking hook/locking point Flat receptacle 6.3x0.8, 2.50 <sup>2</sup> - 4.00 <sup>2</sup> : 25 pieces with locking hook/locking point Flat receptacle 6.3x0.8, 4.00 <sup>2</sup> - 6.00 <sup>2</sup> : 25 pieces with snap hooks Flat receptacle 6.3x0.8, 4.00 <sup>2</sup> - 6.00 <sup>2</sup> : 25 pieces with locking hook/locking point Flat plug 6.3x0.8, 0.50 <sup>2</sup> - 1.00 <sup>2</sup> : 25 pieces with snap hooks Flat plug 6.3x0.8, 1.50 <sup>2</sup> - 2.50 <sup>2</sup> : 25 pieces with snap hooks Flat plug 6.3x0.8, 4.00 <sup>2</sup> - 6.00 <sup>2</sup> : 25 pieces with snap hooks Plug-in distributor 6.3 30° 1.50 <sup>2</sup> - 2.50 <sup>2</sup> : 10 pieces with locking point Assortment box: 1 piece (11 compartments)			
1.2.2.35	<b>Insulating tape</b>		20	pcs
	Roll, length 4.5m, width 15mm, color black			
1.2.2.36	<b>Shrink tubing set</b>		10	set
	Shrink tubing assortment 100 pieces. Section lengths 100 mm, Diameter 1.5 mm (30 pcs.), 2.5 mm (30 pcs.), 4.0 mm (20 pcs.), 6.0 mm (10 pcs.), 10 mm (6 pcs.), 13 mm (4 pcs.),			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Shrinkage rate 2:1, Supplied in a practical storage box			
1.2.2.37	<b>Heat gun</b>		2	pcs
	9-step temperature setting for many applications Particularly light machine for drying, defrosting door locks, removing old paintwork Application of edge banding, shrinking of shrink tubing Also for soldering, welding and disinfection Overheating protection by thermostat Motor is protected against dust contamination Can be placed upright Power appr. 230V / 1800 W Max. Temperature 600 °C			
1.2.2.38	<b>Solder wire</b>		10	pcs
	Fixpoint solder, ø 1.5 mm, 250 g roll, Composition: 2% copper, 60% tin, 38% lead, flux content: 2%, Melting point 182°C			
1.2.2.39	<b>Flux</b>		20	pcs
	Acid-free flux for soft soldering work in the electronics sector. Can with 20g			
1.2.2.40	<b>Oxyacetylene welding and cutting equipment with bottle trolley</b>		1	set
	Individual parts in industrial quality according to ISO For welding 0.5-9 mm Cutting 3-100 mm Contents: - Bottle trolley for 2 x 10-liter cylinders - Cutting torch insert 3 - 100 mm, block nozzles - 5 welding inserts 0.5 - 9 mm - Handle with valves			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>- Cylinder pressure regulator for oxygen</li> <li>- Cylinder pressure regulator for acetylene</li> <li>- Safety device for fuel gas</li> <li>- Safety device for oxygen</li> <li>- Twin hose LW6, 10 m, with connections</li> <li>- Key wrench</li> <li>- Gas lighter</li> <li>- Storage box</li> </ul>			
1.2.2.41	<b>Autogen welding rod</b>		1	pcs
	2.00 x 1000 mm, 25.0 kg Mechanical quality values of the weld metal (guideline values): Yield strength ReH MPa >260 Tensile strength Rm MPa >360 Elongation at break A5 [%] >20 Notched impact AV [J] >30 Directivity analysis of the pure weld metal in %: C 0.08 Si 0.1 Mn 0.5 Welding positions according to: PA, PE, PF, PC			
1.2.2.42	<b>Safety goggles dark</b>		10	pcs
	Material: lens: Polycarbonate Color lens: dark green, scale 4-5 Anti-scratch coated Rubberized, flexible straps Elastic noseband			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.2.43	<b>Grease gun</b>		5	set
	Actuation with pushrod handle Capacity: 400 cm <sup>3</sup> Armoured hose, nozzle tube and 2 mouthpieces M10 x 1 Filling with grease cartridge, loose grease or via a grease filler Operated with pressure air up to 6 bar Connection standard nipple 1/4"			
1.2.2.44	<b>Multi-purpose grease cartridges</b>		24	pcs
	- Standard EP multi-purpose grease, suitable for low temperatures, -40°C to +120°C - Resilient, age-resistant, corrosion-protective, water-resistant multi-purpose lubricating grease based on lithium soap - With good low-temperature behaviour - Supple, flex-stable, wear-reducing, protective against corrosion - Ideal universal lubricating grease for various grease lubrication points on passenger cars, commercial vehicles, work machines, construction and agricultural machinery - Rolling and plain bearing grease for use in vehicles, machines and industry - Cartridges a 400g			
1.2.2.45	<b>Grease nipple set</b>		1	set
	Set of 70 pieces, assorted in plastic box M6 x 1 M8 x 1 M10 x 1 G 1/8"			
1.2.2.46	<b>Plastic lubricator bottle with spout pipe</b>		10	pcs
	Elastic pressure oiler with extendable brass outlet pipe, screw cap at the tip of the pipe. Pipe guide with adjusting nut. Resistant to ethanol and isopropanol-based disinfectants. Capacity approx. 250 ml			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Total height - pipe extended approx. 285 mm Material container Plastic Material outlet pipe Brass			
1.2.2.47	<b>Straight edge</b>		2	pcs
	Straightness tolerance of the measuring edge 0.004 mm Material stainless steel Surface chamfer glare-free matt finish Length 500 mm Packaging Case			
1.2.2.48	<b>Multimeter digital</b>		4	pcs
	Two fused power sockets 2-way adjustable stand DC voltage measurement from 300 mV to 1,000 V DC current measurement from 300 mA to 10 A AC voltage measurement from 3.0 V to 750 V AC current measurement from 300 mA to 10 A Resistance measurement from 300 ohms to 30 MOhm Capacity testing Diode verification with acoustic signal Transistor measurement Acoustic continuity check Frequency measurement Data Hold (storage of the last measured value) Bar graph display Scope of delivery: Protective cover with integrated probe holders Wall holder Test cable approx.900 mm with test probes, covered on both sides 9 V block battery			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.2.49	<b>Solder connector set</b>		5	pcs
	150 pieces in assortment box Solder connector diameter 1.7mm, cable cross-section 0.25-0.34mm <sup>2</sup> , quantity: 25 pieces Solder connector diameter 2.7mm, cable cross-section 0.5-1mm <sup>2</sup> , quantity: 60 pieces Solder connector diameter 4.5mm, cable cross-section 1.5 - 2.5 mm <sup>2</sup> , quantity: 50 pieces Solder connector diameter 6mm, cable cross-section 4-6mm <sup>2</sup> , quantity: 15 pieces Connectors in different colors Shrinkage ratio 2:1 (dia. 1,7 - 4,5 mm) and 3:1 (dia. 6 mm) Shrinkage temperature at least 80°C Solder melting temperature min. 138°C			
1.2.2.50	<b>Induction heater</b>		1	pcs
	Connection cable approx.: 3 m Coil hose length approx.: 700 mm Rigid coils: heating of pipes, bolts, profiles of various diameters Flexible spool: for loosening hard-to-reach parts through the use of special winding wire Flat coil for heating car body and sheet metal, simplifies the removal of stickers, sealants, etc. Frequency: 25 kHz – 60 kHz 1.5 kW power			
1.2.2.51	<b>Diode test lamp 3-48 volts with LED indicator</b>		6	pcs
	Voltage tester for testing cable breaks in the field of motor vehicles, cars, cars, trucks and e-bikes Diode test lamp with puncture function for insulated cables Due to the puncturing function, a voltage measurement can be carried out without stripping the cable, the cable is minimally			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	pricked by a sliding mechanism Specifications: Continuity indicator : LED Power supply: no battery required Voltage range, max.: 48 volts DC Voltage range, min: 3 volts DC Polarity indicator ( +/- ) Test type: two-pole Length of the cable appr.: 90cm Connecting ends: 1 x Test probe with sliding mechanism 1 x Alligator Clip			
1.2.2.52	<b>Oil drain pan</b>		2	pcs
	With spout, made of HDPE: resistant to almost all polar solvents (T up to 80 °C), acids, alkalis, water, alcohols, oil, gasoline. Easy to transport with hand movements. Capacity approx. 16 liters			
1.2.2.53	<b>Socket set, 1/4", 3/8", 1/2"</b>		4	set
	Scope of delivery: With 1/4" Drive: 1 socket each, hexagon 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm 1 socket each, hexagon, extra long 4, 5, 6, 7, 8, 9, 10 mm 1 socket each, E-profile E4, E5, E6, E7, E8 1 screwdriver insert each, T-profile T8, T9, T10, T15, T20, T25, T27, T30 1 screwdriver each, T-profile with bore T8, T9, T10, T15, T20, T25, T27, T30 1 screwdriver each, hexagon socket 3, 4, 5, 6 mm 1 screwdriver each, slotted 4, 5.5, 6.5, 7 mm 1 screwdriver each, cross PH0, PH1, PH2 1 screwdriver each,			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	cross PZ0, PZ1, PZ2 1 extension each 50, 100 mm 1 reversible ratchet 145 mm, 72 teeth Plug-in handle 150 mm sliding handle 110 mm adapter for 1/4" bits Cardan joint With 3/8" drive: 1 socket each, hexagon 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm 1 socket each, hexagon, extra long 10, 11, 12, 13, 14, 15 mm 1 socket each, E-profile E10, E11, E12, E14, E16, E18 1 reversible ratchet 205 mm, 72 teeth Extension 125 mm Spark plug insert 18 mm Adapter for 8 mm bits Cardan joint With 1/2" drive: 1 socket each 10 socket, hexagonal 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 27, 30, 32 mm, 1 socket each, hexagon, extra long 16, 17, 18, 19, 22,			
	1 mm socket each, E-profile E24, E20 1 spark plug insert each 16, 21 mm 1 reversible ratchet 250 mm, 72 teeth Sliding handle 250 mm Extension 125mm Adapter for 8mm bits Universal joint Screwdriver bits in 8 mm drive x 30 mm length: 1 bit each, T-profile without bore T40, T45, T50, T55, T60, T70 1 bit each, T-profile with bore T40, T45, T50, T55, T60, T70 1 bit each, Allen key 7, 8, 10, 12, 14 mm 1 bit each, cross, PH3, PH4 1 bit each, cross, PZ3, PZ4			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	1 bit each, slot 8, 10, 12 mm Screwdriver bits in 1/4" drive x 25 mm length: 1 bit each, multi-tooth M4, M5, M6, M8 1 bit each, T-profile T5, T6, T7, T8, T9, T10, T15, T20, T25, T27, T30, T40 1 bit each, RB profile M5, M6, M7, M8, M9 1 bit each, five star TS10, 15, 20, 25, 27, 30, 40, 45 Bit, T-profile with face hole T7 Allen key: 1 L-key each 1.27, 1.5, 2, 2.5, 3, 4, 5 mm All parts are of chrome-vanadium steel matt chrome-plated. Delivered in sturdy plastic box			
1.2.2.54	<b>Impact wrench 1/2"</b>		2	pcs
	High-performance pin percussion mechanism One-handed switching for clockwise / anti-clockwise rotation Very low vibration With non-slip handle Includes 7.2 compressed air plugs Drive 12.5 mm (1/2") Speed appr. 7000 rpm Operating pressure appr. 6.3 bar Tightening torque max. 750 Nm Release torque max. 850 Nm			
1.2.2.55	<b>1/2" Impact Socket Wrench Set</b>		2	pcs
	Set of 35 nuts with 1/2" drive. The sockets are made of extremely resistant Cr-Mo. Delivered in steel box. Content: Short nut: 8 mm, 9 mm, 10 mm, 11 mm, 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 17 mm, 18 mm, 19 mm, 20 mm, 21 mm, 22 mm, 23 mm, 24 mm, 27 mm, 30 mm, 32 mm			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Long nut: 10 mm, 12 mm, 13 mm, 14 mm, 15 mm, 16 mm, 17 mm, 18 mm, 19 mm, 21 mm, 22 mm, 24 mm, 27 mm, 30 mm, 32 mm			
1.2.2.56	<b>Pressure washer</b>		1	pcs
	Working pressure adjustable 40 to 180 bar Output 450 – 900 l/h Pressure max. 220 bar Inlet temperature max. 60 °C Detergent capacity (2 tanks) with each at least 2.5 l Achievement approx. 7.0 kW Electrical connector 400 V/50 Hz/3 Ph HD Hose 20 m High-pressure gun Spray lance approx. 1000 mm Triple nozzle 0°/25°/40° Rotary nozzle Integrated high-pressure hose reel Detergent tanks easy-to-remove 3-piston axial pump with brass cylinder head and ceramic piston Fine water filter Automatic pressure cut-off			
1.2.2.57	<b>Oil drip tray</b>		5	pcs
	For disassembling and cleaning small assemblies - keeps the work surface clean - Galvanized steel sheet 0.5 mm - Height: 1 cm - Dimensions: 45 x 63 cm			
1.2.2.58	<b>Cooling water jug</b>		2	pcs
	The cooling water jug has a specially curved spout for precise filling. In addition, the two handles allow 2-hand operation, which makes pouring easier.			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Specifications Capacity: approx. 10 l Material: HD-PE specially curved spout 2-hand control			
1.2.2.59	<b>Drip tray 18 litres</b>		2	pcs
	For collecting coolants, oils, etc. Dimensions appr.: 550 mm x 420 mm x 80 mm Made of sturdy plastic			
1.2.2.60	<b>Compressed air nipple</b>		20	pcs
	Nipple for pneumatic devices with 1/4" male thread NW 7.2 Brass blank G 1/4 outside Operating pressure: 0 - 35 bar, maximum stat. operating pressure (without pulsation) Medium & Ambient Temperature: -20°C - +100°C Width across flats: 17			
1.2.2.61	<b>Teflon tape</b>		6	pcs
	Coil with 12 m, 12mm wide For thread sealing of water and air installations			
1.2.2.62	<b>Oil cabinet</b>		1	pcs
	With height-adjustable grating shelves, lockable, 1 drip tray Soils Type: Grating Floor pans type: Floor drip pan Width appr.: 950 mm Body Material: Steel sheet Lock Type: Twist bolt lock Depth: 500 mm Number of floors: 3 Door equipment: Ventilation hole panels			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Floor load capacity: 60 kg Height approx.: 1950 mm Body surface: powder-coated Number of keys: 2 Door Type: Double-wing door			
1.2.2.63	<b>Sealing paper, heat-resistant</b>		2	pcs
	Material thickness: 1.5 mm Dimensions: 100 x 100 cm Temperature range: -100°C to max. +225°C (with application inspection up to max. +400°C)			
1.2.2.64	<b>Sealing paper (0.50 mm)</b>		2	pcs
	Material thickness: 0.50 mm Dimensions: 50 x 250 cm Temperature range: -20°C to +120°C			
1.2.2.65	<b>Cork gasket (1 mm)</b>		1	pcs
	Material thickness: 1 mm Dimensions: 100 x 100 cm Temperature range: -20°C to +120°C			
1.2.2.66	<b>Cork gasket (2 mm)</b>		1	pcs
	Material thickness: 2 mm Dimensions: 100 x 100 cm Temperature range: -20°C to +120°C			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.2.67	<b>Anaerobic surface seal</b>		2	pcs
	Container: 250 ml Tube Application: torsion-resistant flanges Temperature range: -55 to +150 °C Instant tightness: yes Max. gap width: 0.50 mm Description: Suitable as a surface seal for torsion-resistant metal surfaces Tube content: 250 ml			
1.2.2.68	<b>Anaerobic threadlocker, medium strength</b>		2	pcs
	Container: 50 ml Temperature range: -55 to +180 °C Thread size: up to M 36 Functional strength: 2 hours Breakaway torque: 26 Nm Recommended for all threaded connections made of metal			
1.2.2.69	<b>Anaerobic threadlocker, high strength</b>		2	pcs
	Container: 50 ml Strength: high Temperature range: -55 to +180 GC Thread size: up to M 20 Functional strength: 6 hours Breakaway torque: 33 Nm Recommended for all threaded metal connections			
1.2.2.70	<b>Sealing ring, volcanic fiber, 30 dimensions</b>		2	set
	Content: 250 pcs Dimensions: 20 Dimensions (4 - 33 mm) Temperature range: -10°C to +100°C Operating pressure: -0.95 to 16 bar Use: For oxygen, compressed air and gases			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.2.71	<b>Industrial O-Ring Set / BOX H NBR 70, 3-44 mm metric</b>		2	set
	Quality: NBR 70 Shore A Temperature resistance: -30 °C to +100 °C Industrial O-ring set Box with 400 O-rings in 30 different dimensions 3-45 mm Ø (metric)			
1.2.2.72	<b>Sealing ring assortment made of copper / aluminum</b>		2	set
	Design: Solid sealing rings 6x10x1; 30 x alu, 30 x copper 8x14x1; 30 x alu, 30 x copper 10x16x1; 30 x alu, 30 x copper 12x18x1,5; 20 x alu, 20 x copper 14x20x1,5; 10 x alu, 10 x copper 16x22x1,5; 10 x alu, 10 x copper 18x22x1,5; 5 x alu, 5 x copper 20x16x1,5; 5 x alu, 5 x copper 22x27x1,5; 5 x alu, 5 x copper 14x29x2; 5 x alu, 5 x copper			
1.2.2.73	<b>Oil binder granulate</b>		4	pcs
	Universal binds liquids of all kinds on any solid surface. Even with complete saturation of the granules, optimal slip resistance is achieved. Universal, with relatively large grain size, it can be successfully used both outdoors and indoors for all daily absorption tasks. The granules can be used preventively or acutely in the event of damage. Product features: Universal is based on Moler. The granulate is fast-acting and safe (chemically inert) to use. All types of liquids (e.g. water, oil and chemicals) on solid surfaces are immediately absorbed and encapsulated in the porous structure of the granules.			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Sack with 40 lit./appr. 20 kg			
1.2.2.74	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.2.2.75	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.3	<b>Assembling/repair outdoors</b>			
1.2.3.1	<b>Oil Change Canister</b>		4	pcs
	Made from sturdy, durable plastic Resistant to: acids, alkalis, alcohol, oil, petrol, chemicals, antifreeze Capacity min.: 10 liters With secure sealing caps that prevent spilling With inlet strainer and storage area for oil drain plug and filter Container easy to transport and drain due to handles			
1.2.3.2	<b>Spiral hose 8x1</b>		6	pcs
	Hose length: 10 meters Dimensions: 8mm outside, 6mm inside with anti-kink springs Coupling and plug-in nipple made of brass are suitable for all standard connections NW 7.2 Connections at the end of the hose can be rotated			
1.2.3.3	<b>Cable drum 25m</b>		6	pcs
	25 m cable length (H05RR-F 3G1,5), used down to -35 °C, oil- and UV-resistant and also extremely abrasion-resistant Outdoor cable drum with overheating protection, indicator light in case of overheating and overload Drum body made of sheet steel, rust-protected galvanized, on a particularly sturdy carrying frame 3 safety sockets, splash-proof, with self-closing Drum diameter appr.: 240 mm Protection class (IP): IP44 Line voltage 250 V Nominal power unrolled: 3500 (16 A) W			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.2.3.4	<b>Pry bar with blade and point</b>		2	pcs
	Overall length appr. 1,250 mm Shank diameter appr. 30 mm Made of special steel, with angled blade and straight point			
1.2.3.5	<b>Wrecking bar 800 mm</b>		2	pcs
	Overall length appr. 800 mm Shank dimension appr. 25 x15 mm Wrecking bar with strong curved claw and slightly offset chisel blade, hardened and painted. Made of oval steel profile			
1.2.3.6	<b>Pry bar with heel</b>		10	pcs
	Thickness appr. 15 x 15 mm Length appr. 400 mm Made of nickel-plated special steel; one side pointed			
1.2.3.7	<b>Round sling 2000 kg 1,5 m</b>		4	pcs
	Circumference 3 m Usable length 1.5 m Sling width appr. 48 mm			
1.2.3.8	<b>Round sling 1000 kg 0,5 m</b>		6	pcs
	Circumference 1 m Usable length 0.5 m Sling width appr. 46 mm			
1.2.3.9	<b>Round sling 1000 kg 1 m</b>		6	pcs
	Circumference 2 m Usable length 1 m Sling width appr. 46 mm			
1.2.3.10	<b>Shackle 2 t</b>		5	pcs
	Slot width at pin min. 21 mm Eye width min. 13 mm Distance eye-pin appr. 48 mm			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Pin $\varnothing$ 16 mm Eye $\varnothing$ appr. 33 mm Safe working load 2 t			
1.2.3.11	<b>Shackle 1 t</b>		5	pcs
	Slot width at pin min. 17 mm Eye width min. 10 mm Distance eye-pin appr. 37 mm Pin $\varnothing$ 11 mm Eye $\varnothing$ appr. 26 mm Safe working load 1 t			
1.2.3.12	<b>Abrasive cloth roller 400</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife. Grain size 400 Rolls Width appr. 25 mm Rolls length 50 m			
1.2.3.13	<b>Abrasive cloth roller 180</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife. Grain size 180 Rolls Width appr. 25 mm Rolls length 50 m			
1.2.3.14	<b>Abrasive cloth roller 80</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife. Grain size 80 Rolls Width appr. 25 mm			

1.2	G01 - LOT 1	AGRICULTURE MECHATRONICS WORKSHOP	KITALE NP	
1.2.1		KNP_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Rolls length 50 m			
1.2.3.15	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.2.3.16	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.3.1	<b>Welding table</b>		6	pcs
	<p>Welding table The surface of the table has to be divided into two sections. A sheet steel support with fireclay bricks for flat welding and a bar iron rust for the penetration welding. Work piece clamp for constrained welding positions.</p> <ul style="list-style-type: none"> <li>- working area appr. 600 x 600 mm</li> <li>- height 800 mm</li> <li>- steel grid</li> <li>- clamping device for various positions (up to 6 positions), clamping range 0-60 mm</li> <li>- refractory clay area</li> <li>- slag collecting drawer</li> <li>- stable welded steel table</li> <li>- each table with 2 chair with adjustable height from 450 to 650 mm (Seat Ø appr. 400mm by stainless steel)</li> </ul>			
1.3.2	<b>Welding curtain</b>		12	pcs
	<p>Welding Curtain made from Welding protection lamella, complete with mounting materials, Tubular steel frame with practical plug-in / clamp-on connections, Size (H x W) appr. 2000 x 1400 mm</p>			
1.3.3	<b>Combined MIG/MAG/ARC welding machine 300A</b>		6	pcs
	<p>Input voltage: 400V Wire spool size: 5 - 15 kg Duty cycle: 290 A/35%, 220 A/60% Current range: 20 - 300 A Welding wire size: 0,6 - 1,2 mm Separate wire feeder Delivered with welding cables and hose package at least 3 m</p>			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.3.4	<b>Spare parts/consumables MIG/MAG</b>		7	set
	Spare parts for welding machine (pos.1.3.3): Gas nozzles power nozzles (0,6 - 1,2 mm) Ceramic nozzles Drive wheels (0,6 - 1,2 mm) Wire guide spiral  Gas cylinder 50 liters/200bar for argon/CO2			
1.3.5	<b>Portable TIG welding machine 180 A</b>		6	pcs
	Input voltage: 230 V Input power max.: 7 kVA Open circuit voltage max.: 65 V High frequency ignition Welding current: 10 - 180 A Duty cycle: 180A/35% Electrode diameter: 0,5-3,2 mm Delivered with ground cable and hose package at least 3 m			
1.3.6	<b>Spare parts/consumables TIG</b>		6	set
	Clamping sleeves for TIG electrodes TIG electrodes 2,0/2,4/3,2 mm Torch covers Gas nozzles 5/6/7 mm  Gas cylinder 50 liters/200bar for argon			
1.3.7	<b>Flame cutting station</b>		1	pcs
	Portable automatic gas cutting machine For straight, bevel and multi-bevel cuts. Functions control by forward/off/reverse switch, clutch lever and speed adjustment knob.			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Power source: AC 230V, 50/60Hz Motor: Condenser-induction, AC 230V Speed control: Single cone system Cutting thickness: 3-150 mm Cutting speed: 50-1600 mm/min Strip cutting range: 80-300mm Delivered with rail min. 1,8 m			
1.3.8	<b>Spare parts/consumables flame cutting</b>		1	set
	10 Gas nozzles for thickness 3-100 mm 10 Oxygen nozzles for thickness 3-100 mm 25 m Twin hose for oxygen and fuel gas 2 Gas cylinder for oxygen 2 Gas cylinder for acetylene or LNG Pressure regulator for oxygen and fuel gas			
1.3.9	<b>Angle grinder 180 mm</b>		6	pcs
	Electric hand angle grinder including set of accessories Rated power input min. 2,000 W No-load speed 8500 rpm Grinding spindle thread M 14 Main handle Shaft Starting current limitation and soft start of the machine Disc diameter 180 mm			
1.3.10	<b>Angle grinder 125 mm</b>		6	pcs
	Disk diameter 125 mm Power min. 750 W No-load speed 11,000 rpm Thread of grinding shaft M14 Lockable switch			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.3.11	<b>Workbench with drawers</b>		2	pcs
	Workbench with drawers (lockable) Worktop multiplex, finished with clear UV varnish (L x D x T) approx. 2000 x 750 x 40 mm Steel underframe, powder coated 5 drawers, height 1 x 50 mm, 2 x 100 mm, 1 x 150 mm, 1 x 300 mm Load capacity drawers (50 mm height/ >50 mm height) at least 70 kg/100 kg			
1.3.12	<b>Bench vice 125 mm</b>		2	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
1.3.13	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	Double grinding machine for metal with base frame Technical data: • Wheel-ø: 200x25x32mm • Speed: 2850 rev/min • Motor appr.: 1,25 kW • 230V Accessories: • Corundum grinding wheel+spare wheel • Silicium carbide grinding wheel+ spare wheel • Safety shield • Solid Tool rest and adjustable on both wheels			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• Coolant container</li> <li>• Wheel dresser</li> </ul>			
1.3.14	<b>Hydraulic workshop press</b>		1	pcs
	Hydraulic press (pillar press) with base frame Working area Min force: 60 t Min. stroke: 380 mm Passage between stands min. 750 mm Maximum pressure 235 bar Table width appr. 250 mm Press speed appr.: 2,2 mm/s Return speed appr.: 9,5 mm/s Manometer Adjustable work table Overload valve Sliding cylinder Drive Capacities Motor rating hydraulic pump appr.: 1.5 kW With manual hand lever pump for slow and high precision work tasks			
1.3.15	<b>Cantilever arm rack, double sided</b>		1	pcs
	Rack width approx. 3000mm Each column carries 10 welded cantilever arms <ul style="list-style-type: none"> <li>• With anti-roll restraints</li> <li>• Quick assembly</li> <li>• Cross braces for stiffening</li> <li>• 6 horizontal ties</li> <li>• 8 heavy duty anchors for anchoring to the floor</li> </ul> Number of fields – 3 Number of columns – 4 At least 5 height levels			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Load capacity per arm at least: 300kg Total load capacity including floor level storage on each side – 4000kg Rack height appr. – 2500mm			
1.3.16	<b>Horizontal band saw machine</b>		1	pcs
	Metal band saw - Blade dimension at least 2480 x 27 x 0,9 mm - Cutting speed 15-100 m/min - Main drive rating appr. 1.5 kW, - cutting capacity 90° min. - 225mm - cutting angle 0-45°			
1.3.17	<b>Welder's tool set</b>		6	set
	Consisting of: Slag hammer Wire brush Side cutter 130 mm Forging tongs Wolf's Jaw 600 mm Engineers hammer 500 g Flat chisel 200 mm Center punch 120mm Steel ruler 500 mm Try square 300 x 175 mm 2 screw clamps 250 mm Flat scraper 300 mm Grip wrench 250 mm Water pump pliers 250 mm Weld gauge Delivered in sheet steel box			
1.3.18	<b>Welding apron</b>		6	pcs
	Split leather apron 100 cm long x 60cm wide			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Multi-threaded sewn for long life and durability Adjustable straps 5 pockets			
1.3.19	<b>Welding shield automatic</b>		6	pcs
	1/20,000 second switching speed Auto darkening lens Solar powered cells with battery assist Automatic power on/off with adjustable delay time 2 independent arc sensors Variable shade control from #9 to #13 Ratcheting headband Delivered with spare splash protection glass			
1.3.20	<b>Welding shield classic</b>		6	pcs
	Simple and lightweight welding shield Manufactured from special non-conductive, spark-guard, rugged, light-weight, flame-retardant, glass-filled nylon Dimension appr. 275 x 300 mm Lens dimension at least 100 x 90 mm With open view mechanic Delivered with spare splash protection glass as well as spare filter glass			
1.3.21	<b>Safety goggles clear</b>		20	pcs
	Material: lens: Polycarbonate Color lens: clear Anti-scratch coated Rubberized, flexible straps Elastic noseband			
1.3.22	<b>Safety goggles dark</b>		20	pcs
	Material: lens: Polycarbonate Color lens: dark green, scale 4-5 Anti-scratch coated			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Rubberized, flexible straps Elastic noseband			
1.3.23	<b>Welding gloves, pair</b>		20	pair
	Split leather gloves with 5 fingers Lining - Cotton Mechanical Hazard, Corrosion-proof - 2 Cut resistance - 1 Tear resistance - 4 Puncture resistance - 4 Length - Approx. 35 cm			
1.3.24	<b>First aid kit</b>		1	set
	To treat burns, eye irritations, cuts, sprains, and common welding-related injuries Packed in a weather resistant, gasketed, plastic cabinet with a combination handle/hanger			
1.3.25	<b>Plasma cutter</b>		1	pcs
	Mains voltage / fuse protection 380 V/3-phase / 20 A Duty cycle (10 minutes, 40°C) 60 % / 80 A, 100% / 62 A Adjustable ampere range 20-80 A Cooling automatic fan Achievement up to 80 A Open circuit voltage 270 V Protection class/insulation class IP21/F Cutting thickness up to 35 mm (carbon steel) Scope of delivery Plasma cutter with pilot arc min. 5 m torch package min. 2.80 m ground cable mandrel 13 mm water separator with couplings			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	compressed air supply line guide trolley small nozzle starter set with mounting key			
1.3.26	<b>Wear parts for plasma cutter 1.3.25</b>		1	set
	5 x electrodes 5 x nozzles 1,1 mm 5 x nozzles 1,3 mm 3 x ceramic caps Delivered in box			
1.3.27	<b>MIG/MAG/MMA welder</b>		1	pcs
	Power supply 203/400 V Input 20 A MIG welding power 30-200 A (cycle 60%) Wire coil 5 kg Wire feeder 2 rolls Mobile chassis Variable polarity Welding wire size 0,6/0,8/1,0 mm Welding electrodes dia. 1,6 - 3,2 mm Delivered with: Cable package with welding torch min. 3 m MMA cable min. 2 m Ground cable min. 2 m Adapter 400 V /230 V Gas regulator Gas hose min. 2 m			
1.3.28	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor			

1.3	G01 - LOT 1	WELDING WORKSHOP	KITALE NP	
		KNP_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.3.29	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			

1.4	G01 - LOT 1	HYDRAULICS AND PNEUMATICS LAB	KITALE NP	
1.4.1	Pneumatics Section	KNP_LAB_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.4.1.1	<b>Polyurethane hose 8 x 5 mm, blue</b> Hose Ø outside x inside: 8 x 5 mm Colour: blue Operating pressure min.: 16 Bar min. bending radius: 25 mm Price per m Small bending radius due to special flexibility, very good low-temperature flexibility and resilience, kink and abrasion resistant, resistant to aliphatic hydrocarbons and most lubricants, age-resistant in oxygen, suitable for drag chains (min. bending radius corresponds to 10 x outer diameter) Material:polyester-polyurethane Temperature range:-35°C to +60°C Shore hardness: 95 A Roll length: 50 mtr.		50	pcs
1.4.1.2	<b>Polyurethane hose 6 x 4 mm, blue</b> Hose Ø outside x inside: 6 x 4 mm Colour: blue Operating pressure min.: 14 Bar min. bending radius: 15 mm Price per m Small bending radius due to special flexibility, very good low-temperature flexibility and resilience, kink and abrasion resistant, resistant to aliphatic hydrocarbons and most lubricants, age-resistant in oxygen, suitable for drag chains (min. bending radius corresponds to 10 x outer diameter) Material:polyester-polyurethane Temperature range:-35°C to +60°C Shore hardness: 95 A Roll length: 50 mtr.		50	pcs

1.4	G01 - LOT 1	HYDRAULICS AND PNEUMATICS LAB	KITALE NP	
1.4.1	Pneumatics Section	KNP_LAB_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.4.1.3	<b>Straight plug-in connection R 1/4"- 8mm</b>		32	pcs
	R: R 1/4" D: 8 mm Materials: Body: nickel-plated brass, release ring: (M 3: nickel-plated steel), seal: NBR, retaining claws: stainless steel, cartridge: ZnDC galvanized (only silicone-free seals and lubricants are used during assembly) Temperature range: -20°C to +80°C Operating pressure: -0.95 to 20 bar Lubricated and non-lubricated compressed air, neutral gases, water (water up to max. 60°C may only be used after approval of the basic data by us)			
1.4.1.4	<b>Angle plug-in connection R 1/4"-8mm</b>		32	pcs
	R: R 1/4" D: 8 mm Materials: Body: nickel-plated brass, release ring: (M 3: nickel-plated steel), seal: NBR, retaining claws: stainless steel, cartridge: ZnDC galvanized (only silicone-free seals and lubricants are used during assembly) Temperature range: -20°C to +80°C Operating pressure: -0.95 to 20 bar Lubricated and non-lubricated compressed air, neutral gases, water (water up to max. 60°C may only be used after approval of the basic data by us)			
1.4.1.5	<b>Hose cutting Clip 0 - 14 mm</b>		12	pcs
	For tube Ø: 0 - 14 MM For right-angled and burr-free cutting of hoses.			

1.4	G01 - LOT 1	HYDRAULICS AND PNEUMATICS LAB	KITALE NP	
1.4.1	Pneumatics Section	KNP_LAB_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.4.1.6	<b>Y-connector 8mm-8mm</b> D: 8 mm D1: 8 mm Materials: Body: nickel-plated brass, release ring: (M 3: nickel-plated steel), seal: NBR, retaining claws: stainless steel, cartridge: ZnDC galvanized (only silicone-free seals and lubricants are used during assembly) Temperature range: -20°C to +80°C Operating pressure: -0.95 to 20 bar		12	pcs
1.4.1.7	<b>Y-connector 8mm-6mm</b> D: 8 mm D1: 6 mm Materials: Body: nickel-plated brass, release ring: (M 3: nickel-plated steel), seal: NBR, retaining claws: stainless steel, cartridge: ZnDC galvanized (only silicone-free seals and lubricants are used during assembly) Temperature range: -20°C to +80°C Operating pressure: -0.95 to 20 bar Lubricated and non-lubricated compressed air, neutral gases, water (water up to max. 60°C may only be used after approval of the basic data by us)		12	pcs
1.4.1.8	<b>Pressure regulator 8-8mm, with pressure gauge</b> P (hose): 8 mm A: 8 mm Version display: with pressure gauge Version connection: hose-hose Operating pressure: 0 - 9 bar Pressure control range: 1 - 8 bar (pressure gauge display: 0.1 - 0.8 MPa) Media: compressed air, neutral gases When the primary pressure flows in from P, reduced pressure comes out on the connection side.		12	pcs

1.4	G01 - LOT 1	HYDRAULICS AND PNEUMATICS LAB	KITALE NP	
1.4.1	Pneumatics Section	KNP_LAB_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.4.1.9	<b>3/2-way shut-off valve 8mm</b> D: 8 mm Materials: Body: nickel-plated brass, seal: NBR, retaining claws: stainless steel, cartridge: ZnDC galvanized (only silicone-free seals and lubricants are used during assembly) Temperature range: -20°C to +80°C Operating pressure: -0.95 to 20 bar Operating principle: The 3/2-way valves shut off the air flow and bleed the secondary side. Media: compressed air, neutral gases For controlling single-acting small cylinders or for shutting off smaller pneumatic assemblies.		12	pcs
1.4.1.10	<b>Pressure gauge 0 - 16bar, 8mm hose</b> Display range: 0 - 16 Bar D: 8 mm Scale division: 0.5 Bar Materials: Body: nickel-plated brass, seal: NBR, retaining claws: stainless steel, cartridge: ZnDC galvanized Temperature range: -20°C to +60°C Class: 4.0 Protection class: IP 42 Media: compressed air, neutral gases		12	pcs
1.4.1.11	<b>Throttle check valve 8mm plug-in connection</b> D: 8 mm Operating pressure: -0.95 to 20 Bar Temperature range: -20 to +80 °C Principle of operation: Media: compressed air, neutral gases Materials: Body: nickel-plated brass, seal: NBR, retaining claws: stainless steel, cartridge: ZnDC galvanized (only silicone-free		12	pcs

1.4	G01 - LOT 1	HYDRAULICS AND PNEUMATICS LAB	KITALE NP	
1.4.1	Pneumatics Section	KNP_LAB_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	seals and lubricants are used during assembly)			
1.4.1.12	<b>White Board (movable)</b>		1	pcs
	<p>Mobile on heavy duty castors with brakes and robust carrying frame; size appr. 2000 x 1000 mm (W x D); minor deviations of the dimensions are possible but have to correspond with the layout plans provided with the tender documents</p> <p>Writing surface on both sides, steel plastic coated, magnetic and dry cleanable. Both sides white, turn able by 360° plus stopper, tray/holder for markers.</p> <p>Including: 4 x White board marker, set of 6 markers in different colours, 2x cleaning pad</p> <p>The product must bear the GS mark (= "Tested Safety") or equivalent, which guarantees minimum standards for safety, ergonomics and durability.</p> <p>The manufacturer shall have a structured quality management system installed, e.g. in accordance with ISO 9001 or equivalent.</p>			
1.4.1.13	<b>Flipchart</b>		2	pcs
	<p>Flipchart board adjustable height from appr. 1600 - 2200 mm; powder coated metal board, board size approx. 700 x 1100 mm (W x H);</p> <p>pen-holder, star foot with castors, 2 lockable;</p> <p>incl. 3 packages of flip-chart paper, min. 25 sheets</p>			

1.4	G01 - LOT 1	HYDRAULICS AND PNEUMATICS LAB	KITALE NP	
1.4.1	Pneumatics Section	KNP_LAB_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.4.1.14	<b>Swing Door Steel Cabinet (2000 x 1000 x 500 mm)</b>  Heavy duty workshop cabinet for storage of tools and small machinery; size appr. 1000 x 500 x 2000 mm (W x D x H) Minor deviations of the dimensions are possible but have to correspond with the layout plans provided with the tender documents Full steel design, sheet metal parts min 0.9mm thickness, min 4 adjustable galvanized shelves with min. 50 kg load capacity each, security lock with 2 keys, all edges rounded and smoothed, body and interior fully powder-coated, The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.		2	pcs

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.5.1	<b>Combination workbench</b>		6	pcs
	Workbench height: 850 mm Drawer load capacity at least: 75 kg Worktop dimension (L x D) 2000 x 750 Drawer extension (partial/full extension) min.: 90% With 2 times 4 drawers mirrored left and right Drawer height 2 x 2 x 150 mm and 2 x 2 x 200 mm, inner dimension (W x D) approx. 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity approx.: 800 kg Worktop 40 mm thick made of beech multiplex, waterproof glued			
1.5.2	<b>Bench vice 125 mm</b>		12	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
1.5.3	<b>C-screw clamp</b>		4	pcs
	Clamping width 0-150 mm, Overhang min. 95 mm, Clamping force up to 18 kN Body forged and zinc plated Spindle with T-handle and trapezoidal thread			
1.5.4	<b>Welding magnets set</b>		4	set
	Fixed angles of 45° / 90° / 135° 75 mm / 11,5 kg 100 mm / 22,5 kg			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	150 mm / 34 kg			
1.5.5	<b>Height adjuster for vice</b>		12	pcs
	Suitable for Bech vice Pos. 1.1.2. Built-in gas pressure spring for weight compensation during height adjustment of the vice. Quick clamping with safety clamping lever.			
1.5.6	<b>Tool set workbench</b>		12	set
	<p>Workbench tool set including:</p> <ul style="list-style-type: none"> <li>• Vernier calliper 150 mm</li> <li>• Try square 100x70 mm</li> <li>• Protractor, measuring range 0° - 180°, sheet diameter 150 mm, length 200 mm</li> <li>• Spring dividers 150 mm, Scriber, Steel rule 300 mm, Tape measure 2 m</li> <li>• Hand files flat with handle, cut 1, 150 and 250 mm</li> <li>• Hand files flat with handle, cut 3, 150 and 250 mm</li> <li>• Three square file with handle, cut 1, 250 mm</li> <li>• Three square file with handle, cut 3, 200 mm</li> <li>• Square file with handle, cut 1, 250 mm</li> <li>• Square file with handle, cut 3, 150 mm</li> <li>• Round file with handle, cut 1, 250 mm</li> <li>• Round file with handle, cut 3, 200 mm</li> <li>• Set of key files 6 pcs</li> <li>• Hacksaw frame for 300 mm saw blades</li> <li>• File brush</li> <li>• Set of screwdrivers flat and PH</li> <li>• Set of hand tin snips (left, right, hole)</li> <li>• Flat chisel 150 mm</li> <li>• Pin punches dia 3 and 6 mm</li> <li>• Center punch 120 mm</li> <li>• engineer's hammer 500 g</li> </ul>			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• Three edge hollow scraper 200 mm</li> <li>• Flat scraper 250 mm</li> <li>• Bench hand brush 280 mm</li> <li>• Safety goggles, clear, Leather working gloves</li> </ul>			
1.5.7	<b>Tool set team</b>		2	set
	<ul style="list-style-type: none"> <li>• 3 Open ended spanner sets, 10 pieces, 6x7 - 27x30 mm</li> <li>• 2 Double ended ring spanner sets, 10 pieces, 6x7 - 27x30 mm</li> <li>• 3 Hexagon ball-end key sets, 8 pieces, 2 - 10 mm</li> <li>• Socket set 1/2 inch, including drives accessories, 8 - 32 mm</li> <li>• 3 Combination pliers 180 mm</li> <li>• 3 Grooved water pump pliers 250 mm</li> <li>• 3 Side cutter 160 mm</li> <li>• 3 Taper punch set and center punch, 2 - 6 mm, 120 mm</li> <li>• 2 Number punch set, size 6 mm in box</li> <li>• 2 Letter punch set, size 6 mm in box</li> <li>• Set of radius gauges 1-7, 7,5-15,15,5-25 mm</li> <li>• 3 Soft mallet with polyurethane inserts</li> <li>• 5 Plastic oiler with brass tube 150 ml</li> <li>• 3 Jobber drill sets in case, 1 -13 mm, incremental step 0,5 mm, including core diameters for M4 - M12</li> <li>• Taper sheet and tube drill set in case, 3 pieces, 3 - 30,5 mm</li> <li>• 3 Countersink sets in case, 90°, size 6,3 - 25 mm</li> <li>• 3 Counterbore sets in case, M3 - M10, through hole size</li> <li>• 3 Hand reamer sets in case, size 3 - 10 H7</li> <li>• Machine reamer sets in case, size 3 - 10 H7</li> <li>• 3 Thread cutting sets in metal case, hand tap sets (3 pieces) size M3 - M12, dies size M3 - M12, tap wrenches size 1-2, die stocks suitable to all dies</li> <li>• Thread cutting set for fine threads, 8x1 - 20x1,5 mm, hand tap sets (2 pieces), dies, tap wrenches and die stocks as mentioned above</li> </ul>			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• Pipe thread cutting set, size 1/8' - 1', hand tap sets (2 pieces), dies, tap wrenches, and die stocks as mentioned above</li> </ul>			
1.5.8	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	Double grinding machine for metal with base frame Technical data: <ul style="list-style-type: none"> <li>• Wheel-ø: 200x25x32mm</li> <li>• Speed: 2850 rev/min</li> <li>• Motor appr.: 1,25 kW</li> <li>• 230V</li> </ul> Accessories: <ul style="list-style-type: none"> <li>• Corundum grinding wheel+spare wheel</li> <li>• Silicium carbide grinding wheel+ spare wheel</li> <li>• Safety shield</li> <li>• Solid Tool rest and adjustable on both wheels</li> <li>• Coolant container</li> <li>• Wheel dresser</li> </ul>			
1.5.9	<b>Column drilling machine with machine vice</b>		1	pcs
	Dilling Performance in Steel E 335 St 60: 26 mm, Drilling Performance in Cast-iron: 30 mm, Tapping Performance in Steel E 335 St 60: M 20, in Cast-iron: M24, Tool Taper (short spindle): MT 4 Table Clamping Area appr.: 400 x 420 mm, T-Slots, number x width at least: 2 x 14 mm, Distance spindle/table min./max. appr.: 65/800 mm, Column Diameter at least: 115 mm, Z-Travel of Spindle appr.: 125 mm, Feeds: 0,05-0,15 mm/Rev, Speed Range appr. 75 - 2000 rpm, 8 steps Performance approx.: 1,0 / 1,6 kW, With coolant pump device appr. 40 W Delivered with machine vice, Accuracy 0.1mm, Jaws hardened and with prism for round material clamping, Clamping range: 200mm			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Jaw width 150mm With clamping lever			
1.5.10	<b>Bench drilling machine</b>		1	pcs
	Drilling performance in steel 25 mm Chuck 1 - 16 mm / B 18 Morse cone MK 2 Spindle speed appr. (16) 150 - 2800 rpm Swivel drilling table -45° to +45° Distance spindle / table max. 420 mm Distance spindle / base plate appr. 600 mm Quill stroke appr. 80 mm Column diameter appr. 70 mm Table size / T-slot size appr. 300 x 300 mm / 16 mm Motor output power S1 100% appr. 0.75 kW / 400 V Scope of delivery: Quick-action chuck 1 - 16 mm / B 18 Chuck mandrel MK 2 / B 18 Digital quill stroke indicator LED machine light Clockwise-counterclockwise rotation T-slot stones Operating tools Base frame, height appr. 820 mm, with storage compartment, lockable door and chip tray Drill vice, jaw width 125 mm, opening 100 mm, Steel jaws with prisms			
1.5.11	<b>Electric hand drill machine</b>		2	pcs
	Impact drill, Forwards / reverse, appr. 600 W, impact, Metal quick-change chuck 1.5 - 13 mm, additional handle, drilling depth stop, transport case, speed range appr. 0-2800, bore Ø			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	steel/concrete/ wood 10/13/25			
1.5.12	<b>Granite surface plate with stand</b>		1	pcs
	Natural granite control surface plate Width×length appr. 630 x 630 Accuracy class 0 Flatness 0,007 mm Plate thickness 70 mm delivered with underframe/cabinet, height 900 mm, load capacity 500 kg			
1.5.13	<b>Heigh gauge with scriber</b>		1	pcs
	Precision Vernier height gauge Solid rest with ground surface • Scale hardened and ground • Scribing needle tip made of carbide • Scale: 0.02mm • With adjustment screw and fine adjustable measuring scale • Height: 300mm In wooden box			
1.5.14	<b>Steel cabinet 500 x 1000 x 2000</b>		3	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			
1.5.15	<b>First aid kit</b>		1	set
	Content Especially for construction and for the workshop: 1 x resuscitator 1 x splinter tweezers 8 cm 1 x Steri wash eyewash 5 x 20 ml 2 x aluminum compress 8 x 10 cm General First Aid Articles:			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	1x rescue blanket gold-silver 1x first aid scissors 18 cm 2x triangular cloth 1x disposable gloves vinyl powdered (pair) 1x non-woven cloth 10 pieces 1x color key 2x foil bag 2x FFP2 mouth-nose protection 1x wet wipes 1x cold instant compress 14 x 18 cm 1x safety sign first aid sticker 10 x 10 cm Assortment of plasters 3x 14-piece plaster set 1x adhesive plaster 2.5 cm x 5 m General Association Articles 1x bandage cloth 60 x 80 cm 1x quick wound dressing 6 x 8 cm 3x quick wound dressing 8 x 10 cm 1x quick wound dressing 10 x 12 cm 2x elastic fixation bandage 6 cm x 4 m 2x elastic fixation bandage 8 cm x 4 m 3x wound compress sterile 10 x 10 cm 2x eye compress 55 x 70 mm			
1.5.16	<b>HSS bimetallic sawblade</b>		100	pcs
	wavy teeth 24TPI length 300 mm			
1.5.17	<b>Tin panel shelf</b>		1	pcs
	Dimensions approx. H 1000 x D 800 x L 2000 mm 6 compartments, compartment width appr. 85 mm Shelf load 750 kg (with evenly distributed load) Temple height approx. 900 mm Format size 2000x1000 - 3000x1500 mm			
1.5.18	<b>Sheet metal guillotine shear</b>		1	pcs
	Manual sheet metal shears in sturdy steel construction incl. manual hold-down device and adjustable material stop Max. cutting length 1000 mm			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Sheet steel (St.37) max. 1.5 mm Material stop 0 - 600 mm			
1.5.19	<b>Segmented folding machine bending machine</b>		1	pcs
	Bending length min. 1000 mm Max. sheet thickness 2.5 mm (400N/mm <sup>2</sup> ) max. bending angle 135° Max. opening width 55 mm Segment widths at least in mm 25, 30, 35, 40, 45, 50, 75, 100, 150, 200, 270			
1.5.20	<b>Round bending machine</b>		1	pcs
	Roll length at least 1000 mm Sheet thickness max. 1.5 mm Roll diameter appr. 60 mm Asymmetrical 3-roller system for convenient pre-bending Swing-out top roller Roll drive via hand crank			
1.5.21	<b>Manual beading machine</b>		1	pcs
	Including 8 pairs of beading and crimping rollers Adjustable stop on the lower shaft Adjustable upper shaft Thickness up to 1.2 mm (Material strength 400 N/mm <sup>2</sup> ) Working depth at least 270 mm (150 mm with stop) Scope of delivery 8 pairs of beading and crimping rollers Workpiece stop Roller wrench			
1.5.22	<b>Spot Welding Gun</b>		1	pcs
	Line voltage: 230V max. power consumption : 13 KW Rated power appr.: 2.3 KW/50%			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Mains fuse : 25A Spot welding current at least: 6000 A sec. Open circuit voltage max.: 2.5V max. spot weld thickness : 2.0 + 2.0 mm Force of the arms adjustable from appr. 40 kg to 120 kg Included in delivery: Arm pair, length single arm appr. 120 mm Straight electrode appr. L= 130 mm Straight electrode appr. L = 50mm			
1.5.23	<b>Soft soldering set propane</b>		4	set
	Scope of delivery 1 piece copper soldering iron 1 piece propane gas hose 1 piece hose rupture protection 1 piece steel cylinder for propane min. 1 L (without content) 1 piece transfer nozzle 1 bottle of soldering water for titanium zinc min. 125g 1 piece of soldering water brush 1 piece of ammonia stone for cleaning the copper soldering tip 2 pieces of solder in rods for soldering titanium zinc			
1.5.24	<b>Solder rod</b>		100	pcs
	Rod solder 250g with 40% tin content for soldering fine zinc and alloyed zinc in plumbing and roofing, soldering in radiator construction and body construction as well as dip tinning. Characterized by its optimal gap filling, good wetting and high strength. Alloy: Pb60Sn40			
1.5.25	<b>Soldering water for soft soldering</b>		20	pcs
	Form of delivery: Bottle min. 1000 g Condition: liquid Density appr.: 1.30 g/cm <sup>3</sup>			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.5.26	<b>Taper sheet and tube drill set</b>		3	set
	3 - 14 mm / 8 - 20 mm / 16 - 30 mm TiN-coated in metal cassette			
1.5.27	<b>Blind riveting pliers</b>		3	set
	Set including mouthpieces, open-end wrenches, rivet nut pull mandrels Suitable for blind rivets, blind rivet nuts and cavity metal dowels Fold-out legs for increased force requirements 5 mouthpieces in different sizes to be stowed away in the fold-out handle Features: For blind rivet Ø: 2.4 mm, 3.2 mm, 4.0 mm, 4.8 mm, 6.4 mm For rivet nuts: M4, M5, M6, M8, M10 Length appr.: 500mm Delivery: incl. 5 mouthpieces, collection container, spare rivet head, 5 rivet nut pull mandrels, 3 open-end wrenches, hex wrench 6mm, plastic case			
1.5.28	<b>Blind rivets set</b>		5	set
	650 pieces, Ø 3.2-4.8mm x length 6-14mm Head made of aluminum, rivet mandrel made of galvanized steel In plastic sorting box			
1.5.29	<b>Ideal scissor set</b>		16	set
	For continuous, straight and shaped cuts Compact cutter head for high manoeuvrability for shape cutting Ergonomic handle For cutting small radii and in confined spaces For right-hand cutting			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.5.30	<b>Wooden hammer</b> Hammer head made of hornbeam wood with slightly spherical tracks. A pressed-on metal jacket prevents the hammer head from shattering. With ash wood handle. Head length appr. 140 mm Head-∅ 70 mm Stem length appr. 320 mm Weight appr. 550 g		16	pcs
1.5.31	<b>Scale made of aluminium profile</b> Length 1000 mm Aluminum scale, anodized. With spotting edge and glare-free matt mm scale		5	pcs
1.5.32	<b>Stop angle galvanized</b> Length of long thighs 150 mm Length of short thighs 100 mm Leg cross-section at least 20×5 mm Material Steel Surface galvanized		16	pcs
1.5.33	<b>Stop angle galvanized</b> Length of long thighs 500 mm Length of short thighs 280 mm Leg cross-section at least 30×5 mm Material Steel Surface galvanized		5	pcs
1.5.34	<b>Folding chisel</b> Forged Groove width 8 mm		5	pcs
1.5.35	<b>Folding chisel</b> Forged Groove width 10 mm		5	pcs

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.5.36	<b>Folding pliers set</b>		5	set
	3 forged pliers (straight, 45°, 90°) Cheeks and mouth tempered Thighs red plastic-coated Material: Carbon steel Mouth width of the folding pliers at least 60 mm			
1.5.37	<b>Protractor with locking screw</b>		5	pcs
	Made of matt chrome-plated steel Permanently etched scaling Measuring range 0° - 180° Sheet diameter appr. 150 mm Length min. 200 mm			
1.5.38	<b>Sheet metal grip wrench</b>		10	pcs
	Overall length appr. 180 mm Jaw width appr. 80 mm Jaw capacity appr. 45 mm			
1.5.39	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.5.40	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm			

1.5	G01 - LOT 1	METAL BASIC WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.6.1	<b>Combination workbench</b>		4	pcs
	Workbench height: 850 mm Drawer load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension) min.: 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) approx. 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity approx.: 200 kg Worktop 40 mm thick made of beech multiplex, waterproof glued			
1.6.2	<b>Bench vice 125 mm</b>		12	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
1.6.3	<b>Mobile outboard engine trolley</b>		2	pcs
	Suitable for two-stroke, four-stroke, short-tail and long-tail outboard engines Made of powder coated steel With 2 fixed and 2 swivel castors Load capacity appr. 140 kg			
1.6.4	<b>Montage stand for motorbike engines</b>		2	pcs
	Stand for 1-cylinder 2-stroke/4-stroke Cross/Enduro engines. Sturdy construction with mounting rods for the rear and front engine block			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Vessel for leaking oil at the bottom Possibility to rotate the motor in different directions with spring-loaded lock			
1.6.5	<b>Workshop file set</b>		4	set
	Set of 5 files 200 mm H2 Each 1 x flat-blunt, 3-edged, 4-edged, round, semicircular With plastic handles			
1.6.6	<b>Key file set</b>		4	set
	Set of 6 files 100 mm H2 Each 1 x flat-blunt, flat-pointed, 3-edged, 4-edged, semicircular, round With wooden handle Delivered in plastic bag			
1.6.7	<b>Thread cutting set with tap sets, M3-20</b>		2	set
	Content: 1 each tap set, 3 pieces: Size M3; M4; M5; M6; M8; M10; M12; M14; M16; M18; M20 1 each die: Size M3; M4; M5; M6; M8; M10; M12; M14; M16; M18; M20 1 each adjustable tap wrench: Size 1.1/2; 3 1 each die stock: Size 20×5; 20×7; 25×9; 30×11; 38×14; 45×18 1 thread gauge: Size M/W 1 screwdriver: Size 3×60 1 tap wrench with ratchet: Size 85; 110			
1.6.8	<b>Fine thread cutting set in a metal case MF3-20</b>		1	set
	Content: 1 set each hand tap: Size 3×0.35; 4×0.5; 5×0.5; 6×0.75; 8×1; 10×1; 12×1.5; 14×1.5; 16×1.5; 18×1.5; 20×1.5; 1 each die: Size 4×0.5; 5×0.5; 6×0.75; 8×1; 10×1; 12×1.5; 14×1.5; 16×1.5; 18×1.5; 20×1.5; 1 each adjustable tap wrench: Size 1; 3			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	1 each die stock: Size 20×7; 25×9; 30×11; 38×10; 45×14			
1.6.9	<b>Electric hand drill machine</b>		2	pcs
	Impact drill, Forwards / reverse, appr. 600 W, impact, Metal quick-change chuck 1.5 - 13 mm, additional handle, drilling depth stop, transport case, speed range appr. 0-2800, bore Ø steel/concrete/ wood 10/13/25			
1.6.10	<b>Jobber drill set</b>		3	set
	Drill range 1-13 mm HSS uncoated Drill type N, point angle 118 degrees Number of drills 29 Tapping hole dia. 3,3; 4,2; 6,8; 10,2 mm Incremental steps of drills 0,5 mm Delivered in case			
1.6.11	<b>Angle grinder</b>		2	pcs
	Disk diameter 125 mm Power min. 750 W Idle speed 11,000 rpm Thread of grinding shaft M14 Lockable switch			
1.6.12	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	Double grinding machine for metal with base frame Technical data: • Wheel-ø: 200x25x32mm • Speed: 2850 rev/min • Motor appr.: 1,25 kW • 230V Accessories: • Corundum grinding wheel+spare wheel • Silicium carbide grinding wheel+ spare wheel			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• Safety shield</li> <li>• Solid Tool rest and adjustable on both wheels</li> <li>• Coolant container</li> <li>• Wheel dresser</li> </ul>			
1.6.13	<b>Bench drilling machine</b>		1	pcs
	Drilling performance in steel 25 mm Chuck 1 - 16 mm / B 18 Morse cone MK 2 Spindle speed appr. (16) 150 - 2800 rpm Swivel drilling table -45° to +45° Distance spindle / table max. 450 mm Distance spindle / base plate appr. 600 mm Quill stroke appr. 80 mm Column diameter appr. 70 mm Table size / T-slot size appr. 300 x 300 mm / 16 mm Motor output power S1 100% appr. 0.75 kW / 400 V Scope of delivery: Quick-action chuck 1 - 16 mm / B 18 Chuck mandrel MK 2 / B 18 Digital quill stroke indicator LED machine light Clockwise-counterclockwise rotation T-slot stones Operating tools Base frame, height appr. 820 mm, with storage compartment, lockable door and chip tray Drill vice, jaw width 125 mm, opening 100 mm, Steel jaws with prisms			
1.6.14	<b>Jobber drill set</b>		3	set
	Drill range 1-13 mm HSS uncoated			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Drill type N, point angle 118 degrees Number of drills 29 Tapping hole dia. 3,3; 4,2; 6,8; 10,2 mm Incremental steps of drills 0,5 mm Delivered in case			
1.6.15	<b>Drill set MK 2</b>		2	set
	HSS quality drill bit for MK mounting. Completely in wooden case. Content 1 each: • MK 1-14.0 mm • MK 2-15.0 mm • MK 2-16.0 mm • MK 2-17.0 mm • MK 2-18.0 mm • MK 2-19.0 mm • MK 2-20.0 mm • MK 2-MK 1 reduction sleeve			
1.6.16	<b>Electric hand drill machine</b>		2	pcs
	Impact drill, Forwards / reverse, appr. 600 W, impact, Metal quick-change chuck 1.5 - 13 mm, additional handle, drilling depth stop, transport case, speed range appr. 0-2800, bore Ø steel/concrete/ wood 10/13/25			
1.6.17	<b>Steel cabinet 500 x 1000 x 2000</b>		3	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			
1.6.18	<b>Heavy-duty shelf</b>		2	pcs
	Height = 180 cm Width = 160 cm			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Depth = 60 cm Number of levels 5 with sturdy wooden floors Load capacity per level: 250 kg Frame galvanised, boltless assembly			
1.6.19	<b>Hydraulic workshop press</b>		1	pcs
	Hydraulic press (pillar press) with base frame Working area Min force: 60 t Min. stroke: 380 mm Passage between stands min. 750 mm Maximum pressure 235 bar Table width min. 250 mm Press speed appr.: 2,2 mm/s Return speed appr.: 9,5 mm/s Manometer Adjustable work table Overload valve Sliding cylinder Drive Capacities Motor rating hydraulic pump appr.: 1.5 kW With manual hand lever pump for slow and high precision work tasks			
1.6.20	<b>Mounting lever for tire mounting</b>		6	pcs
	Profiled shape. solid forged With protective surfaces for aluminium rims Vanadium steel, chrome-plated Dimension appr. (L x W x H) 300 x 22 x 8 mm			
1.6.21	<b>Mounting lever for tire mounting</b>		4	pcs
	Profiled shape. solid forged With protective surfaces for aluminium rims Vanadium steel, chrome-plated			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Dimension appr. (L x W x H) 540 x 30 x 10 mm			
1.6.22	<b>Motorcycle tubeless tire repair kit</b>		2	set
	1 x T-handle insert tool (drill/file) incl. spare file 1 x T-handle spiral probe tool incl. spare insert 1 x Tire pressure gauge 1 x needle nose pliers 1 x 4-way valve steam tool 2 x hex wrench 1 x Utility knife 50 tire vulcanization plugs, 4x black tire valves, 6x black plastic valve extensions, 8x standard valve inserts, 8x copper hex nuts, 8x black plastic valve caps, 1x spare parts storage box, 1x pair of gloves Delivered in transport box			
1.6.23	<b>Foldable workshop crane</b>		1	pcs
	Foldable steel construction Swivel castors for easy handling Extendable lifting arm appr. 950 - 1250 mm Lifting height min. 0 - 2000 mm Max. load capacity 1000 kg			
1.6.24	<b>Round sling 1000 kg 1 m</b>		2	pcs
	Circumference 2 m Usable length 1 m Sling width appr. 46 mm			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.6.25	<b>Torque Wrench with ratchet 200 Nm</b>		2	pcs
	For right- and left-hand tightening Torque measuring accuracy max. $\pm 3$ % Overall length appr. 450 mm Torque range 40 Nm - 200 Nm Scale graduation, 1 graduation = 1 Nm Weight appr. 1,000 g Square drive 1/2 in Display analogue Release signalling acoustic and haptic			
1.6.26	<b>Abrasive cloth roller 400</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife. Grain size 400 Rolls Width appr. 25 mm Rolls length 50 m			
1.6.27	<b>Abrasive cloth roller 180</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife. Grain size 180 Rolls Width appr. 25 mm Rolls length 50 m			
1.6.28	<b>Abrasive cloth roller 80</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife. Grain size 80 Rolls Width appr. 25 mm Rolls length 50 m	-		

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.6.29	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.6.30	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.6.31	<b>Marine outboard engine</b>		2	pcs
	Engine Type: 4 Stroke Displacement appr.: 225 cc No. of cylinders/configuration: 2 Cylinder Full throttle operating range: 4,500 - 5,500 rpm Fuel Induction System: 1 carburetor Ignition/advance system: Electronic PGM-IG Starter system: Electric/Generator/Recoil starter Gear ratio appr.: 2.30			

1.6	G01 - LOT 1	SMALL ENGINE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Rated Power (kW(PS)) appr.: 6.0(8) Cooling System: Water Cooled (with Thermostat) Alternator/Battery charging capacity min.: 12A With 4 blades Propeller and shaft			
1.6.32	<b>Motorbike engine</b>		2	pcs
	Single-cylinder, air-cooled, 4-stroke, OHC Displacement appr. 125 cc Max. Power appr. 6.3 kW/6,500 rpm Max. Torque appr. 10.0 Nm/5,000 rpm Fuel Induction System: carburetor Transmission 4-speed, Return gear shift Starter Electric and Kick Ignition CDI			
1.6.33	<b>Angle Grinder</b>		2	pcs
	Disk diameter 230 mm Power min. 2200 W Idle speed approx. 6500 rpm Thread of grinding shaft M14 Lockable switch			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<b>Engine / Transmission</b>			
1.7.1.1	<b>Engine support bridge</b>		1	pcs

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	500 kg min. load capacity swivelling mounting plates The motor bridge is used for the installation and removal of motors. Due to swivelling mounting plates, the crossbeam can be aligned exactly so that it stands straight even when the fender is dropping. Scope of delivery: 1 traverse 2 suspension spindles + screw-on parts 2 chains 2 swivelling mounting plates			
1.7.1.2	<b>Oil filter removing wrench</b>		1	set
	Cast Aluminum Drive square socket 1/2"   23 pcs Content: Reversible ratchet, output 1/2" Ring wrench SW 27mm oil filter cap drive inner square 1/2" 1 x 14-sided Ø 65mm oil filter cap drive square socket 1/2" 1 x 14-sided Ø 67mm oil filter cap drive square socket 1/2" 1 x 14-sided Ø 74mm oil filter cap drive square socket 1/2" 1 x 15-sided Ø 75mm oil filter cap drive inner square 1/2" 1 x 8-sided Ø 74mm oil filter cap drive inner square 1/2" 1 x 15-sided Ø 74mm oil filter cap drive inner square 1/2" 1 x 14-sided Ø 73mm oil filter cap drive inner square 1/2" 1 x 12-sided Ø 75mm oil filter cap drive inner square 1/2" 1 x 15-sided Ø 74mm oil filter cap drive inner square 1/2" 1 x 15-sided Ø 79mm oil filter cap drive inner square 1/2" 1 x 15-sided Ø 73mm oil filter cap drive square socket 1/2" 1 x 14-sided Ø 74mm oil filter cap drive square socket 1/2" 1 x 18-sided Ø 84mm oil filter cap drive square socket 1/2" 1 x 15-sided Ø 89mm oil filter cap drive inner square 1/2"			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	1 x 15-sided Ø 91mm oil filter cap drive square socket 1/2" 1 x 15-sided Ø 90mm oil filter cap drive inner square 1/2" 1 x 15-sided Ø 95mm oil filter cap drive inner square 1/2" 1 x 12-sided Ø 76mm oil filter cap drive inner square 1/2" 1 x 15-sided Ø 80mm oil filter cap drive inner square 1/2" 1 x 15-sided Ø 101mm oil filter cap drive square socket 1/2" 1 x 15-sided Ø 92mm oil filter cap drive square socket 1/2" Delivered in sturdy metal cassette			
1.7.1.3	<b>Universal oil filter wrench 3 jaw adjustable</b>		1	pcs
	Oil filter spider, 3-armed for oil filter Ø 80 - 135mm suitable for all car oil filters Inner square drive 1/2" and outside hexagon for standard spanner Material; Chrome plated tool steel			
1.7.1.4	<b>Oil drain pan</b>		1	pcs
	Oil collection container with a capacity of appr. 7 litres and 3 handles. The tub also has a pouring pipe and an internal sieve to prevent the e.g. screws / gasket / oil filter etc. fall into the oil.			
1.7.1.5	<b>Pneumatic oil suction unit</b>		1	set
	Mobile device for collecting waste oil by draining or vacuuming the oil Appr. 450mm diameter drip pan for draining oil Pre-chamber made of plexiglass to determine the quality and quantity of the oil Accelerated oil draining from the vessel for temporary storage by compressed air Two fixed and two steerable castors for easy handle thanks to the push handle A pressure gauge indicates compressed air or vacuum			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	(compressor not included). There is a shut-off tap at the oil drain, which makes emptying by compressed air particularly easy Pressure Air inlet pressure (bar) 6 - 8 Plastic probes (L x D) 740/5 / 745/3 / 910/5 / 920/3 Air consumption (l/min) appr. 150 Metal probes (L x D) 730/2 / 735/3 Fuel tank capacity min. (litres) 70 Working temperature (°C) 40 - 60 Oil sump volume min. (liters) 20			
1.7.1.6	<b>Punch letters and numbers</b>		1	set
	2 Sets 0-8 in a plastic box (9 pieces) A-Z incl. & in plastic box (27 pieces) Font size 5 mm		1	set
1.7.1.7	<b>Hydraulic engine crane</b>		1	pcs
	Load capacity 300 - 1000 kg Boom length appr. 1150 - 1500 mm Stroke range appr. 550 - 2400 mm Ground clearance min. 180 mm Entry width min. 840 mm With 2 fixed and 2 swivel castors Foldable for easy storage		1	pcs
1.7.1.8	<b>Gear Jack</b>		1	pcs
	Hydraulic jack to lift and support gearboxes and engines With 4 swivel castors Min height 1100 mm Max height 1950 mm Crown diameter appr. 320 mm Distance between wheels appr. 450 mm Load capacity min. 500 kg		1	pcs

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.1.9	<b>Combination workbench</b>		8	pcs
	Workbench height: 850 mm Drawer load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension)min.: 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) approx. 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity approx.: 200 kg Worktop 40 mm thick made of beech multiplex, waterproof glued			
1.7.1.10	<b>Bench vice 125 mm</b>		8	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
1.7.1.11	<b>Steel cabinet 500 x 1000 x 2000</b>		6	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			pcs

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.1.12	<b>Outside micrometer set</b>		8	set
	Set of micrometers (3 pieces) 0 - 25 mm 25 - 50 mm 50 - 75 mm 75 - 100 mm Accuracy 0,01 mm Delivered with 2 calibrator pins (25 mm, 50 mm and 75 mm) and calibration tool in wooden plastic box			
1.7.1.13	<b>Two-point inside gauge</b>		2	set
	Measuring range 2 - 200 mm Accuracy 0,01 mm Delivered in box Content: Internal measuring device Dial gauge 4 interchangeable stylus bolts 2 measuring attachments 4 extensions for stylus bolts			pcs
1.7.1.14	<b>Dial gauge with magnetic tripod</b>		4	set
	Dial gauge - measuring range [mm]: 10 - analogue Dial gauge - reading [mm]: 0,01 Dial gauge - accuracy [mm] min.: 0,017 Magnetic measuring stand - height [mm] appr.: 280 Magnetic measuring stand - base [mm] appr.: 60 x 50 x 55, M10 Magnetic measuring stand - magnetic force [kg] min.: 60 Delivered in box			
1.7.1.15	<b>Feeler gauge</b>		20	pcs
	Feather-hard steel blades with clear lettering. Uniformly wide steel blades, collapsible by rivet joint. Conical tapered steel			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	blades. In nickel-plated scabbard, clampable. Sheet thicknesses 0.05–0.25 (0.05 rising) 0.3–1.0 (0.1 rising) mm Number of sheets min. 13 Blade length 100 mm			
1.7.1.16	<b>Hand valve grinder</b>		6	pcs
	Valve grinder for grinding in valves when the cylinder head is dismantled by hand. Suction cups diameter 16 / 20 / 28 and 35 mm.			pcs
1.7.1.17	<b>Valve grinding paste</b>		10	pcs
	Abrasive paste for grinding valves. Can be diluted with oil (e.g. engine oil) Coarse = grain size P90 Fine = grain size P180			
1.7.1.18	<b>Thread cutting set with tap sets, M3-20</b>		2	set
	Content: 1 each tap set, 3 pieces: Size M3; M4; M5; M6; M8; M10; M12; M14; M16; M18; M20 1 each die: Size M3; M4; M5; M6; M8; M10; M12; M14; M16; M18; M20 1 each adjustable tap wrench: Size 1.1/2; 3 1 each die stock: Size 20×5; 20×7; 25×9; 30×11; 38×14; 45×18 1 thread gauge: Size M/W 1 screwdriver: Size 3×60 1 tap wrench with ratchet: Size 85; 110			
1.7.1.19	<b>Fine thread cutting set in a metal case MF3-20</b>		1	set
	Content: 1 set each hand tap: Size 3×0.35; 4×0.5; 5×0.5; 6×0.75; 8×1; 10×1; 12×1.5; 14×1.5; 16×1.5; 18×1.5; 20×1.5; 1 each die: Size 4×0.5; 5×0.5; 6×0.75; 8×1; 10×1; 12×1.5;			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	14×1.5; 16×1.5; 18×1.5; 20×1.5; 1 each adjustable tap wrench: Size 1; 3 1 each die stock: Size 20×7; 25×9; 30×11; 38×10; 45×14			
1.7.1.20	<b>Thread Repair Set</b>		4	set
	Set consisting of: 20x threaded inserts M 6 x 6 20x threaded inserts M 6 x 9 20x threaded inserts M 6 x 12 10x threaded inserts M 8 x 8 10x threaded inserts M 8 x 12 10x threaded inserts M 8 x 16 10x threaded inserts M 10 x 10 10x threaded inserts M 10 x 15 10x threaded inserts M 10 x 20 3x twist drill 3x hand taps 3x built-in spindles 3x tenon crusher Packed in a sturdy plastic box, clearly sorted by length			
1.7.1.21	<b>Chisel and punch set</b>		16	set
	Flat and cross chisels for metal, as well as punches. Special impact head coating prevents chipping on the impact head. Content: Flat chisels: 1 piece ~125 each; ~150 mm Cross chisel: 1 pc. ~125 mm Punch: 1 pc each ~120×2; ~150×3 mm Center punch: 1 pc. ~120×4 mm			
1.7.1.22	<b>Plastic lubricator bottle with spout pipe</b>		10	pcs
	Elastic pressure oiler with extendable brass outlet pipe, screw cap at the tip of the pipe. Pipe guide with adjusting nut.			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Resistant to ethanol and isopropanol-based disinfectants. Capacity approx. 250 ml Total height - pipe extended approx. 285 mm Material container Plastic Material outlet pipe Brass			
1.7.1.23	<b>Punch set</b>		2	pcs
	Interchangeable perforated iron set 11 pieces For the production of seals and punching out of rings, e.g. Cardboard, rubber, punched tape, plastic, leather, lead, textile fiber, felt, foam, foils, etc. Different sizes can be combined with each other so that different ring sizes can be produced at once. Delivered in a sturdy plastic cassette. Content: 1 x holder made of C45 alloy steel to accommodate the perforated pipes with internal thread and external with bayonet lock. 10 x Perforated pipes 3 - 4 - 6 - 8 - 10 - 12 - 14 - 16 - 18 - 20 mm			
1.7.1.24	<b>Socket set, 1/4", 3/8", 1/2"</b>		4	set
	Scope of delivery: With 1/4" Drive: 1 socket each, hexagon 4, 4.5, 5, 5.5, 6, 7, 8, 9, 10, 11, 12, 13, 14 mm 1 socket each, hexagon, extra long 4, 5, 6, 7, 8, 9, 10 mm 1 socket each, E-profile E4, E5, E6, E7, E8 1 screwdriver insert each, T-profile T8, T9, T10, T15, T20, T25, T27, T30 1 screwdriver each, T-profile with bore T8, T9, T10, T15, T20, T25, T27, T30 1 screwdriver each, hexagon socket 3, 4, 5, 6 mm			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP		BUMBE TTI	
1.7.1		BTTI_WS_ME_3			
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type		Qty	Unit
	1 screwdriver each, slotted 4, 5.5, 6.5, 7 mm 1 screwdriver each, cross PH0, PH1, PH2 1 screwdriver each, cross PZ0, PZ1, PZ2 1 extension each 50, 100 mm 1 reversible ratchet 145 mm, 72 teeth Plug-in handle 150 mm sliding handle 110 mm adapter for 1/4" bits Cardan joint With 3/8" drive: 1 socket each, hexagon 10, 11, 12, 13, 14, 15, 16, 17, 18, 19 mm 1 socket each, hexagon, extra long 10, 11, 12, 13, 14, 15 mm 1 socket each, E-profile E10, E11, E12, E14, E16, E18 1 reversible ratchet 205 mm, 72 teeth Extension 125 mm Spark plug insert 18 mm Adapter for 8 mm bits Cardan joint With 1/2" drive: 1 socket each 10 socket, hexagonal 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 24, 27, 30, 32 mm, 1 socket each, hexagon, extra long 16, 17, 18, 19, 22,				
	1 mm socket each, E-profile E24, E20 1 spark plug insert each 16, 21 mm 1 reversible ratchet 250 mm, 72 teeth Sliding handle 250 mm Extension 125mm Adapter for 8mm bits Universal joint Screwdriver bits in 8 mm drive x 30 mm length: 1 bit each, T-profile without bore T40, T45, T50, T55, T60, T70 1 bit each, T-profile with bore T40, T45, T50, T55, T60, T70 1 bit each, Allen key 7, 8, 10, 12, 14 mm				

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	1 bit each, cross, PH3, PH4 1 bit each, cross, PZ3, PZ4 1 bit each, slot 8, 10, 12 mm Screwdriver bits in 1/4" drive x 25 mm length: 1 bit each, multi-tooth M4, M5, M6, M8 1 bit each, T-profile T5, T6, T7, T8, T9, T10, T15, T20, T25, T27, T30, T40 1 bit each, RB profile M5, M6, M7, M8, M9 1 bit each, five star TS10, 15, 20, 25, 27, 30, 40, 45 Bit, T-profile with face hole T7 Allen key: 1 L-key each 1.27, 1.5, 2, 2.5, 3, 4, 5 mm All parts are of chrome-vanadium steel matt chrome-plated. Delivered in sturdy plastic box			
1.7.1.25	<b>Grease gun</b>		5	set
	Actuation with pushrod handle Capacity: 500 cm <sup>3</sup> Armoured hose, nozzle tube and 2 mouthpieces M10 x 1 Filling with grease cartridge, loose grease or via a grease filler Long operating lever Short-stroke system			
1.7.1.26	<b>Multi-purpose grease cartridges</b>		24	pcs
	<ul style="list-style-type: none"> <li>- Standard EP multi-purpose grease, suitable for low temperatures, -40°C to +120°C</li> <li>- Resilient, age-resistant, corrosion-protective, water-resistant multi-purpose lubricating grease based on lithium soap</li> <li>- With good low-temperature behaviour</li> <li>- Supple, flex-stable, wear-reducing, protective against corrosion</li> <li>- Ideal universal lubricating grease for various grease lubrication points on passenger cars, commercial vehicles, work machines, construction and agricultural machinery</li> </ul>			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	- Rolling and plain bearing grease for use in vehicles, machines and industry - Cartridges a 400g			
1.7.1.27	<b>Grease nipple set</b>		1	set
	Set of 70 pieces, assorted in plastic box M6 x 1 M8 x 1 M10 x 1 G 1/8"			
1.7.1.28	<b>Induction heater</b>		1	set
	Connection cable approx.: 3 m Coil hose length approx.: 700 mm Rigid coils: heating of pipes, bolts, profiles of various diameters Flexible spool: for loosening hard-to-reach parts through the use of special winding wire Flat coil for heating car body and sheet metal, simplifies the removal of stickers, sealants, etc. Frequency: 25 kHz – 60 kHz appr. 1.5 kW power			
1.7.1.29	<b>Oil drip tray</b>		10	pcs
	For disassembling and cleaning small assemblies - keeps the work surface clean - Galvanized steel sheet 0.5 mm - Top: 1 cm - Dimensions appr.: 45 x 65 cm			
1.7.1.30	<b>Cooling water jug</b>		2	pcs
	The cooling water jug has a specially curved spout for precise filling. In addition, the two handles allow 2-hand operation, which makes pouring easier. Specifications			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Capacity: approx. 10 l Material: HD-PE specially curved spout 2-hand control			
1.7.1.31	<b>Drip tray 18 litres</b>		2	pcs
	For collecting coolants, oils, etc. Dimensions appr.: 550 mm x 400 mm x 80 mm Made of sturdy plastic			
1.7.1.32	<b>Oil cabinet</b>		1	pcs
	With height-adjustable grating shelves, lockable, 1 drip tray Soils Type: Grating Floor pans type: Floor drip pan Width appr.: 950 mm Body Material: Steel sheet Lock Type: Twist bolt lock Depth: 500 mm Number of floors: 3 Door equipment: Ventilation hole panels Floor load capacity: 60 kg Height approx.: 1950 mm Body surface: powder-coated Number of keys: 2 Door Type: Double-wing door			
1.7.1.33	<b>Hand brush and dustpan</b>		10	set
	Hand brush made of unvarnished wood, with special, wet-resistant Arenga bristles. Dustpan made of extra strong sheet metal, hot-dip galvanized, with wooden handle. Robust design. Width 22 cm			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.1.34	<b>All-round broom with metal holder</b>		10	pcs
	With metal handle holder, body flat wood Brush material: Arenga/Elastin blend Length appr.: 500 mm Handle holder-Ø min.: 24 mm			
1.7.1.35	<b>Wooden handle for all-round broom</b>		10	pcs
	Diameter 24 mm Length min 130 cm Material Aspen wood			
1.7.1.36	<b>PE-bucket</b>		4	pcs
	Construction: conical round Liter scale inside With metal bracket Capacity: 12 l Impact-resistant plastic (PE)			
1.7.1.37	<b>Oil binder granulate</b>		4	pcs
	Universal binds liquids of all kinds on any solid surface. Even with complete saturation of the granules, optimal slip resistance is achieved. Universal, with relatively large grain size, it can be successfully used both outdoors and indoors for all daily absorption tasks. The granules can be used preventively or acutely in the event of damage. Product features: Universal is based on Moler. The granulate is fast-acting and safe (chemically inert) to use. All types of liquids (e.g. water, oil and chemicals) on solid surfaces are immediately absorbed and encapsulated in the porous structure of the granules. Sack with 40 lit./appr. 20 kg			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.1.38	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.7.1.39	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.7.1.40	<b>Sealing paper, heat-resistant</b>		2	pcs
	Material thickness: 1.5 mm Dimensions: 100 x 100 cm Temperature range: -100°C to max. +225°C (with application inspection up to max. +400°C)			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.1.41	<b>Sealing paper (0.50 mm)</b>		2	pcs
	Material thickness: 0.50 mm Dimensions: 50 x 250 cm Temperature range: -20°C to +120°C			
1.7.1.42	<b>Cork gasket (1 mm)</b>		1	pcs
	Material thickness: 1 mm Dimensions: 100 x 100 cm Temperature range: -20°C to +120°C			
1.7.1.43	<b>Cork gasket (2 mm)</b>		1	pcs
	Material thickness: 2 mm Dimensions: 100 x 100 cm Temperature range: -20°C to +120°C			
1.7.1.44	<b>Anaerobic surface seal</b>		2	pcs
	Container: 250 ml Tube Application: torsion-resistant flanges Temperature range: -55 to +150 °C Instant tightness: yes Max. gap width: 0.50 mm Description: Suitable as a surface seal for torsion-resistant metal surfaces Tube content: 250 ml			
1.7.1.45	<b>Anaerobic threadlocker, medium strength</b>		2	pcs
	Container: 50 ml Temperature range: -55 to +180 °C Thread size: up to M 36 Functional strength: 2 hours Breakaway torque: 26 Nm Recommended for all threaded connections made of metal			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.1.46	<b>Anaerobic threadlocker, high strength</b>		2	pcs
	Container: 50 ml Strength: high Temperature range: -55 to +180 GC Thread size: up to M 20 Functional strength: 6 hours Breakaway torque: 33 Nm Recommended for all threaded metal connections			
1.7.1.47	<b>Sealing ring, volcanic fiber, 30 dimensions</b>		2	set
	Content: 250 pcs Dimensions: 20 Dimensions (4 - 33 mm) Temperature range: -10°C to +100°C Operating pressure: -0.95 to 16 bar Use: For oxygen, compressed air and gases			
1.7.1.48	<b>Industrial O-Ring Set / BOX H NBR 70, 3-44 mm metric</b>		2	set
	Quality: NBR 70 Shore A Temperature resistance: -30 °C to +100 °C Industrial O-ring set Box with 400 O-rings in 30 different dimensions 3-45 mm Ø (metric)			
1.7.1.49	<b>Sealing ring assortment made of copper / aluminum</b>		2	set
	Design: Solid sealing rings Content: 300 pcs 6x10x1; 30 x alu, 30 x copper 8x14x1; 30 x alu, 30 x copper 10x16x1; 30 x alu, 30 x copper 12x18x1,5; 20 x alu, 20 x copper 14x20x1,5; 10 x alu, 10 x copper 16x22x1,5; 10 x alu, 10 x copper 18x22x1,5; 5 x alu, 5 x copper 20x16x1,5; 5 x alu, 5 x copper			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	22x27x1,5; 5 x alu, 5 x copper 14x29x2; 5 x alu, 5 x copper			
1.7.1.50	<b>Hand washing paste</b> Fine softwood granules, Moisturizing, Bucket with 10 l Biologically harmless, as phosphate-free and degradable Combination of mild, skin-friendly surfactants (= washing-active substances), skin-caring and organic friction agents Relieves the drain lines pH value approx. 6		4	pcs
1.7.1.51	<b>Mobile exhaust gas extraction</b> Mobile set for AU, passenger cars, petrol and diesel vehicles Composed of: Ventilator trolley, tilt-proof and smooth-running with 2 swivel and 2 fixed castors Including AU funnel, swivel and height adjustable Suction opening appr. 200 x 300 mm Angle of inclination infinitely adjustable Aluminium fan Volumetric flow: max.: 1,620 m³/h Motor power appr.: 0.75 kW Voltage: 400V, 50 Hz, 3-phase Connection cable min. 5 m with reversing pole plug Motor circuit breaker The system is to be delivered ready for operation Including 5 m blow-out hose NW 150 Temperature resistant up to 180°C and basket for storage on the trolley.		1	pcs

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.1.52	<b>Workshop laptop</b>		2	pcs
	Display: 35.56cm (14"), 1920 x 1080 450nits IPS CPU: Intel Core™ i5-1135G7 2.4/4.2GHz 4C 8MB Cache Graphics: Intel® Iris® Xe Graphics Memory: 16GB DDR4 RAM Hard Drive/SSD: 512 GB M.2 PCIe SSD Interfaces: USB 3.1 3 x, Type-C Thunderbolt 1 x, HDMI 1x Keyboard: backlit keyboard QWERTY, touchpad Battery: up to 13h battery life Max. weight: 2 kg Operational System: Windows 10/11 Pro Dual Load WIFI: IEEE 802.11 a/b/g/n/ac/ax Webcam, microphone Power supply 45W Special features: semi ruggedized, IP 53, military standard 810G, 3 years manufacturer's warranty			
<b>1.7.2</b>	<b>Chassis / Brakes / Tyres / Suspension / Steering</b>			
1.7.2.1	<b>Shunting car jack</b>		4	pcs
	Load capacity min. 2t Lifting appr. 760mm Ground clearance appr. 130mm Overall length appr. 1080mm Ø Plate appr. 130mm			
1.7.2.2	<b>Trolley</b>		1	pcs
	Table trolley with two wooden loading areas Floor height appr.: 230/735 mm Surface texture: powder-coated Length (mm) appr.: 1120 Inner length (mm) appr.: 1000 Width (mm) appr.: 705			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Inner width (mm) appr.: 700 Height (mm) appr.: 970 Load capacity at least (kg): 400 Front tires: 2 fixed castors, solid rubber, 160 mm Rear tires: 2 swivel castors, solid rubber, 160 mm, with brakes			
1.7.2.3	<b>Hydraulic Press 10t</b>		1	pcs
	Hydraulic press with 10t pressing force Steel spring inserted into the cylinder for a quick return of the piston. Single-stage hand pump Pressing force min. 10t Overall depth appr. 1900mm Width appr. 850mm Inner frame dimension appr. 550mm Stroke min. 160mm Ø Piston min. 40mm			
1.7.2.4	<b>Jack stands 1t</b>		8	pcs
	1 t min. load capacity Height adjustable approx.: Min. 25 cm to max. 50 cm			
1.7.2.5	<b>Torque Wrench with ratchet 200 Nm</b>		2	pcs
	For right- and left-hand tightening Torque measuring accuracy max. $\pm 3\%$ Overall length appr. 450 mm Torque range 40 Nm - 200 Nm Scale graduation, 1 graduation = 1 Nm Weight appr. 1,000 g Square drive 1/2 in Display analogue Release signalling acoustic and haptic			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.2.6	<b>Torque Wrench with ratchet 50 Nm</b>		2	pcs
	For right- and left-hand tightening Torque measuring accuracy max. $\pm 3$ % Overall length appr. 330 mm Torque range 10 Nm - 50 Nm Scale graduation, 1 graduation = 0,5 Nm Weight appr. 700 g Square drive 3/8 in Display analogue Release signalling acoustic and haptic			
1.7.2.7	<b>Impact wrench 1/2"</b>		2	pcs
	High-performance pin percussion mechanism One-handed switching for clockwise / anti-clockwise rotation Very low vibration With non-slip handle Includes 7.2 compressed air plugs Drive 12.5 mm (1/2") Speed appr. 7000 rpm Operating pressure 6 bar Tightening torque max. 750 Nm Release torque max. 850 Nm			
1.7.2.8	<b>Power sockets for impact wrenches</b>		2	pcs
	Set includes the following impact wrench socket wrenches: Ratchet drive: 1/2 inch Sizes in mm: 15 mm 17 mm 19 mm 21 mm 22 mm All socket wrench sizes are color-coded All impact wrench nuts with bore and ball fan grille Replaceable protective covers Total length: 85 mm With plastic sheath and rubber insert to protect the alloy wheels			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	and wheel bolts Delivered in plastic box			
1.7.2.9	<b>Air hose</b>		10	pcs
	Rubber compressed air hose complete with coupling and plug-in nipple 10 meters Dimension: 6 mm inside Coupling and plug-in nipple made of brass Fully assembled and pressed, NW 7.2 Max. 20 bar Flexible material			
1.7.2.10	<b>Compressor air blow gun</b>		6	pcs
	Material: die-cast aluminum With connection nipple 1/4" female connection thread Operating pressure: 1-10bar Air consumption: 120-600 L/min. Nozzle tube length: approx. 8cm			
1.7.2.11	<b>Tire Inflator Pressure Gauge</b>		3	pcs
	Measuring range 0 bar - 10 bar Length of hose 400 mm Pressure gauge appr. ø 60 mm, protected by a plastic cap With steel nipple for coupling NW 7.2 – 7.8.			
1.7.2.12	<b>Valve assembling lever tool</b>		6	pcs
	High-quality plastic for a long service life, protects the rim Metal head Total length approx. 290 mm With practical device for unscrewing valve inserts at the rear end Can be used on both sides			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.2.13	<b>Balance weight pliers</b>		2	pcs
	High quality, heavy and very robust With hammer at the head end Insulated handle with rubber coating Total length approx. 240 mm Weight approx. 500 g			
1.7.2.14	<b>Wheel rubber valve</b>		1	set
	100 rubber valves TR414 Particularly suitable for steel rims, as long valves are prescribed there Approved for all car tyres (tubeless only) up to a maximum speed of 210 km/h (speed index H) 49mm length, for standard holes 11.3mm diameter Pressure range: up to 6 bar Absolutely weather-resistant and ozone-resistant Short valve core			
1.7.2.15	<b>Wheel impact weights steel rims</b>		1	set
	Set of 900 pieces 4 - 60 g Content: each 100x 5, 10, 15, 20, 25, 30 g and each 50x 35, 40, 45, 50, 55, 60 g High-quality impact weights in silver Galvanized and plastic-coated for maximum durability Optimal bending of the clamp for easy mounting on all steel rims			
1.7.2.16	<b>Wheel impact weights aluminium rims</b>		1	set
	Set of 600 pieces 5 - 30 g Content: 100x 5, 10, 15, 20, 25, 30g high-quality impact weights in silver Galvanized and plastic-coated for maximum durability Optimal bending of the clamp for easy mounting on all alloy wheels			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.2.17	<b>Adhesive wheel weights</b>		2	pcs
	6 kg roll adhesive weights silver zinc-plated, 1200 weights à 5g Adhesive weights for balancing alloy wheels Galvanized for maximum durability Incl. tear-off edge Very good adhesive properties on new and used rims			
1.7.2.18	<b>Adhesive Wheel weight remover</b>		6	pcs
	Adhesive Weight Remover High-quality and almost break-resistant plastic Gently removes adhesive weights and stickers Total length approx. 260 mm Width approx. 25 mm Sharp-edged Blade can be resharpened if necessary			
1.7.2.19	<b>Wheel valve extractor tool</b>		2	set
	Set of 5 valve extractors for mounting machines High-quality plastic Total length approx. 130mm For the installation of all common rubber valves in steel and aluminum rims			
1.7.2.20	<b>Tire mounting paste</b>		1	pcs
	10kg Premium Mounting Paste white Suitable for mounting any car, truck and motorcycle tires Excellent gliding properties with fast drying time Silicone- and solvent-free Processing temperature -15° C to +50° C			
1.7.2.21	<b>Brush for tire mounting paste</b>		1	pcs
	Brush for assembly paste - Suitable for the installation of all car, truck and motorcycle tires - for the application of assembly paste, assembly wax and			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	assembly cream - sturdy wooden handle - total length appr. 28cm incl. head			
1.7.2.22	<b>Tire repair kit</b>		6	set
	The tire repair kit enables quick tire repair in the event of externally recognizable puncture injuries caused by retracted nails or similar. Scope of delivery - 30 vulcanizing strips - Reamer with T-handle - Pulling tool with T-handle - Cutter - Mounting paste - Storage case			
1.7.2.23	<b>Spare strips for tire repair kit</b>		6	pcs
	The refill kit contains 60 tire repair threads for the repair of car tires. The repair threads are suitable for puncture wounds within the tread of steel belt tires.			
1.7.2.24	<b>Tire iron</b>		2	set
	Mounting Iron Set - high-quality mounting irons for mounting and dismounting tires - four mounting irons with a width of appr. 25 mm each and a length of 300 mm, 400 mm, 500 mm and 600 mm - galvanized steel - Particularly solid design			
1.7.2.25	<b>Brake line</b>		1	pcs
	Material: Steel Surface: plastic-coated Diameter [mm]: 4,75 Length [mm]: 5000			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.2.26	<b>Brake line fittings</b>		1	set
	Assortment brake line nipple 135 pieces, consisting of various clutches and nuts. Suitable for brake lines of Ø 4.75 mm (3/16") Content: 50 pieces brake line connector M10x1 (length 16 mm) 15 brake line nuts M10x1 20 brake line connectors M10x1 (length 16 mm) 20 pieces brake line connector M10x1 (length 22mm) 10 brake line nuts 24 TPI x 3/8" UNF 20 brake line connectors 24 TPI x 3/8" UNF (length 20mm) Delivered in plastic box			
1.7.2.27	<b>Brake disc gauge</b>		2	pcs
	Beak length 50 mm - made of stainless steel, hardened Scale and vernier matt chrome plated Vernier 1/10 mm Reading 0.1 mm In container/box			
1.7.2.28	<b>Brake drum calliper</b>		2	pcs
	Beak length 150 mm- made of stainless steel (INOX), Fully hardened With 2 metric pitches for internal and external measurement Vernier for internal measurement 1/10 mm Vernier for external measurement 1/20 mm Accuracy 0.15 mm In container/box Outside measuring range min. 0 - 500 mm, reading 0.05 mm Inner measuring range min. 50 - 550 mm, reading 0.1 mm			
1.7.2.29	<b>Abrasive cloth roller 400</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife.			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Grain size 400 Rolls Width appr. 25 mm Rolls length 50 m			
1.7.2.30	<b>Abrasive cloth roller 180</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife. Grain size 180 Rolls Width appr. 25 mm Rolls length 50 m			
1.7.2.31	<b>Abrasive cloth roller 80</b>		1	pcs
	Flexible cotton fabric (oil and kerosene resistant) with synthetic resin-bonded normal corundum (A). Roll in dispenser box and tear-off knife. Grain size 80 Rolls Width appr. 25 mm Rolls length 50 m			
1.7.2.32	<b>Sand blaster</b>		1	pcs
	Foot control via 2 pedals (one pedal at the front and 1 pedal at the rear) Powder-coated steel body and frame 2 large front flaps for front and rear loading Openings each appr. 970 mm x 740 mm Both front flaps each with a circumferential rubber seal 2 gas-filled shock absorbers on each of the two front flaps Integrated extraction system (220 volts, 1200W, with replaceable filter cartridge) at the rear 2 freely movable sandblasting guns with a total of 6 interchangeable replacement ceramic nozzles The jet pressure of both guns infinitely adjustable via the two pressure regulators and controlled on the pressure gauges			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Gloves are firmly attached to the fold-up front flaps Storage grid (perforated sheet) inside the sandblasting cabin Transparent viewing windows in the two front flaps 15 replacement films for viewing windows and lighting 4 fluorescent tube lamps are located in a separate housing with protective screen Specifications: Electrical connection: 220V, 50Hz Capacity min.: 1200 litres Operating pressure: 5.5 bar - 8.6 bar Ave. Air consumption: 680 litres/min 2x air intakes: 3/8" Incl. 2 pieces pressure reducer + pressure gauge Internal dimensions appr. (W x D x H): 1160 mm x 1280 mm x 450 mm front - 820 mm central			
1.7.2.33	<b>Spare glove for sandblaster</b>		2	pcs
	Extra rough palms for optimal grip Material thickness: 1 mm Total length appr.: 600 mm 1 Pair			pcs
1.7.2.34	<b>Air nozzle spare part set</b>		2	set
	2 pieces of jet nozzles with Ø6mm 2 pieces of jet nozzles with Ø7mm Suitable to sand blaster pos. 1.7.2.32			pcs
1.7.2.35	<b>Spare filter for sandblaster</b>		2	pcs
	Filter cartridge filter fine dust filter replacement filter suitable for Sandblasting cabin and extraction system (1.7.2.32)			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.2.36	<b>Blasting media</b>		2	pcs
	Grain shape: sharp / angular Type: neutral Hardness min.: 7.5 Mohs Bulk density appr.: 2.4 kg/dm <sup>3</sup> Grain size: 0.2 - 0.6 mm Specific weight appr.: 4.1 kg/dm <sup>3</sup> Bag with 25 kg			pcs
1.7.2.37	<b>Mobile tire rack 250kg</b>		1	pcs
	Tubular steel construction, bolted, powder-coated TPE tires Hubs with deep groove ball bearings Brakes on the swivel castors Load capacity min. 250 kg Loading area appr. (LxW) 1420 x 600 mm, External dimensions appr. (LxWxH) 1540 x 670 x 1725			
1.7.2.38	<b>Heavy-duty shelf</b>		8	pcs
	Height = 180 cm Width = 160 cm Depth = 60 cm Number of levels 5 with sturdy wooden floors Load capacity per level min.: 250 kg Frame galvanised, boltless assembly			
<b>1.7.3</b>	<b>Car Electric / Electronics / AC</b>			
1.7.3.1	<b>Battery charger</b>		1	pcs

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	5 main functions: <ul style="list-style-type: none"> <li>• Charging of starter batteries with a processor controlled charging curve</li> <li>• Support of the 12 V on-board network during the diagnosis phase</li> <li>• Securing the power supply for demonstration vehicles in the showroom</li> <li>• Supply of the on-board network when changing the battery to back up memory contents</li> <li>• Use of the device as a stabilized voltage source with individually programmable voltage and current</li> </ul> Special functions: <ul style="list-style-type: none"> <li>• Automatic restart in loading and Showroom mode</li> <li>• Locking the device in Showroom mode</li> <li>• Calibration of the interchangeable charging cables</li> <li>• Simplified loading in Easy mode</li> <li>• Activation and setting of the «Expert» charging curve</li> <li>• Recovery for deeply discharged batteries</li> <li>• Electronic safety for vehicle, on-board electronics and battery: short-circuit protection, electronic reverse polarity protection, safety shutdown in the event of thermal overload</li> </ul> Screen: Improved display with background lighting, multi-language			
1.7.3.2	<b>Battery charger 12-24V with jump start</b>		2	pcs
	Phase type: Single-phase Voltage: 230 V Frequency: 50/60 Hz Power appr.: 1000 W Battery voltage: 12/24 V Maximum current: 45 A Charging current min.: 30 A Maximum surge current: 300 A			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1	BTTI_WS_ME_3			
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Charging capacity: 450 Ah 15h			
1.7.3.3	<b>Automatic trickle battery charger</b>		2	pcs
	<ul style="list-style-type: none"> <li>- after a power failure, the device remains in the previously set operating mode</li> <li>- High-frequency charger with 4-stage fully automatic charging characteristic IUoUp without voltage spikes</li> <li>- Batteries from 1.2 - 120 Ah can be charged when connected without causing damage to the vehicle electronics (engine control)</li> <li>- Pulse maintenance charge keeps batteries at 95-100% ready for use</li> <li>- The device can be permanently connected to the battery</li> <li>- Splash-proof and dustproof (IP 65)</li> <li>- GS tested</li> <li>- Voltage: 170 – 260 V AC; 50 – 60 Hz</li> <li>- Charging voltage: 14.4 V; 14.7 V; 15.8 V; nominal 12 V</li> <li>- Charging current: 5 A or optionally 0.8 A (motorcycle)</li> <li>- Charger type: 8-stage, fully automatic IUoUp characteristic curve with pulse charging (resuscitation of empty batteries)</li> <li>- Battery capacity: 1.2 – 110 Ah (charging); 12 – 140 Ah (preserved)</li> <li>- Battery types: open, maintenance-free, AGM, GEL and lead-cadmium</li> </ul>			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.3.4	<b>Multimeter digital</b>		12	pcs
	Two fused power sockets 2-way adjustable stand DC voltage measurement from 300 mV to 1,000 V DC current measurement from 300 mA to 10 A AC voltage measurement from 3.0 V to 750 V AC current measurement from 300 mA to 10 A Resistance measurement from 300 ohms to 30 MOhm Capacity testing Diode verification with acoustic signal Transistor measurement Acoustic continuity check Frequency measurement Data Hold (storage of the last measured value) Bar graph display Scope of delivery: Protective cover with integrated probe holders Wall holder Test cable approx.900 mm with test probes, covered on both sides 9 V block battery			
1.7.3.5	<b>Digital multimeter with clamp</b>		2	pcs
	Designed for the automotive sector, but can also be used in other areas Display 3 3/4-digit LCD, with max. reading 3999 Battery 2x 1.5 V, AAA or comparable Low battery indicator Storage environment -10 °C - 50 °C, max. 85 %RH Suitable for CAT II category Ranges: Measuring ranges DC and AC voltage 400 mV, 4 V, 40 V, 400		1	pcs

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	V, 600 V Resistance 400 Ohm, 4 KOhm, 40 KOhm, 400 KOhm, 4 MOhm, 40 MOhm AC and DC current up to 400 A, smallest measurand 100 mA Display for negative polarity and exceeding the measuring range Max. measuring clamp opening appr. 33 mm, max. conductor Ø appr. 28 mm			
1.7.3.6	<b>Crimping pliers</b>		12	pcs
	For wire cutting, stripping of wires and crimping of insulated and uninsulated terminals and connectors and open connectors. With threaded holes for cutting off Cu or Ms grub screws with M 2.6; M 3; M 3.5; M 4 and M 5. Screwed joint for high stability and smooth running. Application: uninsulated, open connectors (6.3 mm connector width) Capacity square millimeters: 0.5 — 2.5 mm <sup>2</sup>			pcs
1.7.3.7	<b>Assortment of flat receptacles / flat plugs</b>		10	set
	Scope of delivery Flat receptacle 6.3x0.8, 0.50 <sup>2</sup> - 1.00 <sup>2</sup> : 25 pieces with snap hooks Flat receptacle 6.3x0.8, 0.50 <sup>2</sup> - 1.00 <sup>2</sup> : 25 pieces with locking hook/locking point Flat receptacle 6.3x0.8, 1.50 <sup>2</sup> - 2.50 <sup>2</sup> : 25 pieces with snap hooks Flat receptacle 6.3x0.8, 1.50 <sup>2</sup> - 2.50 <sup>2</sup> : 25 pieces with locking hook/locking point Flat receptacle 6.3x0.8, 2.50 <sup>2</sup> - 4.00 <sup>2</sup> : 25 pieces with locking hook/locking point Flat receptacle 6.3x0.8, 4.00 <sup>2</sup> - 6.00 <sup>2</sup> : 25 pieces with snap hooks Flat receptacle 6.3x0.8, 4.00 <sup>2</sup> - 6.00 <sup>2</sup> : 25 pieces with locking hook/locking point Flat plug 6.3x0.8, 0.50 <sup>2</sup> - 1.00 <sup>2</sup> : 25 pieces with snap hooks Flat plug 6.3x0.8, 1.50 <sup>2</sup> - 2.50 <sup>2</sup> : 25 pieces with snap hooks Flat plug 6.3x0.8, 4.00 <sup>2</sup> - 6.00 <sup>2</sup> : 25 pieces with snap hooks			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Plug-in distributor 6.3 30° 1.50 <sup>2</sup> - 2.50 <sup>2</sup> : 10 pieces with locking point Assortment box: 1 piece (11 compartments)			
1.7.3.8	<b>Insulating tape</b>		20	pcs
	Roll, length 4.5m, width 15mm, color black			
1.7.3.9	<b>Shrink tubing set b/w</b>		10	set
	Shrink tubing assortment 100 pieces. Section lengths 100 mm, Diameter 1.5 mm (30 pcs.), 2.5 mm (30 pcs.), 4.0 mm (20 pcs.), 6.0 mm (10 pcs.), 10 mm (6 pcs.), 13 mm (4 pcs.), Shrinkage rate 2:1, Supplied in a storage box			
1.7.3.10	<b>Heat gun</b>		2	pcs
	9-step temperature setting for many applications Particularly light machine for drying, defrosting door locks, removing old paintwork Application of edge banding, shrinking of shrink tubing Also for soldering, welding and disinfection Overheating protection by thermostat Motor is protected against dust contamination Can be placed upright Power appr. 230V / 1800 W Max. Temperature 600 °C			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.3.11	<b>Solder wire</b>		10	pcs
	Fixpoint solder, ø 1.5 mm, 250 g roll Composition: 2% copper, 60% tin, 38% lead, flux content: 2%,			
1.7.3.12	<b>Flux</b>		20	pcs
	Acid-free flux for soft soldering work in the electronics sector. Can with 20g			
1.7.3.13	<b>Diode test lamp</b>		12	pcs
	Voltage tester for testing cable breaks in the field of motor vehicles, cars, cars, trucks and e-bikes Diode test lamp with puncture function for insulated cables Due to the puncturing function, a voltage measurement can be carried out without stripping the cable, the cable is minimally pricked by a sliding mechanism Specifications: Continuity indicator : LED Power supply: no battery required Voltage range, max.: 48 volts DC Voltage range, min: 3 volts DC Polarity indicator ( +/- ) Test type: two-pole Length of the cable appr.: 90cm Connecting ends: 1 x Test probe with sliding mechanism 1 x Alligator Clip			
1.7.3.14	<b>Solder connector set</b>		10	pcs
	150 pieces in assortment box Solder connector diameter 1.7mm, cable cross-section 0.25-0.34mm <sup>2</sup> , quantity: 25 pieces Solder connector diameter 2.7mm, cable cross-section 0.5-1mm <sup>2</sup> , quantity: 60 pieces			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Solder connector diameter 4.5mm, cable cross-section 1.5 - 2.5 mm <sup>2</sup> , quantity: 50 pieces Solder connector diameter 6mm, cable cross-section 4-6mm <sup>2</sup> , quantity: 15 pieces Connectors in different colors Shrinkage ratio 2:1 (dia. 1,7 - 4,5 mm) and 3:1 (dia. 6 mm) Shrinkage temperature at least 80°C Solder melting temperature min. 138°C			
1.7.3.15	<b>Cable drum 25m</b>		6	pcs
	25 m cable length (H05RR-F 3G1,5), used down to -35 °C, oil- and UV-resistant and also extremely abrasion-resistant Outdoor cable drum with overheating protection, indicator light in case of overheating and overload Drum body made of sheet steel, rust-protected galvanized, on a particularly sturdy carrying frame 3 safety sockets, splash-proof, with self-closing Drum diameter appr.: 240 mm Protection class (IP): IP44 Line voltage 250 V Nominal power unrolled: 3500 (16 A) W			
1.7.3.16	<b>Battery cable 25mm<sup>2</sup></b>		20	psc
	Highly flexible car battery cable in black Temperature range of -5 to +85 °C. Cable cross-section: 25.0 mm <sup>2</sup> Core structure :742x0.20 Voltage: max. 200 volts Current: 170 amps per meter			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.3.17	<b>Cable lugs 25mm<sup>2</sup> M8</b>		5	pcs
	Cross section: 25 mm <sup>2</sup> Cable lug eyelet opening: M8 Packaging unit 20			
1.7.3.18	<b>Ring terminal assortment</b>		2	set
	Scope of delivery M3: 0.5-1 mm <sup>2</sup> 200 pieces 1.5-2.5 mm <sup>2</sup> 150 pieces M3.5: 1.5-2.5 mm <sup>2</sup> 150 pieces M4: 0.5-1 mm <sup>2</sup> 200 pieces 1.5-2.5 mm <sup>2</sup> 150 pieces 4 - 6 mm <sup>2</sup> 75 pieces M5: 0.5-1 mm <sup>2</sup> 150 pieces 1.5-2.5 mm <sup>2</sup> 75 pieces 4 - 6 mm <sup>2</sup> 75 pieces M6: 1.5-2.5 mm <sup>2</sup> 75 pieces 4 - 6 mm <sup>2</sup> 50 pieces + 1x assortment box			
1.7.3.19	<b>Battery terminals</b>		10	set
	1 pair of battery terminals, pole terminals type STBK1 The two robust battery terminals, each consisting of one piece with plus and one piece with minus marking, are made of a corrosion-resistant metal mixture. They are suitable for cables up to a diameter of 12.5 mm or 120 mm <sup>2</sup> .			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.3.20	<b>Jumper cable</b> High-quality jumper cable made of flexible copper cable and fully insulated charging clamps for cars and delivery vehicles. The PVC-sheathed cable is flame retardant, break- and tear-resistant, oil-resistant and, to a limited extent, acid-resistant. Specifications Cross-section min.: 35 mm <sup>2</sup> Length min.: 4.5 m Pair of cables red/black		2	set
1.7.3.21	<b>Standard Notebook</b> Processor type: x64 architecture, Intel I7 12700H OR AMD Ryzen 7 4800U or higher, min 2.5 gigahertz; Graphics: Intel ARC A370M or similar; Screen Size min. 16 inches, Resolution min 1920 x 1080 (Full HD); Optical drive DVD 24x (option); RAM min. 12 GB; BIOS: UEFI (optional Legacy-BIOS switch); Hard drive SSD min. 512 GB; Network: Ethernet RJ 45 onboard (10/100/1.000 Mbit/s), Wireless AC; External ports: USB 4 typ C, >=2, HDMI 1x, VGA Optional, Headphone/mic Jack; Camera Front facing, Built in Microphone, internal stereo speaker; Lithium-ion Battery Life 8 hours, Power adapter; Operating system Windows 11 Prof; all device driver must be available either on a CD/DVD or as downloads over the net; Certifications & Listings: Latest TCO certification of the product category, latest energy saving certification (e.g. Energy Star) upon delivery, certified for Windows 11; The device is provided with up to 5 standard software configurations, the composition of which is agreed with representatives of the schools. The standard configurations are made available as a standard image for the purpose of restoring corrupt systems.		2	pcs

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.4	<b>Body Works</b>			
1.7.4.1	<b>Air Compressor.</b>		1	pcs
	Suction power 650 l/min Delivery power min. 530 l/min Pressure max. 11 bar Container volume appr. 270 l Electrical connector 400 V/50 Hz/3 Ph Achievement appr. 4.0 kW (5.5 HP) Cylinder 2 Levels 2			
1.7.4.2	<b>Digital Vernier Calliper</b>		12	pcs
	Measuring range: 0 - 150 mm Execution: made of stainless steel, hardened, digital, measuring system with 3 V, with metal housing Accuracy: 0.03 mm			
1.7.4.3	<b>Depth calliper</b>		12	pcs
	Measuring range 0 mm - 200 mm Division 1/20 mm Measurement deviation E MPE $\pm 0.05$ mm Measurement analogous Material Stainless steel, INOX All parts hardened Bridge length 100 mm Packaging Case			
1.7.4.4	<b>Straight edge</b>		2	pcs
	Straightness tolerance of the measuring edge 0.004 mm Material stainless steel Surface chamfer glare-free matt finish Length 500 mm Packaging Case			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.4.5	<b>Chisel and punch set</b>		16	set
	Flat and cross chisels for metal, as well as punches. Special impact head coating prevents chipping on the impact head. Content: Flat chisels: 1 piece ~125 each; ~150 mm Cross chisel: 1 pc. ~125 mm Punch: 1 pc each ~120×2; ~150×3 mm Center punch: 1 pc. ~120×4 mm			
1.7.4.6	<b>Straight scriber</b>		16	pcs
	Full length appr. 180 mm 1 straight point Metal handle knurled			
1.7.4.7	<b>Steel scale INOX flexible</b>		16	pcs
	Steel scale 500 x 18 x 0.5 mm flexible - flexible - made of stainless steel, INOX - with mm and 1/2 mm pitch - cross-section 18 x 0.5 mm measuring range 500 mm			
1.7.4.8	<b>Scribing calliper</b>		2	pcs
	Scribing calliper 200 mm with roller - made of stainless steel, matt chrome-plated - reading 0.05 mm - Scratching tip made of carbide, replaceable - in container/box		1	pcs
1.7.4.9	<b>Bodywork dent removal set</b>		6	pcs
	For dent removal work in the body area Practical compilation For clamping and finishing of body panels In sturdy plastic case Content: Body Universal Dent Iron, appr. 70mm			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Body comma buckling iron, appr. 130mm Body Heel Dent Iron, appr. 60mm Body toe buckling iron, large, appr. 120mm Body standard hammer, large round/square, appr. 325mm Body pointed hammer straight head, appr. 325mm Body corrugated hammer fine, round/square, appr. 325mm			
1.7.4.10	<b>Plastic welder kit</b>		1	set
	Welding gun with metal inserts to repair car plastic parts Voltage: 220 V Output Power appr.: 50 W Set included: 1 Plastic Welding Machine 1 Pliers 200 Welding nails 1 Plastic Box			
1.7.4.11	<b>Tin snips</b>		16	set
	3-piece tin shear set 1 x sheet metal shears, cutting direction left 1 x sheet metal shears, straight cutting direction 1 x sheet metal shears, cutting direction right Overall length appr. 260 mm Edge length appr. 31 mm Max. cutting depth in aluminium 1.0 mm Max. cutting depth in steel 1.0 mm Cutting capacity: stainless steel 0.6 mm			
1.7.4.12	<b>MIG/MAG/MMA welder</b>		2	pcs
	Power supply 203/400 V Input 20 A MIG welding power 30-200 A (cycle 60%) Wire coil 5 kg Wire feeder 2 rolls			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Mobile chassis Variabel polarity Welding wire size 0,6/0,8/1,0 mm Welding electrodes dia. 1,6 - 3,2 mm Delivered with: Cable package with welding torch min. 3 m MMA cable min. 2 m Ground cable min. 2 m Adapter 400 V /230 V Gas regulator Gas hose min. 2 m			
1.7.4.13	<b>Spare parts/consumables MIG/MAG</b>		2	set
	Spare parts for welding machine (pos.1.4.1): Gas nozzles power nozzles (0,6 - 1,0 mm) Ceramic nozzles Drive wheels (0,6 - 1,0 mm) Wire guide spiral  Gas cylinder 50 liters/200bar for argon/CO2			
1.7.4.14	<b>Portable TIG welding machine 180 A</b>		2	pcs
	Input voltage: 230 V Input power max.: 7 kVA Open circuit voltage max.: 65 V High frequency ignition Welding current: 10 - 180 A Duty cycle: 180A/35% Electrode diameter: 0,5-3,2 mm Delivered with ground cable and hose package at least 3 m			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.4.15	<b>Spare parts/consumables TIG</b>		2	set
	Clamping sleeves for TIG electrodes TIG electrodes 2,0/2,4/3,2 mm Torch covers Gas nozzles 5/6/7 mm  Gas cylinder 50 liters/200bar for argon			
1.7.4.16	<b>Workshop file set</b>		16	pcs
	1 piece each of flat butt, square, triangular and round files, semicircular rasp. Length 200 mm			
1.7.4.17	<b>Key files set</b>		16	pcs
	Key file set in plastic bag Wooden Handle, polished, 100 mm Contents: 1 piece each of flat butt, flat pointed, square, semicircular, triangular and round file cut 2			
1.7.4.18	<b>Angle grinder</b>		2	pcs
	Disk diameter 125 mm Power min. 750 W Idle speed 11,000 rpm Thread of grinding shaft M14 Lockable switch			
1.7.4.19	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	Double grinding machine for metal with base frame Technical data: • Wheel-ø: 200x25x32mm • Speed: 2850 rev/min • Motor appr.: 1,25 kW • 230V Accessories:			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• Corundum grinding wheel+spare wheel</li> <li>• Silicium carbide grinding wheel+ spare wheel</li> <li>• Safety shield</li> <li>• Solid Tool rest and adjustable on both wheels</li> <li>• Coolant container</li> <li>• Wheel dresser</li> </ul>			
1.7.4.20	<b>Universal grip wrench</b>		16	pcs
	<p>Overall length appr. 185 mm            Jaw length appr. 32 mm            Jaw capacity appr. 35 mm            For clamping profiled and flat materials, clamping force up to 10,000 N            Jaws of chrome vanadium steel, drop forged</p>			
1.7.4.21	<b>Blind riveting pliers</b>		3	set
	<p>Set including mouthpieces, open-end wrenches, rivet nut pull mandrels Suitable for blind rivets, blind rivet nuts and cavity metal dowels            Fold-out legs for increased force requirements            5 mouthpieces in different sizes to be stowed away in the fold-out handle            Features:            For blind rivet Ø: 2.4 mm, 3.2 mm, 4.0 mm, 4.8 mm, 6.4 mm            For rivet nuts: M4, M5, M6, M8, M10            Length appr.: 500mm            Delivery:            incl. 5 mouthpieces, collection container, spare rivet head, 5 rivet nut pull mandrels, 3 open-end wrenches, hex wrench 6mm, plastic case</p>			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.4.22	<b>Blind rivets set</b>		5	set
	650 pieces, Ø 3.2-4.8mm x length 6-14mm Head made of aluminum, rivet mandrel made of galvanized steel In plastic sorting box			
1.7.4.23	<b>Welding apron</b>		4	pcs
	Split leather apron 105 cm long x 60cm wide Multi-threaded sewn for long life and durability Adjustable straps 5 pockets			
1.7.4.24	<b>Welding shield automatic</b>		4	pcs
	1/20,000 second switching speed Auto darkening lens Solar powered cells with battery assist Automatic power on/off with adjustable delay time 2 independent arc sensors Variable shade control from #9 to #13 Ratcheting headband Delivered with spare splash protection glass			
1.7.4.25	<b>Welding shield classic</b>		4	pcs
	Simple and lightweight welding shield Manufactured from special non-conductive, spark-guard, rugged, light-weight, flame-retardant, glass-filled nylon Dimension appr. 275 x 300 mm Lens dimension at least 100 x 90 mm With open view mechanic Delivered with spare splash protection glass as well as spare filter glass			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.4.26	<b>Safety goggles clear</b>		16	pcs
	Material: lens: Polycarbonate Color lens: clear Anti-scratch coated Rubberized, flexible straps Elastic noseband			
1.7.4.27	<b>Safety goggles dark</b>		12	pcs
	Material: lens: Polycarbonate Color lens: dark green, scale 4-5 Anti-scratch coated Rubberized, flexible straps Elastic noseband			
1.7.4.28	<b>Welding gloves, pair</b>		10	pair
	Split leather gloves with 5 fingers Lining - Cotton Mechanical Hazard, Corrosion-proof - 2 Cut resistance - 1 Tear resistance - 4 Puncture resistance - 4 Length - Approx. 35 cm			
1.7.4.29	<b>Hacksaw frame</b>		4	pcs
	For 300 mm sawblades Frame lacquered, with captive dowel pins Hardwood handle			
1.7.4.30	<b>HSS bimetallic sawblade</b>		100	pcs
	wavy teeth 24TPI length 300 mm			

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1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.4.31	<b>Cordless screwdriver set</b>		2	set
	Battery voltage: 12 V Number of gears: 2 Max. screw diameter: 7 mm Max. drilling diameter in wood: 19 mm Max. drilling diameter in steel: 10 mm Number of batteries: 2 pieces Max. chuck span: 10 mm Max. torque: 30 Nm Delivered in Box with Charger and 2 batteries			
1.7.4.32	<b>Hexagonal drill and bit set</b>		2	set
	43 pieces For work in wood and metal Metal drill made of high-performance high-speed steel with precision grinding Suitable for all brands of power tools 8 HSS-E metal drill bits; 1/4" hexagonal shank; Diameter: 2 - 8 mm 8 wood drill bits; 1/4" hexagonal shank; Diameter: 2 - 8 mm 10 screwdriver bits; L = 25 mm; PH 1 / 2 / 3; PZ 1 / 2 / 3; S 4 / 6; T 20 / 25 10 screwdriver bits; L = 50 mm; PH 1 / 2 / 3; PZ 1 / 2 / 3; S 4 / 6; T 20 / 25 4 socket wrenches; Diameter: 7 / 8 / 10 / 13 mm 1 adapter for socket wrench 1 magnetic universal holder 1 countersink Plastic case with clear arrangement			
1.7.4.33	<b>Oxyacetylene welding and cutting equipment with bottle</b>		1	set

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<b>trolley</b>			
	Individual parts in industrial quality according to ISO 2503 For welding 0.5-9 mm Cutting 3-100 mm Contents: - Bottle trolley for 2 x 10-liter cylinders - Cutting torch insert 3 - 100 mm, block nozzles - 5 welding inserts 0.5 - 9 mm - Handle with valves - Cylinder pressure regulator for oxygen - Cylinder pressure regulator for acetylene - Safety device for fuel gas - Safety device for oxygen - Twin hose LW6, 10 m, with connections - Key wrench - Gas lighter - Storage box			
1.7.4.34	<b>Autogen welding rod</b>		1	pcs
	2.00 x 1000 mm, 25.0 kg Standard designation: Material number 1.0324 AWS/ASME SFA-5.2 ~ R 45 Mechanical quality values of the weld metal (guideline values): Yield strength ReH MPa >260 Tensile strength Rm MPa >360 Elongation at break A5 [%] >20 Notched impact AV [J] >30 Directivity analysis of the pure weld metal in %: C 0.08 Si 0.1 Mn 0.5			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Welding positions according to ISO 6947: PA, PE, PF, PC			
1.7.4.35	<b>Wet and dry vacuum cleaner</b>		1	pcs
	Industrial vacuum cleaner (wet and dry) Compact all-purpose vacuum cleaner With socket and automatic switch-on for connection of an electric power tool maximum 2000 W). Accessories and cable storage directly on the cleaner. Supplied with suction hose, curved hand tube, wet filter and washable filter element (PET), hose storage, and cable storage.			
1.7.4.36	<b>Paint spray gun set</b>		3	set
	Delivered in case with a spray gun, as well as a mini spray gun, accessories and nozzle sets. Scope of delivery: 1x Flow cup spray gun 1x Nozzle set 1.4mm 1x Nozzle set 1.8mm 1x Mini Spray Gun 1x Nozzle set 0.8mm 1x Nozzle set 1.0mm 1x Compressed air pressure gauge 1x Water separator 1x Alu Case			
1.7.4.37	<b>Cleaning set for spray guns</b>		2	set
	Cleaning set for spray guns For cleaning and caring for spray guns, as well as for the air and paint nozzle as well as all material-carrying parts of the guns. The supplied needles are ideal for cleaning the air cap. Scope of delivery			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	4 brushes (1 steel brush, 3 made of fibers) 5 fine fibre brushes 6 micro-needles 2 scalpel knife handles 1 plastic brush 3 fine brushes 1 vial with steel needle and cleaning liquid 1 assortment case for a quick overview			
1.7.4.38	<b>Eccentric sander 150mm compressed air</b>		2	pcs
	Random orbital sander 150mm compressed air grinding machine 5mm stroke Specifications: Diameter: 150mm Perforation: 15-hole Thread for compressed air connection: 1/4" - female thread Max. speed: 12,000 rpm Max. compressed air: 6.2 bar - 90 psi Air consumption Ø: 115 L/min Offcenter stroke appr.: 5 mm Scope of delivery: Random orbital sander Compressed air connection Suction hose Plate change tool Dust bag			pcs
1.7.4.39	<b>Grinding discs P80</b>		2	pcs
	Diameter: 150mm Perforation: 15-hole Suitable for eccentric sander pos. 1.7.4.38 Contents: 50 grinding wheels, grain size P80 Grain: Alumina plus stearate			pcs

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Dispersion: relatively closed dispersion Carrier: D-paper Binding: Stearate coating			
1.7.4.40	<b>Grinding discs P120</b>		2	pcs
	Diameter: 150mm Perforation: 15-hole Suitable for eccentric sander pos. 1.7.4.38 Contents: 50 grinding wheels, grain size P120 Grain: Alumina plus stearate Dispersion: relatively closed dispersion Carrier: D-paper Binding: Stearate coating			
1.7.4.41	<b>Grinding discs P320</b>		2	pcs
	Diameter: 150mm Perforation: 15-hole Suitable for eccentric sander pos. 1.7.4.38 Contents: 50 grinding wheels, grain size P320 Grain: Alumina plus stearate Dispersion: relatively closed dispersion Carrier: D-paper Binding: Stearate coating			
1.7.4.42	<b>Compressed air nipple</b>		20	pcs
	Nipple for pneumatic devices with 1/4" male thread NW 7.2 Brass blank Operating pressure: 0 - 35 bar, maximum stat. operating pressure (without pulsation) Medium & Ambient Temperature: -20°C - +100°C Width across flats: 17			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.4.43	<b>Teflon tape</b>		6	pcs
	Coil with 12 m, 12mm wide For thread sealing of water and air installations			
1.7.4.44	<b>Eccentric polishing machine set</b>		2	set
	Polishing machine Voltage: 230V~ Frequency: 50Hz Power consumption appr.: 950 watts Lifting speed: 2000-5000 min -1 Disc diameter: max. 150mm Spindle size 5/16" -24 Cable length min.: 8 meters Speed Constant Maintenance with Remote Electronics Torque control display via green and red LED Scope of delivery Eccentric Polishing Machine 150 mm backing pad Storage Bag Replacement carbon brushes Allen key Operating instructions 3 Polishes (Heavy Cut/1000, Medium Cut/2500, Super Finish/3500) 3 Polishing pads Ø150x23 mm (Heavy Cut, Fine Cut, Polish&Sealing) 2 Ultra Duo Premium Microfiber Cloths 520g/sm			
1.7.4.45	<b>Spot weld cutter</b>		4	pcs
	Right-cutting Interchangeable crowns Milling depth adjustable For loosening spot welds			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	No deformation of the sheet metal Special high-performance steel For use with pneumatic, electric and cordless drills Diameter D: 8.0 mm Total length in mm appr.: 75.0 Material: High-performance steel (HSS) Cutting direction: right			
1.7.4.46	<b>Spare part spot weld cutter</b>		5	set
	Set of 3 spare crowns for 1.3.4.41			
1.7.4.47	<b>Mini Air Body Jigsaw</b>		1	pcs
	Vibration damped Including 1/4" coupling plug With infinitely variable speed regulation For one-handed operation Very small size Robust housing Exhaust air ducting through the exhaust air hose to the rear For work in body parts, spars and profiles Suitable for small sawing radii Stroke appr. mm: 8 Speed appr.: 6000 strokes/min			
1.7.4.48	<b>Jigsaw blade for mini air body jigsaw</b>		10	set
	Set of 5 saw blades for 1.3.4.39 HSS Bi-Metal Length 100 mm 60 teeth/cm			

1.7	G01 - LOT 1	AUTOMOTIVE WORKSHOP	BUMBE TTI	
1.7.1		BTTI_WS_ME_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.7.4.49	<b>Paint mask</b>		10	pcs
	Disposable rubber half mask: Protection against solvent vapours and dust particles of filter class A1 / P2 Low breathing resistance Specially pressed activated carbon for longer life.			

1.8	G01 - LOT 1	WELDING WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.8.1	<b>MIG/MAG/MMA welder</b>		2	pcs
	Power supply 203/400 V Input 20 A MIG welding power 30-200 A (cycle 60%) Wire coil 5 kg Wire feeder 2 rolls Mobile chassis Variable polarity Welding wire size 0,6/0,8/1,0 mm Welding electrodes dia. 1,6 - 3,2 mm Delivered with: Cable package with welding torch min. 3 m MMA cable min. 2 m Ground cable min. 2 m Adapter 400 V /230 V Gas regulator Gas hose min. 2 m			
1.8.2	<b>Spare parts/consumables MIG/MAG</b>		2	set
	Spare parts for welding machine (pos.1.4.1): Gas nozzles power nozzles (0,6 - 1,0 mm) Ceramic nozzles Drive wheels (0,6 - 1,0 mm) Wire guide spiral  Gas cylinder 50 liters/200bar for argon/CO2			
1.8.3	<b>Portable TIG welding machine 180 A</b>		2	pcs
	Input voltage: 230 V Input power max.: 7 kVA Open circuit voltage max.: 65 V High frequency ignition			

1.8	G01 - LOT 1	WELDING WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Welding current: 10 - 180 A Duty cycle: 180A/35% Electrode diameter: 0,5-3,2 mm Delivered with ground cable and hose package at least 3 m			
1.8.4	<b>Spare parts/consumables TIG</b>		2	set
	Clamping sleeves for TIG electrodes TIG electrodes 2,0/2,4/3,2 mm Torch covers Gas nozzles 5/6/7 mm Gas cylinder 50 liters/200bar for argon			
1.8.5	<b>Combination workbench</b>		2	pcs
	Workbench height: 850 mm Drawer load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension)min.: 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) approx. 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity approx.: 200 kg Worktop 40 mm thick made of beech multiplex, waterproof glued			
1.8.6	<b>Angle grinder 180 mm</b>		2	pcs
	Electric hand angle grinder including set of accessories Rated power input min. 2,000 W No-load speed 8500 rpm Grinding spindle thread M 14 Main handle Shaft Starting current limitation and soft start of the machine Disc diameter 180 mm			

1.8	G01 - LOT 1	WELDING WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.8.7	<b>Angle grinder 125 mm</b>		4	pcs
	Disk diameter 125 mm Power min. 750 W No-load speed 11,000 rpm Thread of grinding shaft M14 Lockable switch			
1.8.8	<b>Bench vice 125 mm</b>		2	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
1.8.9	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	Double grinding machine for metal with base frame Technical data: • Wheel-ø: 200x25x32mm • Speed: 2850 rev/min • Motor appr.: 1,25 kW • 230V Accessories: • Corundum grinding wheel+spare wheel • Silicium carbide grinding wheel+ spare wheel • Safety shield • Solid Tool rest and adjustable on both wheels • Coolant container • Wheel dresser			

1.8	G01 - LOT 1	WELDING WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.8.10	<b>Cantilever arm rack, double sided</b> Rack width approx. 3000mm Each column carries 10 welded cantilever arms • With anti-roll restraints • Quick assembly • Cross braces for stiffening • 6 horizontal ties • 8 heavy duty anchors for anchoring to the floor Number of fields – 3 Number of columns – 4 At least 5 height levels Load capacity per arm at least: 300kg Total load capacity including floor level storage on each side – 4000kg Rack height appr. – 2500mm		1	pcs
1.8.11	<b>Horizontal band saw machine</b> Metal band saw - Blade dimension at least 2480 x 27 x 0,9 mm - Cutting speed 15-100 m/min - Main drive rating appr. 1.5 kW, - cutting capacity 90° min. 225mm - cutting angle 0-45°		1	pcs
1.8.12	<b>Welder's tool set</b> Consisting of: Slag hammer Wire brush Side cutter 130 mm Forging tongs Wolf's Jaw 600 mm Engineers hammer 500 g Flat chisel 200 mm Center punch 120mm		4	set

1.8	G01 - LOT 1	WELDING WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Steel ruler 500 mm Try square 300 x 175 mm 2 screw clamps 250 mm Flat scraper 300 mm Grip wrench 250 mm Water pump pliers 250 mm Weld gauge Delivered in sheet steel box			
1.8.13	<b>Welding apron</b>		12	pcs
	Split leather apron 105 cm long x 60cm wide Multi-threaded sewn for long life and durability Adjustable straps 5 pockets			
1.8.14	<b>Welding shield automatic</b>		12	pcs
	1/20,000 second switching speed Auto darkening lens Solar powered cells with battery assist Automatic power on/off with adjustable delay time 2 independent arc sensors Variable shade control from #9 to #13 Ratcheting headband Delivered with spare splash protection glass			
1.8.15	<b>Welding shield classic</b>		25	pcs
	Simple and lightweight welding shield Manufactured from special non-conductive, spark-guard, rugged, light-weight, flame-retardant, glass-filled nylon Dimension appr. 275 x 300 mm Lens dimension at least 100 x 90 mm With open view mechanic Delivered with spare splash protection glass as well as spare			

1.8	G01 - LOT 1	WELDING WORKSHOP	BUMBE TTI	
		BTTI_WS_ME_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	filter glass			
1.8.16	<b>Safety goggles clear</b>		12	pcs
	Material: lens: Polycarbonate Color lens: clear Anti-scratch coated Rubberized, flexible straps Elastic noseband			
1.8.17	<b>Safety goggles dark</b>		12	pcs
	Material: lens: Polycarbonate Color lens: dark green, scale 4-5 Anti-scratch coated Rubberized, flexible straps Elastic noseband			
1.8.18	<b>Welding gloves, pair</b>		25	pair
	Split leather gloves with 5 fingers Lining - Cotton Mechanical Hazard Corrosion-proof - 2 Cut resistance - 1 Tear resistance - 4 Puncture resistance - 4 Length - Approx. 35 cm			
1.8.19	<b>First aid kit</b>		1	set
	To treat burns, eye irritations, cuts, sprains, and common welding-related injuries Packed in a weather resistant, gasketed, plastic cabinet with a combination handle/hanger			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<b>Metal Basics</b>			
1.9.1.1	<b>Combination workbench</b>		6	pcs
	Workbench height: 850 mm Drawer load capacity at least: 75 kg Worktop dimension (L x D) 2000 x 750 Drawer extension (partial/full extension) min.: 90% With 2 times 4 drawers mirrored left and right Drawer height 2 x 2 x 150 mm and 2 x 2 x 200 mm, inner dimension (W x D) approx. 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity approx.: 800 kg Worktop 40 mm thick made of beech multiplex, waterproof glued			
1.9.1.2	<b>Bench vice 125 mm</b>		12	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
1.9.1.3	<b>Height adjuster for vice</b>		12	pcs
	Suitable for Bench vice Pos. 1.1.2. Built-in gas pressure spring for weight compensation during height adjustment of the vice. Quick clamping with safety clamping lever.			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.9.1.4	<b>Tool set workbench</b>		12	set
	Workbench tool set including: <ul style="list-style-type: none"> <li>• Vernier calliper 150 mm</li> <li>• Try square 100x70 mm</li> <li>• Protractor, measuring range 0° - 180°, sheet diameter 150 mm, length 200 mm</li> <li>• Spring dividers 150 mm, Scriber, Steel rule 300 mm, Tape measure 2 m</li> <li>• Hand files flat with handle, cut 1, 150 and 250 mm</li> <li>• Hand files flat with handle, cut 3, 150 and 250 mm</li> <li>• Three square file with handle, cut 1, 250 mm</li> <li>• Three square file with handle, cut 3, 200 mm</li> <li>• Square file with handle, cut 1, 250 mm</li> <li>• Square file with handle, cut 3, 150 mm</li> <li>• Round file with handle, cut 1, 250 mm</li> <li>• Round file with handle, cut 3, 200 mm</li> <li>• Set of key files 6 pcs</li> <li>• Hacksaw frame for 300 mm saw blades</li> <li>• File brush</li> <li>• Set of screwdrivers flat and PH</li> <li>• Set of hand tin snips (left, right, hole)</li> <li>• Flat chisel 150 mm</li> <li>• Pin punches dia 3 and 6 mm</li> <li>• Center punch 120 mm</li> <li>• engineer's hammer 500 g</li> <li>• Three edge hollow scraper 200 mm</li> <li>• Flat scraper 250 mm</li> <li>• Bench hand brush 280 mm</li> <li>• Safety goggles, clear, Leather working gloves</li> </ul>			
1.9.1.5	<b>Tool set team</b>		4	set
	<ul style="list-style-type: none"> <li>• 3 Open ended spanner sets, 10 pieces, 6x7 - 27x30 mm</li> <li>• 2 Double ended ring spanner sets, 10 pieces, 6x7 - 27x30 mm</li> </ul>			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• 3 Hexagon ball-end key sets, 8 pieces, 2 - 10 mm</li> <li>• Socket set 1/2 inch, including drives accessories, 8 - 32 mm</li> <li>• 3 Combination pliers 180 mm</li> <li>• 3 Grooved water pump pliers 250 mm</li> <li>• 3 Side cutter 160 mm</li> <li>• 3 Taper punch set and center punch, 2 - 6 mm, 120 mm</li> <li>• 2 Number punch set, size 6 mm in box</li> <li>• 2 Letter punch set, size 6 mm in box</li> <li>• Set of radius gauges 1-7, 7,5-15,15,5-25 mm</li> <li>• 3 Soft mallet with polyurethane inserts</li> <li>• 5 Plastic oiler with brass tube 150 ml</li> <li>• 3 Jobber drill sets in case, 1 -13 mm, incremental step 0,5 mm, including core diameters for M4 - M12</li> <li>• Taper sheet and tube drill set in case, 3 pieces, 3 - 30,5 mm</li> <li>• 3 Countersink sets in case, 90°, size 6,3 - 25 mm</li> <li>• 3 Counterbore sets in case, M3 - M10, through hole size</li> <li>• 3 Hand reamer sets in case, size 3 - 10 H7</li> <li>• Machine reamer sets in case, size 3 - 10 H7</li> <li>• 3 Thread cutting sets in metal case, hand tap sets (3 pieces) size M3 - M12, dies size M3 - M12, tap wrenches size 1-2, die stocks suitable to all dies</li> <li>• Thread cutting set for fine threads, 8x1 - 20x1,5 mm, hand tap sets (2 pieces), dies, tap wrenches and die stocks as mentioned above</li> <li>• Pipe thread cutting set, size 1/8' - 1', hand tap sets (2 pieces), dies, tap wrenches, and die stocks as mentioned above</li> </ul>			
1.9.1.6	<b>Double grinding machine-pedestal type 200 mm</b>		2	pcs
	Double grinding machine for metal with base frame Technical data: <ul style="list-style-type: none"> <li>• Wheel-ø: 200x25x32mm</li> <li>• Speed: 2850 rev/min</li> <li>• Motor appr.: 1,25 kW</li> </ul>			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• 230V</li> <li>Accessories:</li> <li>• Corundum grinding wheel+spare wheel</li> <li>• Silicium carbide grinding wheel+ spare wheel</li> <li>• Safety shield</li> <li>• Solid Tool rest and adjustable on both wheels</li> <li>• Coolant container</li> <li>• Wheel dresser</li> </ul>			
1.9.1.7	<b>Column drilling machine with machine vice</b>		2	pcs
	<p>Dilling Performance in Steel E 335 St 60: 26 mm, Drilling Performance in: 30 mm, Tapping Performance in Steel E 335 St 60: M24,</p> <p>Tool Taper (short spindle): MT 4</p> <p>Table Clamping Area appr.: 400 x 420 mm, T-Slots, number x width at least: 2 x 14 mm, Distance spindle/table min./max. appr.: 65/800 mm, Column Diameter at least: 115 mm, Z-Travel of Spindle appr.: 125 mm, Feeds: 0,05-0,15 mm/Rev, Speed Range appr. 75 - 2000 rpm, 8 steps</p> <p>Performance approx.: 1,0 / 1,6 kW,</p> <p>With coolant pump device appr. 40 W</p> <p>Delivered with machine vice, Accuracy 0.1mm, Jaws hardened and with prism for round material clamping,</p> <p>Clamping range: 200mm</p> <p>Jaw width 150mm</p> <p>With clamping lever</p>			
1.9.1.8	<b>Bench drilling machine</b>		2	pcs
	<p>Drilling performance in steel 25 mm</p> <p>Chuck 1 - 16 mm / B 18</p> <p>Morse cone MK 2</p> <p>Spindle speed appr. (16) 150 - 2800 rpm</p>			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Swivel drilling table -45° to +45° Distance spindle / table max. 400 mm Distance spindle / base plate appr. 600 mm Quill stroke appr. 80 mm Column diameter appr. 70 mm Table size / T-slot size appr. 300 x 300 mm / 16 mm Motor output power S1 100% appr. 0.75 kW / 400 V Scope of delivery: Quick-action chuck 1 - 16 mm / B 18 Chuck mandrel MK 2 / B 18 Digital quill stroke indicator LED machine light Clockwise-counterclockwise rotation T-slot stones Operating tools Base frame, height appr. 820 mm, with storage compartment, lockable door and chip tray Drill vice, jaw width 125 mm, opening 100 mm, Steel jaws with prisms			
1.9.1.9	<b>Electric hand drill machine</b>		2	pcs
	Impact drill, Forwards / reverse, appr. 600 W, impact, Metal quick-change chuck 1.5 - 13 mm, additional handle, drilling depth stop, transport case, speed range appr. 0-2800, bore Ø steel/concrete/ wood 10/13/25			
1.9.1.10	<b>Granite surface plate with stand</b>		1	pcs
	Natural granite control surface plate Width × length appr. 630 x 630 Accuracy class 0 Flatness 0,007 mm Plate thickness min. 70 mm delivered with underframe/cabinet, height 900 mm, load capacity			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	min. 500 kg			
1.9.1.11	<b>Heigh gauge with scriber</b>		2	pcs
	Precision Vernier height gauge Solid rest with ground surface • Scale hardened and ground • Scribing needle tip made of carbide • Scale: 0.02mm • With adjustment screw and fine adjustable measuring scale • Height: 300mm In wooden box			
1.9.1.12	<b>Steel cabinet 500 x 1000 x 2000</b>		4	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			
1.9.1.13	<b>First aid kit</b>		4	set
	Content Especially for construction and for the workshop: 1 x resuscitator 1 x splinter tweezers 8 cm 1 x Steri wash eyewash 5 x 20 ml 2 x aluminum compress 8 x 10 cm General First Aid Articles: 1x rescue blanket gold-silver 1x first aid scissors 18 cm 2x triangular cloth 1x disposable gloves vinyl powdered (pair) 1x non-woven cloth 10 pieces 1x color key 2x foil bag 2x FFP2 mouth-nose protection 1x wet wipes 1x cold instant compress 14 x 18 cm 1x safety sign first aid sticker 10 x 10 cm			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Assortment of plasters 3x 14-piece plaster set 1x adhesive plaster 2.5 cm x 5 m General Association Articles 1x bandage cloth 60 x 80 cm 1x quick wound dressing 6 x 8 cm 3x quick wound dressing 8 x 10 cm 1x quick wound dressing 10 x 12 cm 2x elastic fixation bandage 6 cm x 4 m 2x elastic fixation bandage 8 cm x 4 m 3x wound compress sterile 10 x 10 cm 2x eye compress 55 x 70 mm			
1.9.1.14	<b>HSS bimetallic sawblade</b>		100	pcs
	wavy teeth 24TPI length 300 mm			
1.9.1.15	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.9.1.16	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.9.1.17	<b>Set Installation Material</b>		12	pcs
	Locally deployed set of high quality installation material for surface mounting: On-Off Switch 2x; changeover switch 3x; two-way double-pole reversing switch 2x; 4x push button switch; 1x impulse relay; 1 phase sockets 230V/10A 3x; bulb sockets 3x; circuit breaker 5x; sub distribution for 12 circuits, PE bus terminals; junction boxes 4x; connectors; tube lights short 2x; compact lights 2x; Set of material for bell signal circuits (low voltage): 3 x bell push button, 2 x bells, 1 x low voltage transformer 230V/9V 50Hz, signal wire 8 x 0.5 mm <sup>2</sup> 100m, 4 x junction boxes; CEE plug red 16A 5p 6h 400V 1x, CEE plug blue 16A 3p 230V 1x 100m Installation cable NYM-J 3 x 1,5mm <sup>2</sup> 100m Installation cable NYM-J 5 x 1,5mm <sup>2</sup> Control wire 1,5 mm <sup>2</sup> Type H07V-U > black 1 x 500m > blue 1 x 200m > green/yellow 1 x 200m 10m PVC cable conduit 20 mm (residential wiring) 100 cable clamps All installation material has to fulfil national and if not available international safety and quality standards. Certificate of quality standard has to be provided by manufacturer. (Basic Electric WS)			
1.9.1.18	<b>Wire H05V-K</b>		4	pcs

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Class 5, Control wire 1,0 mm <sup>2</sup> Type H05V-K black 3 x 500m blue 2 x 500m green/yellow 2 x 500m  Control wire 1,5 mm <sup>2</sup> Type H05V-K black 2 x 500m blue 1 x 500m green/yellow 1 x 500m (Basic Electric WS)			
<b>1.9.2</b>	<b>Metal Cutting</b>			
1.9.2.1	<b>Steel cabinet 500 x 1000 x 2000</b>		17	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal. 1 x Metal Cutting, 6 x Basic Electric WS, 6 x Electronics, 4 x Mechatronics			
1.9.2.2	<b>Drawer cabinet</b>		3	pcs

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<p>Welded sheet steel construction  Housing: Powder-coated  8 x drawer, height approx.in mm: 2×50, 3×100.2×150.1×200  Dimensions in mm (WxDxH) approx.: 700 x 740 x 1050  Single pull-out lock  Drawer pull-out: 90% at least  Drawer slides: ball bearings  Load capacity drawer(s) in kg at least: Drawers with 50 mm height – 70 kg, Drawers from 75 mm cover height – 100 kg  Drawer usable dimensions in mm approx.: 600 x 600</p>			
1.9.2.3	<b>Combination workbench</b>		32	pcs
	<p>Workbench height: 850 mm  Drawer load capacity at least: 70 kg  Worktop dimension (L x D) 1500 x 750  Drawer extension (partial/full extension)min.: 90%  With 3 drawers  Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) approx. 450 x 600 mm  Powder coated steel frame with levelling screws  Load-carrying capacity approx.: 200 kg  Worktop 40 mm thick made of beech multiplex, waterproof glued</p>			
1.9.2.4	<b>Bench vice 125 mm</b>		26	pcs
	<p>Bench vice, of cast iron (jaw width 125mm)  • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide.  • spindle fully enclosed and protected from dirt  • spindle with trapezoidal thread  • hardened jaws, serrated/smooth ground, reversible and exchangeable.  • with flat-milled anvil  • delivered with a set of soft jaws</p>			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	2 x Metal Cutting, 12 x Basic Electric WS, 12 x Electronics			
1.9.2.5	<b>Wet and dry vacuum cleaner</b>		1	pcs
	Industrial vacuum cleaner (wet and dry) Compact all-purpose vacuum cleaner With socket and automatic switch-on for connection of an electric power tool maximum 2000 W). Accessories and cable storage directly on the cleaner. Supplied with suction hose, curved hand tube, wet filter and washable filter element (PET), hose storage, and cable storage.			
1.9.2.6	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	Double grinding machine for metal with base frame Technical data: <ul style="list-style-type: none"> <li>• Wheel-ø: 200x25x32mm</li> <li>• Speed: 2850 rev/min</li> <li>• Motor appr.: 1,25 kW</li> <li>• 230V</li> </ul> Accessories: <ul style="list-style-type: none"> <li>• Corundum grinding wheel+spare wheel</li> <li>• Silicium carbide grinding wheel+ spare wheel</li> <li>• Safety shield</li> <li>• Solid Tool rest and adjustable on both wheels</li> <li>• Coolant container</li> <li>• Wheel dresser</li> </ul>			
1.9.2.7	<b>Safety goggles clear</b>		6	pcs
	Material: lens: Polycarbonate Color lens: clear Anti-scratch coated Rubberized, flexible straps Elastic noseband			

<b>1.9</b>	<b>G01 - LOT 1</b>	<b>MECHANIC PLANT TECHNICIAN WORKSHOP</b>	<b>NYAMIRA NP</b>	
<b>1.9.1</b>		<b>ETTI_WS_ME_1</b>		
<b>No.</b>	<b>Requested by Client: Specification Detail</b>	<b>To be filled by bidder: Brand - Model - Type</b>	<b>Qty</b>	<b>Unit</b>
1.9.2.8	<b>Heavy-duty shelf</b>		4	pcs
	Height = 180 cm Width = 160 cm Depth = 60 cm Number of levels 5 with sturdy wooden floors Load capacity per level: 250 kg Frame galvanised, boltless assembly			
1.9.2.9	<b>Plastic garbage can blue for scrap metal and chips</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			
1.9.2.10	<b>Plastic garbage can anthracite for residual waste</b>		1	pcs
	Volume 120 Litre(s) Height appr. 1000 mm Material waste container Plastic Location Indoor and outdoor Equipped with lid Width appr. 500 mm Depth appr. 560 mm Wheel equipment 2 wheels Wheel diameter 200 mm Wheel material Rubber			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.9.2.11	<b>Air Compressor</b>		1	pcs
	Suction power min. 1050 l/min Delivery power min. 750 l/min Pressure max. 11 bar Container volume appr. 500 l Electrical connector 400 V/50 Hz/3 Ph Achievement appr. 7,5 kW (10 HP) Cylinder 2 Levels 2			
<b>1.9.3</b>	<b>Welding</b>			
1.9.3.1	<b>MIG/MAG/MMA welder</b>		2	pcs
	Power supply 203/400 V Input 20 A MIG welding power 30-200 A (cycle 60%) Wire coil 5 kg Wire feeder 2 rolls Mobile chassis Variable polarity Welding wire size 0,6/0,8/1,0 mm Welding electrodes dia. 1,6 - 3,2 mm Delivered with: Cable package with welding torch min. 3 m MMA cable min. 2 m Ground cable min. 2 m Adapter 400 V /230 V Gas regulator Gas hose min. 2 m			
1.9.3.2	<b>Spare parts/consumables MIG/MAG</b>		2	set
	Spare parts for welding machine (pos.1.4.1): Gas nozzles power nozzles (0,6 - 1,0 mm)			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Ceramic nozzles Drive wheels (0,6 - 1,0 mm) Wire guide spiral  Gas cylinder 50 liters/200bar for argon/CO2			
1.9.3.3	<b>Portable TIG welding machine 180 A</b>		2	pcs
	Input voltage: 230 V Input power max.: 7 kVA Open circuit voltage max.: 65 V High frequency ignition Welding current: 10 - 180 A Duty cycle: 180A/35% Electrode diameter: 0,5-3,2 mm Delivered with ground cable and hose package at least 3 m			
1.9.3.4	<b>Spare parts/consumables TIG</b>		2	set
	Clamping sleeves for TIG electrodes TIG electrodes 2,0/2,4/3,2 mm Torch covers Gas nozzles 5/6/7 mm  Gas cylinder 50 liters/200bar for argon			
1.9.3.5	<b>Combination workbench</b>		2	pcs
	Workbench height: 850 mm Drawer load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension)min.: 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) approx. 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity approx.: 200 kg			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Worktop 40 mm thick made of beech multiplex, waterproof glued			
1.9.3.6	<b>Angle grinder 180 mm</b>		2	pcs
	Disk diameter 230 mm Power min. 2200 W Idle speed approx. 6500 rpm Thread of grinding shaft M14 Lockable switch			
1.9.3.7	<b>Angle grinder 125 mm</b>		4	pcs
	Disk diameter 125 mm Power min. 750 W No-load speed 11,000 rpm Thread of grinding shaft M14 Lockable switch			
1.9.3.8	<b>Bench vice 125 mm</b>		2	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
1.9.3.9	<b>Double grinding machine-pedestal type 200 mm</b>		1	pcs
	Double grinding machine for metal with base frame Technical data: • Wheel-ø: 200x25x32mm • Speed: 2850 rev/min • Motor appr.: 1,25 kW			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<ul style="list-style-type: none"> <li>• 230V</li> <li>Accessories:</li> <li>• Corundum grinding wheel+spare wheel</li> <li>• Silicium carbide grinding wheel+ spare wheel</li> <li>• Safety shield</li> <li>• Solid Tool rest and adjustable on both wheels</li> <li>• Coolant container</li> <li>• Wheel dresser</li> </ul>			
1.9.3.10	<b>Cantilever arm rack, double sided</b>		1	pcs
	Rack width approx. 3000mm Each column carries 10 welded cantilever arms <ul style="list-style-type: none"> <li>• With anti-roll restraints</li> <li>• Quick assembly</li> <li>• Cross braces for stiffening</li> <li>• 6 horizontal ties</li> <li>• 8 heavy duty anchors for anchoring to the floor</li> </ul> Number of fields – 3 Number of columns – 4 At least 5 height levels Load capacity per arm at least: 300kg Total load capacity including floor level storage on each side – 4000kg Rack height appr. – 2500mm			
1.9.3.11	<b>Horizontal band saw machine</b>		1	pcs
	Metal band saw <ul style="list-style-type: none"> <li>- Blade dimension at least 2480 x 27 x 0,9 mm</li> <li>- Cutting speed 15-100 m/min</li> <li>- Main drive rating appr. 1.5 kW,</li> <li>- cutting capacity 90° min. 225mm</li> <li>- cutting angle 0-45°</li> </ul>			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
1.9.3.12	<b>Welder's tool set</b>		4	set
	Consisting of: Slag hammer Wire brush Side cutter 130 mm Forging tongs Wolf's Jaw 600 mm Engineers hammer 500 g Flat chisel 200 mm Center punch 120mm Steel ruler 500 mm Try square 300 x 175 mm 2 screw clamps 250 mm Flat scraper 300 mm Grip wrench 250 mm Water pump pliers 250 mm Weld gauge Delivered in sheet steel box			
1.9.3.13	<b>Welding apron</b>		4	pcs
	Split leather apron 105 cm long x 60cm wide Multi-threaded sewn for long life and durability Adjustable straps 5 pockets			
1.9.3.14	<b>Welding shield automatic</b>		4	pcs
	1/20,000 second switching speed Auto darkening lens Solar powered cells with battery assist Automatic power on/off with adjustable delay time 2 independent arc sensors Variable shade control from #9 to #13 Ratcheting headband			

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Delivered with spare splash protection glass			
1.9.3.15	<b>Welding shield classic</b>		4	pcs
	Simple and lightweight welding shield Manufactured from special non-conductive, spark-guard, rugged, light-weight, flame-retardant, glass-filled nylon Dimension appr. 275 x 300 mm Lens dimension at least 100 x 90 mm With open view mechanic Delivered with spare splash protection glass as well as spare filter glass			
1.9.3.16	<b>Safety goggles clear</b>		12	pcs
	Material: lens: Polycarbonate Color lens: clear Anti-scratch coated Rubberized, flexible straps Elastic noseband			
1.9.3.17	<b>Safety goggles dark</b>		12	pcs
	Material: lens: Polycarbonate Color lens: dark green, scale 4-5 Anti-scratch coated Rubberized, flexible straps Elastic noseband			
1.9.3.18	<b>Welding gloves, pair</b>		10	pair

1.9	G01 - LOT 1	MECHANIC PLANT TECHNICIAN WORKSHOP	NYAMIRA NP	
1.9.1		ETTI_WS_ME_1		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Split leather gloves with 5 fingers Lining - Cotton Mechanical Hazard Corrosion-proof - 2 Cut resistance - 1 Tear resistance - 4 Puncture resistance - 4 Length - Approx. 35 cm			
1.9.3.19	<b>First aid kit</b>		1	set
	To treat burns, eye irritations, cuts, sprains, and common welding-related injuries Packed in a weather resistant, gasketed, plastic cabinet with a combination handle/hanger			

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<b>Photovoltaic Laboratory</b>			
2.1.1.1	<b>Combination workbench</b>		2	pcs
	Workbench height: 850 mm Drawer/pull-out shelf load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension): 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity: 200 kg Worktop 40 mm thick made of beech multiplex, waterproof glued. Clearly varnished with UV varnish.			
2.1.1.2	<b>Bench vice 125 mm</b>		2	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
2.1.1.3	<b>Universal Table, Rectangular (1200 x 800 mm)</b>		4	pcs
	Universal table, frame and legs of circular tube 40/2 mm, powder coated, adjustable gliders; Table top made of pearl grey plastic, extremely dense and rigid ; size appr. 1200 x 800 x 720 mm (L x W x H); minor deviations of the dimensions are possible but have to correspond with the layout and ground plans of the rooms provided with the tender documents			

2.1	G01 - LOT 2	Solar & PV	KITALE NP		
2.1.1			KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type		Qty	Unit
	The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.				
2.1.1.4	<b>Office Chair Type 2, fabric</b>			4	pcs
	High back chair with lockable tilt, adjustable height, armrest and swivel base, breathable backrest with adjustable lumbar support; Spacious seat with high-density padding; Height-adjustable armrests with softpad support; Sturdy and stable frame made of chromed steel; Breathable mesh and fabric cover, black; Seat height 47 - 57 cm; Seat width >49 cm; Seat depth >50 cm; Backrest height >60 cm; Armrest 17 - 23 cm (from the seat); Castors approx. 11x65 mm for hard floors; Load capacity up to max. 120 kg;				
2.1.1.5	<b>Chair with Writing Tablet</b>			15	pcs
	Chair with writing tablet; Seat shell beech shaped wood, Folding, removable writing tablet in beech, writing tablet format approx. 360 x 265 mm, optionally mounted on the left or right side, stackable with writing tablet removed, stacking bar, Chrome plated frame, Mirror pads, Cover imitation leather black; approx. dimensions: 535 x 400 x 470 mm (L x W x H); max height with open tablet appr. 810 mm Minor deviations of the dimensions are possible but have to correspond with the layout and ground plans of the rooms provided with the tender documents  The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.				

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.1.1.6	<b>Steel cabinet 500 x 1000 x 2000</b>		6	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			
2.1.1.7	<b>Key Box</b>		1	pcs
	48 hooks L x W x H appr.: 308 x 65 x 285 mm cylindrical lock			
2.1.1.8	<b>Smart Board 75" touch</b>		1	pcs
	Panel Size: 75", Panel Type: TFT LCD Module, Display Area (mm): 1670 (H) x 940 (V) (75" diagonal), Aspect Ratio: 16:9, Resolution: UHD 3840x2160 (Pixels), Colors: 1.07B colors (10bit), Brightness: 350 nits (typ.), Contrast Ratio: 5000:1 (DCR), Response Time: 8ms, Viewing Angles: H = 178, V = 178 typ. Surface Treatment: Hardness: 9H Pencil AG glass Anti-glare coating, Type/ Tech: IR Recognition, Touch Resolution: 32767 x 32767, Touch Point: 20 points touch, 10 points writing  HDMI: 2.0 x3 (3840x2160 @60Hz), RGB / VGA: x1, Audio: x1 (PC audio in), RS232: x1, LAN: RJ45: x1, USB: Type A: USB2.0: Front x2, Rear x1 (SmartPort™ for all) USB3.0: Front x1, Rear x3 (SmartPort™ for Rear x3), Type B: x2, for touch Energy Star Certified Delivery includes: (1x) 3m Length HDMI Cable, (1x) 3m Length USB cable (A-B), (1x) 3m Regional Power Cable, (1x) 2m Length USB-C Cable, (1x) Remote Control, (2x) Batteries for Remote Control, (4x) ActivPanel Pens, (1x) Block Eraser			

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	The smart board is mounted to a movable rack with four castors, diameter ≈10 cm			
2.1.1.9	<b>Standard Notebook</b>		4	pcs
	Processor type: x64 architecture, Intel I5 1235U OR AMD Ryzen 7 4800U or higher, min 2.5 gigahertz; Graphics: Intel Iris Xe Graphics or higher; Screen Size min. 16 inches, Resolution min 1920 x 1080 (Full HD); Optical drive DVD 24x (option); RAM min. 12 GB; BIOS: UEFI (optional Legacy-BIOS switch); Hard drive SSD min. 512 GB; Network: Ethernet RJ 45 onboard (10/100/1.000 Mbit/s), Wireless AC; External ports: USB 4 typ C, >=2, HDMI 1x, VGA Optional, Headphone/mic Jack; Camera Front facing, Built in Microphone, internal stereo speaker; Lithium-ion Battery Life 6 hours, Power adapter; optical USB mouse; Operating system Windows 11 Prof; all device driver must be available either on a CD/DVD or as downloads over the net; Certifications & Listings: Latest TCO certification of the product category, latest energy saving certification (e.g. Energy Star) upon delivery, certified for Windows 11; The device is provided with up to 5 standard software configurations, the composition of which is agreed with representatives of the schools. The standard configurations are made available as a standard image for the purpose of restoring corrupt systems.			
2.1.1.10	<b>PV Hybrid inverter</b>		1	pcs
	5-8kWp 3 phase hybrid inverter, full (100%) off-grid operation with LV battery system, grid/generator backup charging, optional grid tie, feed-in function External Temperature Sensor, 2 MPP Trackers; Battery Voltage Range 40 - 60V; Rated PV input voltage 550V(160V~800V;			

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Max. Charging/Discharging Current 190A; Max. Efficiency >97%			
2.1.1.11	<b>Battery system LV 12kWh</b>		1	unit
	48V, 12kWh, Li-Ion battery system incl. battery management system (BMS); Usable energy 12.0kWh; Cont. discharge current >190A; Peak discharge current >250A; Voltage range (DC) 40V – 57.6V; Enclosure Protection Rating IP55; Lithium Iron Phosphate (LFP)			
2.1.1.12	<b>Hybrid System Controller</b>		1	pcs
	PV hybrid control system for parallel operation of genset and PV with fuel save function. Monitoring and data logging software for load, power distribution and system operation. Including all required hardware equipment i.e. control units, current transformers, automated transfer switch, interfaces, ethernet modules.			
2.1.1.13	<b>Cordless screwdriver kit</b>		2	pcs
	Battery voltage :18 V; Torque (soft/hard):21/54 Nm; No-load speed (1st gear / 2nd gear):0 – 500 / 0 – 1,900 rpm; Battery type: Lithium-ion >1.5 Ah; Chuck capacity, min./max.:1.5 / 13 mm; Torque settings:20+1; Tool holder: Three-jaw chuck; Max. screw diameter: 10 mm; Max. drilling diameter in wood: 35 mm; Max. drilling diameter in steel: 10 mm; Incl. 2 x 1.5 Ah Li-ion battery, Carrying case, 1 x 11 pcs Screw bit Set, 1 x 12 pcs Drill bit Set, Charger 18V-20 Professional Certificate of industrial standard quality has to be provided by manufacturer.			
2.1.1.14	<b>Drill bit set - extended</b>		2	pcs
	9 wood drill bits: Ø 3 -10 mm 19 HSS-TiN metal drill bits: Ø 1.5 - 7 mm 5 stone 8/5 drill bits: Ø 4 - 10 mm 40 screwdriver bits, L = 25 mm: slotted, Phillips PH, cross-tip PZ			

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	2/3/3/3, Torx T10/10/15/15/20/20/25/25/30/40, inner hexagon SW 3/4/5/6 13 screwdriver bits, L = 50 mm: slotted 4/6 mm, cross-tip PH 0/1/2/3, Cross slot PZ 0/1/2/3, Torx T 10/20/25 7 socket wrenches: 5/6/8/10/11/12/13 mm Flat milling drill Ø 6/22 mm, Hole saw Ø 32/38/44/54 mm, Countersink, Bit holder, Hex adapter, Allen key, Case			
2.1.1.15	<b>Corded SDS Plus Rotary Hammer</b>		1	pcs
	Corded SDS Plus Rotary Hammer; Hammer drilling diameter range: 4 - 22 mm; Single impact energy: 1.8 J; Hammer drilling RPM: 1200 rpm; Full hammering frequency: 4600 impacts/minute; 2nd gear for drilling in metal, Removable chuck, Reverse mode, Depth gauge, AC 230V Including case, grease, hammer drills 6x: 5, 6, 8, 10, 12mm			
2.1.1.16	<b>Angle grinder 125 mm</b>		1	pcs
	Angle grinder 125 mm, Intelligent brake system, Variable Speed pre-selection, Kickback control, Restart protection, Vibration Control 1700 W, 230 V, Disc diameter 125 mm, Idle speed 2800 - 11500 rpm, Max. separation depth 33, Mandrel thread M14			
2.1.1.17	<b>Grinder disk set 125mm</b>		10	pcs
	1x Metal cutting discs, 125mm 1x 125mm metal grinding disc, medium grinding for steel 1xAbrasive flap disc, 125mm, grit 120			
2.1.1.18	<b>Table column drill</b>		1	pcs
	Table column drill; Keyless drill chuck B 16, 1 - 16 mm; Taper mandrel MK 2 / B 16; Drill drift; Operating lever for speed setting; Speed adjustment by means of variator disc; Telescopic drill chuck protection CE; LED light integrated into drilling head; laser drilling indicator drilling capacity in steel 16 mm; speed range 340 - 2200 rpm;			

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	drill table lift 275 mm drill table swivelling $\pm 45^\circ$ ; drill table revolving $\pm 180^\circ$ ; quill distance table min./max. 360 mm; drilling table surface min 240x240 mm; motor power min. 550 W; voltage 230/50 V/Hz Including Machine vice 3" / 75 mm, 2 clamping screws 14 mm, 2x HSS drill cartridge 1-13 mm, 25-pc.			
2.1.1.19	<b>Reciprocating saw</b>		1	pcs
	Reciprocating saw, quick blade change, 230V, 1200W, Number of strokes (max.) 3000 /min, Upstroke (max.) 30 mm, Cutting depth (max.) (wood) 255 mm Including case, 3 sets of spare Reciprocating saw blade, for 1x metal, 1x plastics and 1xwood			
2.1.1.20	<b>Welding inverter</b>		1	pcs
	Welding inverter; MMA electrode welding; IGBT technology; output current MMA: 30-200A; protection class: IP21S; mains voltage: 1 x 230VAC (+-15%); mains frequency: 50/60 Hz Including: mass cable 3 meters, electrode holder 3 meters, protective cover, slag hammer 500 g, wire brush, 3x pack of 1.6mm welding electrodes, 40A, pack of 200, 3x pack of 2.5mm welding electrodes, 80A, pack of 200			
2.1.1.21	<b>Welding helmet</b>		2	pcs
	Auto darkening welding helmet, adjustable sensitivity and darkening time, rechargeable batteries with amorphous front PV cell			
2.1.2	<b>PV Training Field (outdoor)</b>	KNP_TF_E_4		
2.1.2.1	<b>PV panel</b>		24	pcs

Deleted[Monteiro, Carolina]; ;

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	36 cell photovoltaic panels, between 12-20WP, aluminium frame, preferably square shape			
2.1.2.2	<b>Charge controller</b>		6	pcs
	PWM charge controller, 12V, 10A. Protective features: deep discharge, reverse polarity, short circuit, over current			
2.1.2.3	<b>Off-grid inverter</b>		6	pcs
	Off-grid inverter, 12V, approx. 180W - 350W, 230 VAC +/- 3% 50 Hz, True sine wave, aluminium case			
2.1.2.4	<b>Gel battery, 12V</b>		6	pcs
	Sealed gel battery, 12V approx. 10 - 15Ah			
2.1.2.5	<b>MPPT tracker</b>		2	pcs
	Maximum power point tracker, approx. 75V/15A, intelligent BMS, monitoring APP (Bluetooth), protection against short circuit, overheating			
2.1.2.6	<b>Micro inverter</b>		2	pcs
	Grid tie micro inverter, approx. 30-60VDC, 300W, output voltage AC230V IP65 waterproof class, reverse efficient power transmission technology, Input/output fully isolated, Intelligent monitoring management			
2.1.2.7	<b>Cable ties</b>		3	set
	Reopenable cable ties, various colors, 6"/150mm, Pack of 100			
2.1.2.8	<b>Slotted angle iron</b>		20	m
	1 1/2x 1 1/2" , 14s.w.g. (38x38x2mm), Total length 20m			
2.1.2.9	<b>Tension plate</b>		20	pcs

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Triangular corner tension plates for connection of slotted angle iron 1 1/2x 1 1/2"			
2.1.2.10	<b>Flange bolts with Flange nuts</b>		400	set
	Flange bolt and flange nut, galvanized, M8x16mm, Total of 2x200pcs			
2.1.2.11	<b>Particle board</b>		20	m2
	16mm laminated particle hard board, waterproof			
2.1.2.12	<b>Swivel castor wheels with brakes</b>		20	pcs
	Heavy duty swivel castor wheels with brakes, full rubber wheels, 4"(10mm), Screw-on plate, load capacity >75kg			
2.1.2.13	<b>Multipurpose screw set</b>		2	set
	Galvanized multi purpose screws with cross heads, approx. size range from 1.5-6mm, approx. 200pcs			
2.1.2.14	<b>550Wp PV panel</b>		10	pcs
	monocrystalline, 144 cells, 550Wp, approx.: Voc 50V, Imp: 13.45A			
2.1.2.15	<b>450Wp PV panel</b>		10	pcs
	monocrystalline, 144 cells, 450Wp, approx: Voc 50V, Imp: 10.83A			
2.1.2.16	<b>300Wp PV panel</b>		10	pcs
	polycrystalline, 72 cells, 300Wp, approx. Voc: 45V, Imp: 8.2			
2.1.2.17	<b>PV mounting rail</b>		52	m
	Solar module mounting rail, approx. 4m length, aluminium			
2.1.2.18	<b>Roof hook</b>		20	pcs
	Stainless steel roof hook for slate roofs, adjustable			
2.1.2.19	<b>End clamps</b>		20	pcs
	Aluminium end clamps, up to 40mm			
2.1.2.20	<b>Mid clamps</b>		50	pcs

2.1	G01 - LOT 2	Solar & PV	KITALE NP	
2.1.1		KNP_LAB_E_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Aluminium middle clamps, up to 40mm			
2.1.2.21	<b>PV cable</b>		250	m
	4mm2 PV cable, double sheated, 1500 V			
2.1.2.22	<b>Submersible Flat Cable</b>		100	m
	4mm2 4-core Submersible Flat Cable			
2.1.2.23	<b>Concrete foundation</b>		1	order
	Earthworks and casting of concrete foundation of training roof structure, floor tiles at rear part of training roof to create seating area incl. labour			
2.1.2.24	<b>Steel works</b>		1	order
	2x2" 16G (1.6mm) square steel tubing welded structure. Approx. Base dimensions: 5x10m, 25° roof slope, incl. labour			
2.1.2.25	<b>Wood works and roofing</b>		1	order
	10mm plywood decking with wood battens, concrete tile roofing, approx. roof area 60m2. Slope roof with top ridge and PVC rain gutter on backside incl. labour			
2.1.2.26	<b>Surface pump</b>		1	pcs
	3 phase surface pump, 1.5-2.2kW, Rp 1 1/2"			
2.1.2.27	<b>Surface pump controller</b>		1	pcs
	Solar PV inverter for 3 phase surface pump. Max. voltage input 800V, Voltage output 380VAC, Output current 6A. IP66			
2.1.2.28	<b>Switch box</b>		1	pcs
	Disconnect switch, max. voltage 650V, 8.4A, IP66			
2.1.2.29	<b>PV disconnect box</b>		1	pcs
	PV disconnect box, max. voltage DC1000V, max. current 40A, 5 strings, IP68			

2.2	G01 - LOT 2	Solar & PV	KITALE NP	
2.2.1		KNP_LAB_BC_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<b>Thermal Solar Laboratory</b>			
2.2.1.1	<b>Combination workbench</b>		2	pcs
	Workbench height: 850 mm Drawer/pull-out shelf load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension): 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity: 200 kg Worktop 40 mm thick made of beech multiplex, waterproof glued. Clearly varnished with UV varnish.			
2.2.1.2	<b>Bench vice 125 mm</b>		2	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
2.2.1.3	<b>Universal Table, Rectangular (1200 x 800 mm)</b>		4	pcs
	Universal table, frame and legs of circular tube 40/2 mm, powder coated, adjustable gliders; Table top made of pearl grey plastic, extremely dense and rigid ; size appr. 1200 x 800 x 720 mm (L x W x H); minor deviations of the dimensions are possible but have to correspond with the layout and ground plans of the rooms provided with the tender documents			

2.2	G01 - LOT 2	Solar & PV	KITALE NP	
2.2.1		KNP_LAB_BC_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.			
2.2.1.4	<b>Office Chair Type 2, fabric</b>		4	pcs
	High back chair with lockable tilt, adjustable height, armrest and swivel base, breathable backrest with adjustable lumbar support; Spacious seat with high-density padding; Height-adjustable armrests with soft pad support; Sturdy and stable frame made of chromed steel; Breathable mesh and fabric cover, black; Seat height 47 - 57 cm; Seat width >49 cm; Seat depth >50 cm; Backrest height >60 cm; Armrest 17 - 23 cm (from the seat); Castors approx. 11x65 mm for hard floors; Load capacity up to max. 120 kg;			
2.2.1.5	<b>Chair with Writing Tablet</b>		15	pcs
	Chair with writing tablet; Seat shell beech shaped wood, Folding, removable writing tablet in beech, writing tablet format approx. 360 x 265 mm, optionally mounted on the left or right side, stackable with writing tablet removed, stacking bar, Chrome plated frame, Mirror pads, Cover imitation leather black; approx. dimensions: 535 x 400 x 470 mm (L x W x H); max height with open tablet appr. 810 mm Minor deviations of the dimensions are possible but have to correspond with the layout and ground plans of the rooms provided with the tender documents  The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.			

2.2	G01 - LOT 2	Solar & PV	KITALE NP	
2.2.1		KNP_LAB_BC_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.2.1.6	<b>Steel cabinet 500 x 1000 x 2000</b>		6	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			
2.2.1.8	<b>Smart Board 75" touch</b>		1	pcs
	<p>Panel Size: 75", Panel Type: TFT LCD Module, Display Area (mm): 1670 (H) x 940 (V) (75"diagonal), Aspect Ratio: 16:9, Resolution: UHD 3840x2160 (Pixels), Colors: 1.07B colors (10bit), Brightness: 350 nits (typ.), Contrast Ratio: 5000:1 (DCR), Response Time: 8ms, Viewing Angles: H = 178, V = 178 typ.</p> <p>Surface Treatment: Hardness: 9H Pencil AG glass Anti-glare coating, Type/ Tech: IR Recognition, Touch Resolution: 32767 x 32767, Touch Point: 20 points touch, 10 points writing</p> <p>HDMI: 2.0 x3 (3840x2160 @60Hz), RGB / VGA: x1, Audio: x1 (PC audio in), RS232: x1, LAN: RJ45: x1, USB: Type A: USB2.0: Front x2, Rear x1 (SmartPort™ for all) USB3.0: Front x1, Rear x3 (SmartPort™ for Rear x3), Type B: x2, for touch</p> <p>Energy Star Certified</p> <p>Delivery includes: (1x) 3m Length HDMI Cable, (1x) 3m Length USB cable (A-B), (1x) 3m Regional Power Cable, (1x) 2m Length USB-C Cable, (1x) Remote Control, (2x) Batteries for Remote Control, (4x) ActivPanel Pens, (1x) Block Eraser</p> <p>The smart board is mounted to a movable rack with four castors, diameter ≈10 cm</p>			
2.2.1.9	<b>Standard Notebook</b>		4	pcs

2.2	G01 - LOT 2	Solar & PV	KITALE NP	
2.2.1		KNP_LAB_BC_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<p>Processor type: x64 architecture, Intel I5 1235U OR AMD Ryzen 7 4800U or higher, min 2.5 gigahertz; Graphics: Intel Iris Xe Graphics or higher; Screen Size min. 16 inches, Resolution min 1920 x 1080 (Full HD); Optical drive DVD 24x (option); RAM min. 12 GB; BIOS: UEFI (optional Legacy-BIOS switch); Hard drive SSD min. 512 GB; Network: Ethernet RJ 45 onboard (10/100/1.000 Mbit/s), Wireless AC; External ports: USB 4 typ C, &gt;=2, HDMI 1x, VGA Optional, Headphone/mic Jack; Camera Front facing, Built in Microphone, internal stereo speaker; Lithium-ion Battery Life 6 hours, Power adapter; optical USB mouse; Operating system Windows 11 Prof; all device driver must be available either on a CD/DVD or as downloads over the net; Certifications &amp; Listings: Latest TCO certification of the product category, latest energy saving certification (e.g. Energy Star) upon delivery, certified for Windows 11; The device is provided with up to 5 standard software configurations, the composition of which is agreed with representatives of the schools. The standard configurations are made available as a standard image for the purpose of restoring corrupt systems.</p>			
2.2.1.10	<b>Drill bit set - extended</b>		1	pcs
	<p>9 wood drill bits: Ø 3 -10 mm            19 HSS-TiN metal drill bits: Ø 1.5 - 7 mm            5 stone 8/5 drill bits: Ø 4 - 10 mm            40 screwdriver bits, L = 25 mm: slotted, Phillips PH, cross-tip PZ 2/3/3/3, Torx T10/10/15/15/20/20/25/25/30/40, inner hexagon SW 3/4/5/6            13 screwdriver bits, L = 50 mm: slotted 4/6 mm, cross-tip PH 0/1/2/3, Cross slot PZ 0/1/2/3, Torx T 10/20/25            7 socket wrenches: 5/6/8/10/11/12/13 mm            Flat milling drill Ø 6/22 mm, Hole saw Ø 32/38/44/54 mm, Countersink, Bit holder, Hex adapter , Allen key, Case</p>			
2.2.1.11	<b>Angle grinder 125 mm</b>		1	pcs

2.2	G01 - LOT 2	Solar & PV	KITALE NP	
2.2.1		KNP_LAB_BC_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Angle grinder 125 mm, Intelligent brake system, Variable Speed pre-selection, Kickback control, Restart protection, Vibration Control 1700 W, 230 V, Disc diameter 125 mm, Idle speed 2800 - 11500 rpm, Max. separation depth 33, Mandrel thread M14			
2.2.1.12	<b>Metal cutting discs</b>		10	pcs
	1x Metal cutting discs, 125mm 1x 125mm metal grinding disc, medium grinding for steel 1xAbrasive flap disc, 125mm, grit 120			
2.2.1.13	<b>Table column drill</b>		1	pcs
	Table column drill; Keyless drill chuck B 16, 1 - 16 mm; Taper mandrel MK 2 / B 16; Drill drift; Operating lever for speed setting; Speed adjustment by means of variator disc; Telescopic drill chuck protection CE; LED light integrated into drilling head; laser drilling indicator drilling capacity in steel 16 mm; speed range 340 - 2200 rpm; drill table lift 275 mm drill table swivelling $\pm 45^\circ$ ; drill table revolving $\pm 180^\circ$ ; quill distance table min./max. 360 mm; drilling table surface min 240x240 mm; motor power min. 550 W; voltage 230/50 V/Hz Including Machine vice 3" / 75 mm, 2 clamping screws 14 mm, 2x HSS drill cartridge 1-13 mm, 25-pc.			
2.2.1.14	<b>Reciprocating saw</b>		1	pcs
	Reciprocating saw, quick blade change, 230V, 1200W, Number of strokes (max.) 3000 /min, Upstroke (max.) 30 mm, Cutting depth (max.) (wood) 255 mm Including case, 3 sets of spare Reciprocating saw blade, for 1x metal, 1x plastics and 1xwood			
2.2.1.15	<b>Welding inverter</b>		1	pcs

2.2	G01 - LOT 2	Solar & PV	KITALE NP	
2.2.1		KNP_LAB_BC_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Welding inverter; MMA electrode welding; IGBT technology; output current MMA: 30-200A; protection class: IP21S; mains voltage: 1 x 230VAC (+-15%); mains frequency: 50/60 Hz; Including: mass cable 3 meters, electrode holder 3 meters, protective cover, slag hammer 500 g, wire brush, 3x pack of 1.6mm welding electrodes, 40A, pack of 200, 3x pack of 2.5mm welding electrodes, 80A, pack of 200			
2.2.1.16	<b>Welding helmet</b>		2	pcs
	Auto darkening welding helmet, adjustable sensitivity and darkening time, rechargeable batteries with amorphous front PV cell			
2.2.1.17	<b>Digital multimeter</b>		5	pcs
	Digital multimeter, CAT II 600V, LCD display 2000 counts, protective cover, Auto power off, Auto backlight off, Loud continuity buzzer, rotary switch, diode test, DC voltage (V) 200.0mV~600V ±(0.5%+3); AC voltage (V) 200.0mV~600V, 200.0V~600V ±(1.2%+3); DC current (A) 200.0µA~10.00A ±(1.0%+3); AC current (A) 200.0µA~10.00A; Resistance (Ω) 200.0Ω~200.0MΩ ±(1.0%+2); 200.0Ω~20.00MΩ; Capacitance (F) 2.000nF~2.000mF; Including rechargeable batteries > 1500mAh, test leads, manual, 10x spare fuses 10A			
2.2.1.18	<b>Charger for cylindrical cells</b>		1	pcs
	VOLTCRAFT CC-8 Charger for cylindrical cells Li-ion, LiFePO, NiMH, NiCd A, AA , AAA , AAAA, C, Sub C, 9V PP3, 10340, 145 Individual slot monitoring, Battery recognition, Faulty battery detection, Battery diagnostics Matching rechargeable battery Li-ion, LiFePO, NiMH, NiCd; Suitable for battery size A, AA , AAA , AAAA, C, Sub C, 9V; Charging slots >10 (AAA 8x, AA 8x, Size C 5x, 9 V 2x) Max. charging current per slot 2000 mA, Li-Ion/Li-Po charging			

2.2	G01 - LOT 2	Solar & PV	KITALE NP	
2.2.1		KNP_LAB_BC_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	current 2000 mA Including power supply, user manual.			
2.2.2	Thermal Solar Training Field (outdoor)	KNP_TF_BC_4		
2.2.2.1	Solar Thermosiphon		2	set
	Indirect system, flat plate collector, slope roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.2.2.2	Solar Thermosiphon		1	set
	Indirect system, flat plate collector, flat roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.2.2.3	Solar Thermosiphon		1	set
	Indirect system, vacuum tube collector, slope roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.2.2.4	0.5kW Water pump		5	pcs
	Impeller pump, 0.5kW, 240V, G thread fitting			
2.2.2.5	Pump switch		5	pcs
	Pump pressure switch, adjustable start/stop pressure, 240V			
2.2.2.6	Expansion vessel		5	pcs
	Pressure tank expansion vessel, 5l, with Schrader filling valve			
2.2.2.7	Pressure gauge		5	pcs
	Pressure gauge, max. 10bar and PTR valve			
2.2.2.8	4 way Tee		6	pcs
	Brass or PPR 5 way tee to connect pressure gauge, expansion vessel and pump switch. G thread fittings at end to connect with Bayonet couplings.			

2.2	G01 - LOT 2	Solar & PV	KITALE NP	
2.2.1		KNP_LAB_BC_3		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.2.2.9	<b>Thermostatic mixing valve</b> 3 way thermostatic mixing valve, G thread fitting		5	pcs
2.2.2.10	<b>Cross fitting</b> Brass cross G thread fitting		10	pcs
2.2.2.11	<b>EPDM heat resistant hose</b> 1" int.dia., EPDM, heat resistance 120°C, fabric hose or similar		50	m
2.2.2.12	<b>PVC hose</b> 1" int.dia., clear PVC, heat resistance 60°C, clear, braided fabric hose or similar		70	m
2.2.2.13	<b>3/4" ball valve</b> Ball valve, 3/4" int.		20	pcs
2.2.2.14	<b>1/2" ball valve</b> Ball valve, 1/2" int.		20	pcs
2.2.2.15	<b>Bayonet hose coupling</b> Brass quick bayonet with 1" hose fitting		50	pcs
2.2.2.16	<b>1/2"int. bayonet coupling</b> Brass quick bayonet coupling, G1/2" int.		20	pcs
2.2.2.17	<b>1/2"ext. bayonet coupling</b> Brass quick bayonet coupling, G1/2" ext.		20	pcs
2.2.2.18	<b>3/4"int. bayonet coupling</b> Brass quick bayonet coupling, G3/4" int.		20	pcs
2.2.2.19	<b>3/4"ext. bayonet coupling</b> Brass quick bayonet coupling, G3/4" ext.		20	pcs
2.2.2.20	<b>1"int. bayonet coupling</b> Brass quick bayonet coupling, G1" int.		20	pcs
2.2.2.21	<b>1"ext. bayonet coupling</b> Brass quick bayonet coupling, G1" ext.		20	pcs

<b>2.2</b>	<b>G01 - LOT 2</b>	<b>Solar &amp; PV</b>	<b>KITALE NP</b>	
<b>2.2.1</b>		<b>KNP_LAB_BC_3</b>		
<b>No.</b>	<b>Requested by Client: Specification Detail</b>	<b>To be filled by bidder: Brand - Model - Type</b>	<b>Qty</b>	<b>Unit</b>
2.2.2.22	<b>Hose clips</b>		20	pcs
	Stainless steel 1" hose clamps			
2.2.2.23	<b>Float valve</b>		7	pcs
	Ball float valve with thread connection			
2.2.2.24	<b>Water tank</b>		5	pcs
	MDPE water tank with lid, approx. 75l, preferably upright square shape			
2.2.2.25	<b>Timer</b>		7	pcs
	Rail mount timer, 240V			
2.2.2.26	<b>Residual current device</b>		7	pcs
	Rail mount RCD 0.03A, 10A 240V			
2.2.2.27	<b>Circuit breakers</b>		7	pcs
	Miniature circuit breaker, 10A, 240V			
2.2.2.28	<b>Electric cable</b>		100	m
	Sheated, flexible, multi strand cable, 3x1.5mm <sup>2</sup>			
2.2.2.29	<b>Cable conduit</b>		100	m
	PVC cable conduit for electric cable,			
2.2.2.30	<b>Conduit bends</b>		40	pcs
	PVC conduit bends,			
2.2.2.31	<b>Cable ties</b>		200	pcs
	Releasable cable ties 250x4.5mm			
2.2.2.32	<b>Steel bars</b>		50	m
	Square tube steel bars, 1.5x1.5", 16G(1.6mm)			
2.2.2.33	<b>Perforated cable tray</b>		3	m
	Galvanized, perforated cable trays			
2.2.2.34	<b>Mounting straps</b>		10	m
	Galvanized perforated mounting straps			

<b>2.2</b>	<b>G01 - LOT 2</b>	<b>Solar &amp; PV</b>	<b>KITALE NP</b>	
<b>2.2.1</b>		<b>KNP_LAB_BC_3</b>		
<b>No.</b>	<b>Requested by Client: Specification Detail</b>	<b>To be filled by bidder: Brand - Model - Type</b>	<b>Qty</b>	<b>Unit</b>
2.2.2.35	<b>Castor wheels</b>		22	pcs
	Swivel castor heavy duty rubber wheels with brakes, 6"			
2.2.2.36	<b>Multipurpose screw set</b>		3	set
	Galvanized multi purpose screws with cross heads, approx. size range from 1.5-6mm, approx. 200pcs			

2.3	G01 - LOT 2	Solar & PV	BUMBE TTI	
2.3.1		BTTI_LAB_BC_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<b>Thermal Solar Laboratory</b>			
2.3.1.1	<b>Combination workbench</b>		2	pcs
	Workbench height: 850 mm Drawer/pull-out shelf load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension): 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity: 200 kg Worktop 40 mm thick made of beech multiplex, waterproof glued. Clearly varnished with UV varnish.			
2.3.1.2	<b>Bench vice 125 mm</b>		2	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
2.3.1.3	<b>Universal Table, Rectangular (1200 x 800 mm)</b>		4	pcs
	Universal table, frame and legs of circular tube 40/2 mm, powder coated, adjustable gliders; Table top made of pearl grey plastic, extremely dense and rigid ; size appr. 1200 x 800 x 720 mm (L x W x H); minor deviations of the dimensions are possible but have to correspond with the layout and ground plans of the			

2.3	G01 - LOT 2	Solar & PV	BUMBE TTI	
2.3.1		BTTI_LAB_BC_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<p>rooms provided with the tender documents</p> <p>The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.</p>			
2.3.1.4	<b>Office Chair Type 2, fabric</b>		4	pcs
	<p>High back chair with lockable tilt, adjustable height, armrest and swivel base, breathable backrest with adjustable lumbar support; Spacious seat with high-density padding; Height-adjustable armrests with soft pad support; Sturdy and stable frame made of chromed steel; Breathable mesh and fabric cover, black; Seat height 47 - 57 cm; Seat width &gt;49 cm; Seat depth &gt;50 cm; Backrest height &gt;60 cm; Armrest 17 - 23 cm (from the seat); Castors approx. 11x65 mm for hard floors; Load capacity up to max. 120 kg;</p>			
2.3.1.5	<b>Chair with Writing Tablet</b>		15	pcs
	<p>Chair with writing tablet; Seat shell beech shaped wood, Folding, removable writing tablet in beech, writing tablet format approx. 360 x 265 mm, optionally mounted on the left or right side, stackable with writing tablet removed, stacking bar, Chrome plated frame, Mirror pads, Cover imitation leather black; approx. dimensions: 535 x 400 x 470 mm (L x W x H); max height with open tablet appr. 810 mm</p> <p>Minor deviations of the dimensions are possible but have to correspond with the layout and ground plans of the rooms provided with the tender documents</p> <p>The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.</p>			
2.3.1.6	<b>Steel cabinet 500 x 1000 x 2000</b>		6	pcs

2.3	G01 - LOT 2	Solar & PV	BUMBE TTI	
2.3.1	BTTI_LAB_BC_4			
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			
2.3.1.7	<b>Key Box</b>		1	pcs
	48 hooks L x W x H appr.: 308 x 65 x 285 mm cylindrical lock			
2.3.1.8	<b>Smart Board 75" touch</b>		1	pcs
	<p>Panel Size: 75", Panel Type: TFT LCD Module, Display Area (mm): 1670 (H) x 940 (V) (75"diagonal), Aspect Ratio: 16:9, Resolution: UHD 3840x2160 (Pixels), Colors: 1.07B colors (10bit), Brightness: 350 nits (typ.), Contrast Ratio: 5000:1 (DCR), Response Time: 8ms, Viewing Angles: H = 178, V = 178 typ.</p> <p>Surface Treatment: Hardness: 9H Pencil AG glass Anti-glare coating, Type/ Tech: IR Recognition, Touch Resolution: 32767 x 32767, Touch Point: 20 points touch, 10 points writing</p> <p>HDMI: 2.0 x3 (3840x2160 @60Hz), RGB / VGA: x1, Audio: x1 (PC audio in), RS232: x1, LAN: RJ45: x1, USB: Type A: USB2.0: Front x2, Rear x1 (SmartPort™ for all) USB3.0: Front x1, Rear x3 (SmartPort™ for Rear x3), Type B: x2, for touch</p> <p>Energy Star Certified</p> <p>Delivery includes: (1x) 3m Length HDMI Cable, (1x) 3m Length USB cable (A-B), (1x) 3m Regional Power Cable, (1x) 2m Length USB-C Cable, (1x) Remote Control, (2x) Batteries for Remote Control, (4x) ActivPanel Pens, (1x) Block Eraser</p> <p>The smart board is mounted to a movable rack with four castors,</p>			

2.3	G01 - LOT 2	Solar & PV	BUMBE TTI	
2.3.1		BTTI_LAB_BC_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	diameter ≈10 cm			
2.3.1.9	<b>Standard Notebook</b>		4	pcs
	Processor type: x64 architecture, Intel I5 1235U OR AMD Ryzen 7 4800U or higher, min 2.5 gigahertz; Graphics: Intel Iris Xe Graphics or higher; Screen Size min. 16 inches, Resolution min 1920 x 1080 (Full HD); Optical drive DVD 24x (option); RAM min. 12 GB; BIOS: UEFI (optional Legacy-BIOS switch); Hard drive SSD min. 512 GB; Network: Ethernet RJ 45 onboard (10/100/1.000 Mbit/s), Wireless AC; External ports: USB 4 typ C, >=2, HDMI 1x, VGA Optional, Headphone/mic Jack; Camera Front facing, Built in Microphone, internal stereo speaker; Lithium-ion Battery Life 6 hours, Power adapter; optical USB mouse; Operating system Windows 11 Prof; all device driver must be available either on a CD/DVD or as downloads over the net; Certifications & Listings: Latest TCO certification of the product category, latest energy saving certification (e.g. Energy Star) upon delivery, certified for Windows 11; The device is provided with up to 5 standard software configurations, the composition of which is agreed with representatives of the schools. The standard configurations are made available as a standard image for the purpose of restoring corrupt systems.			
2.3.1.10	<b>Drill bit set - extended</b>		1	pcs
	9 wood drill bits: Ø 3 -10 mm 19 HSS-TiN metal drill bits: Ø 1.5 - 7 mm 5 stone 8/5 drill bits: Ø 4 - 10 mm			

2.3	G01 - LOT 2	Solar & PV	BUMBE TTI	
2.3.1		BTTI_LAB_BC_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	40 screwdriver bits, L = 25 mm: slotted, Phillips PH, cross-tip PZ 2/3/3/3, Torx T10/10/15/15/20/20/25/25/30/40, inner hexagon SW 3/4/5/6 13 screwdriver bits, L = 50 mm: slotted 4/6 mm, cross-tip PH 0/1/2/3, Cross slot PZ 0/1/2/3, Torx T 10/20/25 7 socket wrenches: 5/6/8/10/11/12/13 mm Flat milling drill Ø 6/22 mm, Hole saw Ø 32/38/44/54 mm, Countersink, Bit holder, Hex adapter , Allen key, Case			
2.3.1.11	<b>Angle grinder 125 mm</b>		1	pcs
	Angle grinder 125 mm, Intelligent brake system, Variable Speed pre-selection, Kickback control, Restart protection, Vibration Control 1700 W, 230 V, Disc diameter 125 mm, Idle speed 2800 - 11500 rpm, Max. separation depth 33, Mandrel thread M14			
2.3.1.12	<b>Metal cutting discs</b>		30	pcs
	1x Metal cutting discs, 125mm 1x 125mm metal grinding disc, medium grinding for steel 1xAbrasive flap disc, 125mm, grit 120			
2.3.1.13	<b>Table column drill</b>		1	pcs
	Table column drill; Keyless drill chuck B 16, 1 - 16 mm; Taper mandrel MK 2 / B 16; Drill drift; Operating lever for speed setting; Speed adjustment by means of variator disc; Telescopic drill chuck protection CE; LED light integrated into drilling head; laser drilling indicator drilling capacity in steel 16 mm; speed range 340 - 2200 rpm; drill table lift 275 mm drill table swivelling ± 45 °; drill table revolving ± 180 °; quill distance table min./max. 360 mm; drilling table surface min 240x240 mm; motor power min. 550 W; voltage 230/50 V/Hz Including Machine vice 3" / 75 mm, 2 clamping screws 14 mm, 2x HSS drill cartridge 1-13 mm, 25-pc.			

2.3	G01 - LOT 2	Solar & PV	BUMBE TTI	
2.3.1		BTTI_LAB_BC_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.3.1.14	<b>Reciprocating saw</b>		1	pcs
	Reciprocating saw, quick blade change, 230V, 1200W, Number of strokes (max.) 3000 /min, Upstroke (max.) 30 mm, Cutting depth (max.) (wood) 255 mm Including case, 3 sets of spare Reciprocating saw blade, for 1x metal, 1x plastics and 1xwood			
2.3.1.15	<b>Welding inverter</b>		1	pcs
	Welding inverter; MMA electrode welding; IGBT technology; output current MMA: 30-200A; protection class: IP21S; mains voltage: 1 x 230VAC (+-15%); mains frequency: 50/60 Hz Including: mass cable 3 meters, electrode holder 3 meters, protective cover, slag hammer 500 g, wire brush, 3x pack of 1.6mm welding electrodes, 40A, pack of 200, 3x pack of 2.5mm welding electrodes, 80A, pack of 200			
2.3.1.16	<b>Welding helmet</b>		2	pcs
	Auto darkening welding helmet, adjustable sensitivity and darkening time, rechargeable batteries with amorphous front PV cell			
2.3.1.17	<b>Digital multimeter</b>		5	pcs
	Digital multimeter, CAT II 600V, LCD display 2000 counts, protective cover, Auto power off, Auto backlight off, Loud continuity buzzer, rotary switch, diode test, DC voltage (V) 200.0mV~600V ±(0.5%+3); AC voltage (V) 200.0mV~600V, 200.0V~600V ±(1.2%+3); DC current (A) 200.0µA~10.00A ±(1.0%+3); AC current (A) 200.0µA~10.00A; Resistance (Ω) 200.0Ω~200.0MΩ ±(1.0%+2); 200.0Ω~20.00MΩ; Capacitance (F) 2.000nF~2.000mF; Including rechargeable batteries > 1500mAh, test leads, manual, 10x spare fuses 10A			
2.3.1.18	<b>Charger for cylindrical cells</b>		1	pcs

<b>2.3</b>	<b>G01 - LOT 2</b>	<b>Solar &amp; PV</b>	<b>BUMBE TTI</b>	
<b>2.3.1</b>		<b>BTTI_LAB_BC_4</b>		
<b>No.</b>	<b>Requested by Client: Specification Detail</b>	<b>To be filled by bidder: Brand - Model - Type</b>	<b>Qty</b>	<b>Unit</b>
	VOLTCRAFT CC-8 Charger for cylindrical cells Li-ion, LiFePO, NiMH, NiCd A, AA , AAA , AAAA, C, Sub C, 9V PP3, 10340, 145 Individual slot monitoring, Battery recognition, Faulty battery detection, Battery diagnostics Matching rechargeable battery Li-ion, LiFePO, NiMH, NiCd; Suitable for battery size A, AA , AAA , AAAA, C, Sub C, 9V; Charging slots >10 (AAA 8x, AA 8x, Size C 5x, 9 V 2x) Max. charging current per slot 2000 mA, Li-Ion/Li-Po charging current 2000 mA Including power supply, user manual.			
<b>2.3.2</b>	<b>Thermal Solar Training Field</b>	<b>BTTI_TF_BC_3</b>		
2.3.2.1	<b>Solar Thermosiphon</b>		2	set
	Indirect system, flat plate collector, slope roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.3.2.2	<b>Solar Thermosiphon</b>		1	set
	Indirect system, flat plate collector, flat roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.3.2.3	<b>Solar Thermosiphon</b>		1	set
	Indirect system, vacuum tube collector, slope roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.3.2.4	<b>0.5kW Water pump</b>		5	pcs
	Impeller pump, 0.5kW, 240V, G thread fitting			
2.3.2.5	<b>Pump switch</b>		5	pcs
	Pump pressure switch, adjustable start/stop pressure, 240V			
2.3.2.6	<b>Expansion vessel</b>		5	pcs
	Pressure tank expansion vessel, 5l, with Schrader filling valve			

<b>2.3</b>	<b>G01 - LOT 2</b>	<b>Solar &amp; PV</b>	<b>BUMBE TTI</b>	
<b>2.3.1</b>		<b>BTTI_LAB_BC_4</b>		
<b>No.</b>	<b>Requested by Client: Specification Detail</b>	<b>To be filled by bidder: Brand - Model - Type</b>	<b>Qty</b>	<b>Unit</b>
2.3.2.7	<b>Pressure gauge</b> Pressure gauge, max. 10bar and PTR valve		5	pcs
2.3.2.8	<b>4 way Tee</b> Brass or PPR 5 way tee to connect pressure gauge, expansion vessel and pump switch. G thread fittings at end to connect with Bayonet couplings.		6	pcs
2.3.2.9	<b>Thermostatic mixing valve</b> 3 way thermostatic mixing valve, G thread fitting		5	pcs
2.3.2.10	<b>Cross fitting</b> Brass cross G thread fitting		10	pcs
2.3.2.11	<b>EPDM heat resistant hose</b> 1" int.dia., EPDM, heat resistance 120°C, fabric hose or similar		50	m
2.3.2.12	<b>PVC hose</b> 1" int.dia., clear PVC, heat resistance 60°C, clear, braided fabric hose or similar		70	m
2.3.2.13	<b>3/4" ball valve</b> Ball valve, 3/4" int.		20	pcs
2.3.2.14	<b>1/2" ball valve</b> Ball valve, 1/2" int.		20	pcs
2.3.2.15	<b>Bayonet hose coupling</b> Brass quick bayonet with 1" hose fitting		50	pcs
2.3.2.16	<b>1/2"int. bayonet coupling</b> Brass quick bayonet coupling, G1/2" int.		20	pcs
2.3.2.17	<b>1/2"ext. bayonet coupling</b> Brass quick bayonet coupling, G1/2" ext.		20	pcs
2.3.2.18	<b>3/4"int. bayonet coupling</b> Brass quick bayonet coupling, G3/4" int.		20	pcs
2.3.2.19	<b>3/4"ext. bayonet coupling</b>		20	pcs

2.3	G01 - LOT 2	Solar & PV	BUMBE TTI	
2.3.1		BTTI_LAB_BC_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Brass quick bayonet coupling, G3/4" ext.			
2.3.2.20	<b>1"int. bayonet coupling</b>		20	pcs
	Brass quick bayonet coupling, G1" int.			
2.3.2.21	<b>1"ext. bayonet coupling</b>		20	pcs
	Brass quick bayonet coupling, G1" ext.			
2.3.2.22	<b>Hose clips</b>		20	pcs
	Stainless steel 1" hose clamps			
2.3.2.23	<b>Float valve</b>		7	pcs
	Ball float valve with thread connection			
2.3.2.24	<b>Water tank</b>		5	pcs
	MDPE water tank with lid, approx. 75l, preferably upright square shape			
2.3.2.25	<b>Timer</b>		7	pcs
	Rail mount timer, 240V			
2.3.2.26	<b>Residual current device</b>		7	pcs
	Rail mount RCD 0.03A, 10A 240V			
2.3.2.27	<b>Circuit breakers</b>		7	pcs
	Miniature circuit breaker, 10A, 240V			
2.3.2.28	<b>Electric cable</b>		100	m
	Sheated, flexible, multi strand cable, 3x1.5mm <sup>2</sup>			
2.3.2.29	<b>Cable conduit</b>		100	m
	PVC cable conduit for electric cable,			
2.3.2.30	<b>Conduit bends</b>		40	pcs
	PVC conduit bends,			
2.3.2.31	<b>Cable ties</b>		200	pcs
	Releasable cable ties 250x4.5mm			
2.3.2.32	<b>Steel bars</b>		50	m

2.3	G01 - LOT 2	Solar & PV	BUMBE TTI	
2.3.1		BTTI_LAB_BC_4		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Square tube steel bars, 1.5x1.5", 16G(1.6mm)			
2.3.2.33	<b>Perforated cable tray</b>		3	m
	Galvanized, perforated cable trays			
2.3.2.34	<b>Mounting straps</b>		10	m
	Galvanized perforated mounting straps			
2.3.2.35	<b>Castor wheels</b>		22	pcs
	Swivel castor heavy duty rubber wheels with brakes, 6"			
2.3.2.36	<b>Multipurpose screw set</b>		3	set
	Galvanized multi purpose screws with cross heads, approx. size range from 1.5-6mm, approx. 200pcs			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	<b>Training Room Thermal Solar</b>			
2.4.1.1	<b>Combination workbench</b>		2	pcs
	Workbench height: 850 mm Drawer/pull-out shelf load capacity at least: 70 kg Worktop dimension (L x D) 1500 x 750 Drawer extension (partial/full extension): 90% With 3 drawers Drawer height 1 x 50 mm, 1 x 100 mm and 1 x 150 mm inner dimension (W x D) 450 x 600 mm Powder coated steel frame with levelling screws Load-carrying capacity: 200 kg Worktop 40 mm thick made of beech multiplex, waterproof glued. Clearly varnished with UV varnish.			
2.4.1.2	<b>Bench vice 125 mm</b>		2	pcs
	Bench vice, of cast iron (jaw width 125mm) • high-strength casting with a pearlitic structure. Long and particularly accurate prismatic form precision guide. • spindle fully enclosed and protected from dirt • spindle with trapezoidal thread • hardened jaws, serrated/smooth ground, reversible and exchangeable. • with flat-milled anvil • delivered with a set of soft jaws			
2.4.1.3	<b>Universal Table, Rectangular (1200 x 800 mm)</b>		4	pcs
	Universal table, frame and legs of circular tube 40/2 mm, powder coated, adjustable gliders; Table top made of pearl grey plastic, extremely dense and rigid ; size appr. 1200 x 800 x 720 mm (L x W x H); minor deviations of the dimensions are possible but have to correspond with the layout and ground plans of the rooms provided with the tender documents			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1	ETTI_WS_BC_2			
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.			
2.4.1.4	<b>Office Chair Type 2, fabric</b>		4	pcs
	High back chair with lockable tilt, adjustable height, armrest and swivel base, breathable backrest with adjustable lumbar support; Spacious seat with high-density padding; Height-adjustable armrests with soft pad support; Sturdy and stable frame made of chromed steel; Breathable mesh and fabric cover, black; Seat height 47 - 57 cm; Seat width >49 cm; Seat depth >50 cm; Backrest height >60 cm; Armrest 17 - 23 cm (from the seat); Castors approx. 11x65 mm for hard floors; Load capacity up to max. 120 kg;			
2.4.1.5	<b>Chair with Writing Tablet</b>		15	pcs
	<p>Chair with writing tablet; Seat shell beech shaped wood, Folding, removable writing tablet in beech, writing tablet format approx. 360 x 265 mm, optionally mounted on the left or right side, stackable with writing tablet removed, stacking bar, Chrome plated frame, Mirror pads, Cover imitation leather black; approx. dimensions: 535 x 400 x 470 mm (L x W x H); max height with open tablet appr. 810 mm</p> <p>Minor deviations of the dimensions are possible but have to correspond with the layout and ground plans of the rooms provided with the tender documents</p> <p>The manufacturer must have a structured quality management system, e.g. according to ISO 9001 or equivalent.</p>			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1	ETTI_WS_BC_2			
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.4.1.6	<b>Steel cabinet 500 x 1000 x 2000</b>		6	pcs
	Steel cabinet, approx. height 2000 mm, width/dept 1000/400 mm. Body and doors of 0.9 mm sheet steel, storage shelf mountings at 40 mm intervals. Doors reinforced on the inside, can be locked by push handle with cylinder lock. Complete with 4 storage shelves of sheet metal.			
2.4.1.7	<b>Key Box</b>		1	pcs
	48 hooks L x W x H appr.: 308 x 65 x 285 mm cylindrical lock			
2.4.1.8	<b>Smart Board 75" touch</b>		1	pcs
	<p>Panel Size: 75", Panel Type: TFT LCD Module, Display Area (mm): 1670 (H) x 940 (V) (75" diagonal), Aspect Ratio: 16:9, Resolution: UHD 3840x2160 (Pixels), Colors: 1.07B colors (10bit), Brightness: 350 nits (typ.), Contrast Ratio: 5000:1 (DCR), Response Time: 8ms, Viewing Angles: H = 178, V = 178 typ.</p> <p>Surface Treatment: Hardness: 9H Pencil AG glass Anti-glare coating, Type/ Tech: IR Recognition, Touch Resolution: 32767 x 32767, Touch Point: 20 points touch, 10 points writing</p> <p>HDMI: 2.0 x3 (3840x2160 @60Hz), RGB / VGA: x1, Audio: x1 (PC audio in), RS232: x1, LAN: RJ45: x1, USB: Type A: USB2.0: Front x2, Rear x1 (SmartPort™ for all) USB3.0: Front x1, Rear x3 (SmartPort™ for Rear x3), Type B: x2, for touch</p> <p>Energy Star Certified</p> <p>Delivery includes: (1x) 3m Length HDMI Cable, (1x) 3m Length USB cable (A-B), (1x) 3m Regional Power Cable, (1x) 2m Length USB-C Cable, (1x) Remote Control, (2x) Batteries for Remote Control, (4x) ActivPanel Pens, (1x) Block Eraser</p>			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	The smart board is mounted to a movable rack with four castors, diameter ≈10 cm			
2.4.1.9	<b>Standard Notebook</b>		4	pcs
	Processor type: x64 architecture, Intel I5 1235U OR AMD Ryzen 7 4800U or higher, min 2.5 gigahertz; Graphics: Intel Iris Xe Graphics or higher; Screen Size min. 16 inches, Resolution min 1920 x 1080 (Full HD); Optical drive DVD 24x (option); RAM min. 12 GB; BIOS: UEFI (optional Legacy-BIOS switch); Hard drive SSD min. 512 GB; Network: Ethernet RJ 45 onboard (10/100/1.000 Mbit/s), Wireless AC; External ports: USB 4 typ C, >=2, HDMI 1x, VGA Optional, Headphone/mic Jack; Camera Front facing, Built in Microphone, internal stereo speaker; Lithium-ion Battery Life 6 hours, Power adapter; optical USB mouse; Operating system Windows 11 Prof; all device driver must be available either on a CD/DVD or as downloads over the net; Certifications & Listings: Latest TCO certification of the product category, latest energy saving certification (e.g. Energy Star) upon delivery, certified for Windows 11; The device is provided with up to 5 standard software configurations, the composition of which is agreed with representatives of the schools. The standard configurations are made available as a standard image for the purpose of restoring corrupt systems.			
2.4.1.10	<b>Drill bit set - extended</b>		1	pcs
	9 wood drill bits: Ø 3 -10 mm 19 HSS-TiN metal drill bits: Ø 1.5 - 7 mm 5 stone 8/5 drill bits: Ø 4 - 10 mm 40 screwdriver bits, L = 25 mm: slotted, Phillips PH, cross-tip PZ			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	2/3/3/3, Torx T10/10/15/15/20/20/25/25/30/40, inner hexagon SW 3/4/5/6 13 screwdriver bits, L = 50 mm: slotted 4/6 mm, cross-tip PH 0/1/2/3, Cross slot PZ 0/1/2/3, Torx T 10/20/25 7 socket wrenches: 5/6/8/10/11/12/13 mm Flat milling drill Ø 6/22 mm, Hole saw Ø 32/38/44/54 mm, Countersink, Bit holder, Hex adapter , Allen key, Case			
2.4.1.11	<b>Angle grinder 125 mm</b>		1	pcs
	Angle grinder 125 mm, Intelligent brake system, Variable Speed pre-selection, Kickback control, Restart protection, Vibration Control 1700 W, 230 V, Disc diameter 125 mm, Idle speed 2800 - 11500 rpm, Max. separation depth 33, Mandrel thread M14			
2.4.1.12	<b>Metal cutting discs</b>		10	pcs
	1x Metal cutting discs, 125mm 1x 125mm metal grinding disc, medium grinding for steel 1xAbrasive flap disc, 125mm, grit 120			
2.4.1.13	<b>Table column drill</b>		1	pcs
	Table column drill; Keyless drill chuck B 16, 1 - 16 mm; Taper mandrel MK 2 / B 16; Drill drift; Operating lever for speed setting; Speed adjustment by means of variator disc; Telescopic drill chuck protection CE; LED light integrated into drilling head; laser drilling indicator drilling capacity in steel 16 mm; speed range 340 - 2200 rpm; drill table lift 275 mm drill table swivelling ± 45 °; drill table revolving ± 180 °; quill distance table min./max. 360 mm; drilling table surface min 240x240 mm; motor power min. 550 W; voltage 230/50 V/Hz Including Machine vice 3" / 75 mm, 2 clamping screws 14 mm, 2x HSS drill cartridge 1-13 mm, 25-pc.			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.4.1.14	<b>Reciprocating saw</b>		1	pcs
	Reciprocating saw, quick blade change, 230V, 1200W, Number of strokes (max.) 3000 /min, Upstroke (max.) 30 mm, Cutting depth (max.) (wood) 255 mm Including case, 3 sets of spare Reciprocating saw blade, for 1x metal, 1x plastics and 1xwood			
2.4.1.15	<b>Welding inverter</b>		1	pcs
	Welding inverter; MMA electrode welding; IGBT technology; output current MMA: 30-200A; protection class: IP21S; mains voltage: 1 x 230VAC (+-15%); mains frequency: 50/60 Hz; Including: mass cable 3 meters, electrode holder 3 meters, protective cover, slag hammer 500 g, wire brush, 3x pack of 1.6mm welding electrodes, 40A, pack of 200, 3x pack of 2.5mm welding electrodes, 80A, pack of 200			
2.4.1.16	<b>Welding helmet</b>		2	pcs
	Auto darkening welding helmet, adjustable sensitivity and darkening time, rechargeable batteries with amorphous front PV cell			
2.4.1.17	<b>Digital multimeter</b>		5	pcs
	Digital multimeter, CAT II 600V, LCD display 2000 counts, protective cover, Auto power off, Auto backlight off, Loud continuity buzzer, rotary switch, diode test, DC voltage (V) 200.0mV~600V $\pm(0.5\%+3)$ ; AC voltage (V) 200.0mV~600V, 200.0V~600V $\pm(1.2\%+3)$ ; DC current (A) 200.0 $\mu$ A~10.00A $\pm(1.0\%+3)$ ; AC current (A) 200.0 $\mu$ A~10.00A; Resistance ( $\Omega$ ) 200.0 $\Omega$ ~200.0M $\Omega$ $\pm(1.0\%+2)$ ; 200.0 $\Omega$ ~20.00M $\Omega$ ; Capacitance (F) 2.000nF~2.000mF; Including rechargeable batteries > 1500mAh, test leads, manual, 10x spare fuses 10A			
2.4.1.18	<b>Charger for cylindrical cells</b>		1	pcs

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1	ETTI_WS_BC_2			
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	VOLTCRAFT CC-8 Charger for cylindrical cells Li-ion, LiFePO, NiMH, NiCd A, AA , AAA , AAAA, C, Sub C, 9V PP3, 10340, 145 Individual slot monitoring, Battery recognition, Faulty battery detection, Battery diagnostics Matching rechargeable battery Li-ion, LiFePO, NiMH, NiCd; Suitable for battery size A, AA , AAA , AAAA, C, Sub C, 9V; Charging slots >10 (AAA 8x, AA 8x, Size C 5x, 9 V 2x) Max. charging current per slot 2000 mA, Li-Ion/Li-Po charging current 2000 mA Including power supply, user manual.			
2.4.1.19	<b>Plumbing tool case</b>		1	set
	ABS Tool case with aluminium frame, lockable with two keys. 1/4" bit screwdriver handle, magnetic with 3 slot bits: 4.5;5.5; 6.5 mm, 6 Philips bits: 2x PH 1 – 2 – 3, 6 hex bits: 3-8mm, 9 torx bits: 8-40. 1/2" socket wrench inserts: 10;11;12;13;14;15;16;17;18;19;21;22;24 mm, with 125 mm extension and cardan joint. 2 insulated Philips screwdrivers: PH 1-2, 4 3 insulated slot screwdrivers: 3;4; 5,5;6,5 mm. Phase tester 125-250V, Wooden measuring rod: 2m. Spirit level, 400mm. Hex keys with ball headm9pcs: 1,5-10mm. Double open end spanners, 10pcs: 8 x 9;10 x 11;12 x 13;14 x 15;16 x 17;18 x 19; 20 x 22;21 x 23;24 x 27;30 x 32 mm. Water pump pliers: 250mm. Water pipe wrench: 250mm. Corner pipe wrench 240mm. Engineer's hammer 600g. Flat chisel 200mm. Point chisel.			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Metal hacksaw 150mm. Scraper blade width: 40mm. Plumbing wrench 200mm. Pipe cutter 3-28mm. Pipe cutter 3-42mm. Basin wrench set 1/2" with extension and 9;10;11;14mm sockets			
2.4.1.20	<b>Electrical Tool Case 63 pcs for instructors</b>		1	set
	ABS tool case with aluminium frame, lockable. Electrician spirit level 430mm, pocket spirit level 70mm,. Double ended ring spanner 10x13mm,. Multi-function cabinet keys for all standard and shut-off systems. Socket set with textile wallet, 1/4", 28 pcs, hexagon female sockets: 9pcs, 5-13mm, hex male socket bits: 3;4;5;6, Philips sockets: 1/25;2/25;3/25, internal torx sockets; TX10;15;20;25;27;30, extension with quick rotation sleeve 150mm, wobble extension 56mm, adapter with quick change chuck 1/4", reversible ratchet. Pozi drive screwdriver, insulated, size 1. Slot head screwdriver, insulated, size 3.5mm. Combination screwdriver set with textile wallet, insulated handle, 4 slot heads, 2 Philips heads, 2 Pozi drive heads, 2 square heads, 1 square heads , voltage tester. insulated combination pliers 145mm. Water pump pliers, 180mm. Bent snipe nose pliers, 200mm. insulated side cutters, 160mm. Universal stripping cable, 8-13mm, 0.2-4mm2. Wire stripping tool for 0.08-16mm2. insulated installation pliers 200mm.			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	Crimping tool up to 16mm2. Flat chisel 250mm. Engineer's hammer 300g. Pliers wrench 180mm. insulated cable knife 180mm.			
2.4.1.21	<b>Pliers Set 3-piece</b>		2	set
	Pliers Set 3-piece Combi pliers 180mm, Max. cutting value: (medium hard/hard wire) 3.4/2.2mm Snipe nose side cutting pliers 200mm, Form: straight bracket, Max. cutting value: (medium hard/hard wire) 3.2/2.2mm Diagonal cutter 160 mm, Form 0: with Facette.			
2.4.1.22	<b>Tools set PV1</b>		2	pcs
	3x Tape measure with mm/inch graduations 3 m : Plastic casing with removable belt clip. Automatic tape return and stop, with damping effect. Sliding end hook. Tape measure printed black/red on yellow. Black rubber hammer 300g: Rubber (90 Shore), non-rebound; Head $\varnothing \approx 55$ mm; With ash wood handle $\approx 320$ mm. Hacksaw: with general-purpose blade fixed handle, overall length 290 mm, Blade length 150 mm including spare blades pack, 12 pieces metal (312) 32 TPI			
2.4.1.23	<b>First Aid Kit Box</b>		1	pcs
	Design: First aid kit, plus special contents for occupation-specific requirements in dust- and splash-proof ABS case including wall bracket. Electrical equipment, leather fingerling, tweezers, respiratory aid device, roll of quick bandage, immediate cold compress, burn gel, cleaning wipes alcohol-free, bandage cloth, eye wash bottle sodium chloride solution, net bandages size 3. Orange box with			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
	first aid pictogram Size approx. 400 x 300 x 150 mm (W x D x H)			
<b>2.4.2</b>	<b>Thermal Solar Training Field</b>			
2.4.2.1	<b>Solar Thermosiphon</b>		2	set
	Indirect system, flat plate collector, slope roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.4.2.2	<b>Solar Thermosiphon</b>		1	set
	Indirect system, flat plate collector, flat roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.4.2.3	<b>Solar Thermosiphon</b>		1	set
	Indirect system, vacuum tube collector, slope roof mounting. 150l tank with pressure relief valves and built-in adjustable electrical heating element			
2.4.2.4	<b>0.5kW Water pump</b>		5	pcs
	Impeller pump, 0.5kW, 240V, G thread fitting			
2.4.2.5	<b>Pump switch</b>		5	pcs
	Pump pressure switch, adjustable start/stop pressure, 240V			
2.4.2.6	<b>Expansion vessel</b>		5	pcs
	Pressure tank expansion vessel, 5l, with Schrader filling valve			
2.4.2.7	<b>Pressure gauge</b>		5	pcs
	Pressure gauge, max. 10bar and PTR valve			
2.4.2.8	<b>4 way Tee</b>		6	pcs
	Brass or PPR 5 way tee to connect pressure gauge, expansion vessel and pump switch. G thread fittings at end to connect with Bayonet couplings.			
2.4.2.9	<b>Thermostatic mixing valve</b>		5	pcs
	3 way thermostatic mixing valve, G thread fitting			

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.4.2.10	<b>Cross fitting</b> Brass cross G thread fitting		10	pcs
2.4.2.11	<b>EPDM heat resistant hose</b> 1" int.dia., EPDM, heat resistance 120°C, fabric hose or similar		50	m
2.4.2.12	<b>PVC hose</b> 1" int.dia., clear PVC, heat resistance 60°C, clear, braided fabric hose or similar		70	m
2.4.2.13	<b>3/4" ball valve</b> Ball valve, 3/4" int.		20	pcs
2.4.2.14	<b>1/2" ball valve</b> Ball valve, 1/2" int.		20	pcs
2.4.2.15	<b>Bayonet hose coupling</b> Brass quick bayonet with 1" hose fitting		50	pcs
2.4.2.16	<b>1/2"int. bayonet coupling</b> Brass quick bayonet coupling, G1/2" int.		20	pcs
2.4.2.17	<b>1/2"ext. bayonet coupling</b> Brass quick bayonet coupling, G1/2" ext.		20	pcs
2.4.2.18	<b>3/4"int. bayonet coupling</b> Brass quick bayonet coupling, G3/4" int.		20	pcs
2.4.2.19	<b>3/4"ext. bayonet coupling</b> Brass quick bayonet coupling, G3/4" ext.		20	pcs
2.4.2.20	<b>1"int. bayonet coupling</b> Brass quick bayonet coupling, G1" int.		20	pcs
2.4.2.21	<b>1"ext. bayonet coupling</b> Brass quick bayonet coupling, G1" ext.		20	pcs
2.4.2.22	<b>Hose clips</b> Stainless steel 1" hose clamps		20	pcs

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.4.2.23	<b>Float valve</b> Ball float valve with thread connection		7	pcs
2.4.2.24	<b>Water tank</b> MDPE water tank with lid, approx. 75l, preferably upright square shape		5	pcs
2.4.2.25	<b>Timer</b> Rail mount timer, 240V		7	pcs
2.4.2.26	<b>Residual current device</b> Rail mount RCD 0.03A, 10A 240V		7	pcs
2.4.2.27	<b>Circuit breakers</b> Miniature circuit breaker, 10A, 240V		7	pcs
2.4.2.28	<b>Electric cable</b> Sheated, flexible, multi strand cable, 3x1.5mm <sup>2</sup>		100	m
2.4.2.29	<b>Cable conduit</b> PVC cable conduit for electric cable,		100	m
2.4.2.30	<b>Conduit bends</b> PVC conduit bends,		40	pcs
2.4.2.31	<b>Cable ties</b> Releasable cable ties 250x4.5mm		200	pcs
2.4.2.32	<b>Steel bars</b> Square tube steel bars, 1.5x1.5", 16G(1.6mm)		50	m
2.4.2.33	<b>Perforated cable tray</b> Galvanized, perforated cable trays		3	m
2.4.2.34	<b>Mounting straps</b> Galvanized perforated mounting straps		10	m
2.4.2.35	<b>Castor wheels</b> Swivel castor heavy duty rubber wheels with brakes, 6"		22	pcs

2.4	G01 - LOT 2	Solar & PV	NYAMIRA NP	
2.4.1		ETTI_WS_BC_2		
No.	Requested by Client: Specification Detail	To be filled by bidder: Brand - Model - Type	Qty	Unit
2.4.2.36	<b>Multipurpose screw set</b>		3	set
	Galvanized multi-purpose screws with cross heads, approx. size range from 1.5-6mm, approx. 200pcs			

## 4. Drawings

These Bidding Documents include no drawings.

## 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>
	BUMBE TTI		
	KITALE NP		
	NYAMIRA NP		

*[If all Goods listed in these Bidding Documents (or all Goods listed in specific Lots) are to be delivered to the same recipient, simply state so; if Goods are to be delivered to multiple recipients, use the following table]:*

Distribution List:

<b>Distribution List</b>									
<b>Lot</b>	<b>Item</b>	<b>Item Name</b>	<b>Recipient 1</b>	<b>Recipient 2</b>	<b>Recipient 3</b>	<b>Recipient 4</b>	<b>Recipient 5</b>	<b>Recipient 6</b>	<b>Total</b>
<b>Number</b>			<b>Recipient 1</b>	<b>Recipient 2</b>	<b>Recipient 3</b>	<b>Recipient 4</b>	<b>Recipient 5</b>	<b>Recipient 6</b>	<b>Total</b>

## **PART 3 - Contract**

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

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## 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

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

Agreement;

- (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 DDP 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

10.1 The Purchaser and the Supplier shall make every effort to

- Disputes** 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 arbitration 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: <i>Republic of Kenya</i>
<b>GC 1.1(j)</b>	The Purchaser is: <i>Ministry of Education (MoE)</i> <i>State Department of Technical, Vocational Education and Training,</i> <i>Jogoo House B, Harambee Avenue</i>
<b>GC 1.1 (o)</b>	The Project Site(s) is/are: <b>according to Bidding Document Section VII. Schedule of Requirements, 6. Distribution of Goods</b>  The Named Places of Destinations are: <b>Location 1: Kitale National Polytechnic (Kitale NP)</b> Address: Kitale Municipality along Elgon Road, 1 km from Kitale town <b>Location 2: Bumbe Technical Training Institute (Bumbe TTI)</b> Address: Funyala <b>Location 3: Nyamira National Polytechnic (Nyamira NP)</b> Address: Itibo Ward, Nyamira North Sub-County, Nyamira
<b>GC 4.2</b>	The version edition of Incoterms shall be Incoterms 2020.  However, the definition of the place and date associated with "delivery" is modified as follows:  (a) Under "DDP" Incoterms defines "delivery" as the place and date where risk transfers from the seller to the buyer.  (b) In these Bidding Documents, when using "DDP" 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.
<b>GC 5.1</b>	The governing and communication language shall be <b>English</b> .
<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>	Goods and services from countries under embargo from Germany, the European Union or the United Nations are not eligible.  Goods and services from countries which are legally barred in the country of the contracting agency.

<b>GC 8.1</b>	<p>For <b>notices</b>, the <b>Purchaser's</b> address shall be:</p> <p>Address: Principal Secretary State Department for TVET Jogoo Hse B 8<sup>th</sup> Floor Harambee Avenue</p> <p>City: Nairobi, Kenya</p> <p>ZIP Code: Box 9583 00200</p> <p>Country: Kenya Attention HSCM – Head Supply Chain Management Through room 703 Uchumi Hse 7<sup>th</sup> Floor</p> <p>For <b>notices</b>, the <b>Supplier's</b> address shall be:</p> <p>Attention: <i>[Insert full name of person, if applicable]</i></p> <p>Street Address: <i>[Insert street address and number]</i></p> <p>City: <i>[Insert name of city or town]</i></p> <p>ZIP Code: <i>[Insert postal ZIP code, if applicable]</i></p> <p>Country: <i>[Insert name of country]</i></p> <p>Telephone: <i>[Include telephone number, including country and city codes]</i></p> <p>Electronic mail address: <i>[Insert e-mail address, if applicable]</i></p>
<b>GC 9.1</b>	The governing law shall be the law of: <b>The Republic of Kenya.</b>
<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><b>(a) Contract with foreign Supplier:</b></p> <p><i>[For contracts entered into with foreign suppliers, International commercial arbitration may have practical advantages over other dispute settlement methods. The KfW should not be named as arbitrator, nor should it be asked to name an arbitrator. Among the rules to govern the arbitration proceedings, the Purchaser may wish to consider the United Nations Commission on International Trade Law (UNCITRAL) Arbitration Rules of 1976, or the Rules of Conciliation and Arbitration of the International Chamber of Commerce (ICC).]</i></p> <p><b>If the Purchaser chooses the UNCITRAL Arbitration Rules, the following sample clause should be inserted:</b></p> <p>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.</p> <p><b>If the Purchaser chooses the Rules of ICC, the following sample clause should be inserted:</b></p> <p>GC 10.2—All disputes arising in connection with the present Contract shall be finally settled under the Rules of Conciliation and</p>

	<p>Arbitration of the International Chamber of Commerce by one or more arbitrators appointed in accordance with said Rules.</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>
<p><b>GC 13.1</b></p>	<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, 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) One (1) Original and <i>three (3)</i> copies of the Supplier's invoice<sup>1</sup> 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) One (1) Original negotiable and three (3) non-negotiable copies (stamped and dated according to the original) of the clean, on-board bill of lading marked "freight prepaid" or equivalent (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) One (1) Original and three (3) copies of the packing list 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) Original insurance certificate;</li> <li>(v) Original Manufacturer's or Supplier's warranty certificate;</li> <li>(vi) Original inspection certificate, issued by the nominated inspection agency [<i>If applicable, otherwise delete</i>], and the Supplier's factory inspection report;</li> <li>(vii) Certified certificate of origin: One (1) original and three (3) copies; 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>

<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.).

	<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) One (1) Original and three (3) copies of the Supplier's invoice showing Goods' and Related Services' description, quantity, unit price, and total amount;</li> <li>(ii) One (1) Original delivery note, railway receipt, or truck receipt;</li> <li>(iii) One (1) Original insurance certificate</li> <li>(iv) One (1) Original Manufacturer's or Supplier's warranty certificate;</li> <li>(v) One (1) Original inspection certificate, and the Supplier's factory inspection report;</li> <li>(vi) Certified certificate of origin: One (1) original and three (3) copies; 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> <p>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.</p>
GC 15.1	<p>The prices charged for the Goods supplied and the related Services performed shall not be adjustable. <b>Prices are fixed until contract completion.</b></p>
GC 16.1	<p>The method and conditions of payment to be made to the Supplier under this Contract shall be as follows:</p> <p><b>Methods of Payment:</b></p> <p>Payments shall be made using the KfW's <b>Simplified Direct Disbursement procedure.</b></p> <p><b>Payment for Goods supplied from abroad.</b></p> <p>Payment shall be made in <i>Euro (EUR)</i> in the following manner:</p> <ul style="list-style-type: none"> <li>(i) <b>Advance Payment<sup>2</sup>:</b> <i>Twenty (20)</i> percent of the Contract Price shall be paid through the payment method stipulated above within thirty (30) 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;</li> <li>(ii) <b>On Final Acceptance:</b> <i>The remaining eighty (80)]</i> percent of the Contract Price 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 final inspection and acceptance certificate, issued by the Purchaser within</li> </ul>

<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 were the Supplier does not wish to receive an advance payment.

	<p>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. The Purchaser will have a maximum of four (4) weeks for inspection and acceptance after the goods/equipment are delivered to the respective TVET centers. After the four (4) weeks it will be assumed that the purchaser accepts the goods.</p> <p><b>Payment for Goods and Services supplied from within the Purchaser's country:</b></p> <p>Payment for Goods and Services supplied from within the Purchaser's country shall be made in <i>EURO</i> as follows:</p> <p>(i) <b>Advance Payment<sup>2</sup>:</b> Twenty (20) percent of the Contract Price shall be paid through the payment method stipulated above within thirty (30) 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;</p> <p>(ii) <b>On Final Acceptance:</b> <i>The remaining eighty (80)]</i> percent of the Contract Price 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 final inspection and acceptance certificate, 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. The Purchaser will have a maximum of four (4) weeks for inspection and acceptance after the goods/equipment are delivered to the respective TVET centers. After the four (4) weeks it will be assumed that the purchaser accepts the goods.</p>
<p><b>GC 16.1</b></p>	<p>Payment to the Supplier of the amounts due in each currency shall be made into the following bank accounts:</p> <p><i>[Insert bank account details at the time of contract signing]</i></p> <p>Bank charges are for the account of the Supplier, except for the bank charges of KfW as transferring bank only.</p>
<p><b>GC 16.5</b></p>	<p>GC 16.5 will be applied to this Contract. Interest will be paid on delayed payments based on the prevailing commercial rates at the time of processing the Invoice.</p>
<p><b>GC 16.6</b></p>	<p>Reimbursement payments shall be made to KfW to the following bank account:</p> <p>Account holder: KfW Entwicklungsbank Account number: 38 000 000 00</p>

	<p>Branch code (BLZ): 500 204 00  Account number (IBAN): DE53 5002 0400 3800 0000 00  SWIFT/BIC: KFWIDEFF</p> <p>Payment to be made for the account of the Ministry of Education (MoE), State Department of Technical, Vocational Education and Training, Jogoo House B, Harambee Avenue, Nairobi, Kenya.</p>
<b>GC 17.3</b>	<p>The following taxes, duties and fees exemptions apply to the Contract:</p> <p>Pursuant to Article 1.3 of the Financing Agreement between the Purchaser and KfW, no import duties may be financed from the German Financial Contribution.</p> <p>However, any other charges, fees such as custom clearance, etc. will be borne by the Supplier.</p>
<b>GC 18.1</b>	<p>The amount of the Performance Security shall be: <b>10 % of the contract price</b></p>
<b>GC 18.3</b>	<p>The Performance Security shall be in the form of: <b>Performance Bond</b></p> <p>The Performance security shall be denominated in <b>the currency of payment of the Contract (EUR)</b>, in accordance with their portions of the Contract Price.</p>
<b>GC 22.2(a)</b>	<p>The number of days shall be: <b>thirty (30)</b></p>
<b>GC 22.2 (b)</b>	<p>The number of years shall be: <b>five (5)</b></p>

<b>GC 23.2</b>	<p>The packing, marking and documentation within and outside the packages shall be:</p> <p>Ministry of Education (MoE), State Department of Technical, Vocational Education and Training, Jogoo House B, Harambee Avenue, Nairobi Kenya</p> <p><b>Promotion of Youth Employment and Vocational Training in Kenya – Phase II</b></p> <p>Addressed to:</p> <p><b>Kitale National Polytechnic</b> Kitale Municipality along Elgon Rd,</p> <p><b>Bumbe Technical Training Institute</b> Funyala</p> <p><b>Nyamira National Polytechnic</b> Itibo Ward, Nyamira North Sub-County, Nyamira</p>
<b>GC 24.1</b>	<p>The insurance coverage shall be as follows:</p> <p>Up to 110% of the Contract Price <i>DDP value plus all required local services</i> 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 the Republic of Kenya to the extent that the risk has already come to lie with the Purchaser. The insurance certificate/policy must 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 Ministry of Education (MoE), State Department of Technical, Vocational Education and Training, Jogoo House B, Harambee Avenue Nairobi, Kenya.</p>
<b>GC 25.1</b>	<p>Responsibility for transportation of the Goods shall be as specified in the Incoterms.</p>
<b>GC 25.2</b>	<p>Incidental services to be provided are:</p>

<b>GC 26.1</b>	<p>The inspections and tests shall be specified in Section VII – Schedule of Requirements, Chapter 5 Inspections and Tests.</p> <p>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.</p>
<b>GC 26.2</b>	The Inspections and tests shall be conducted at the Goods' final destination
<b>GC 27.1</b>	The liquidated damage shall be: <i>0.5 % per week of the contract price</i>
<b>GC 27.1</b>	The maximum amount of liquidated damages shall be: 10 % of the contract
<b>GC 28.3</b>	<p>The period of validity of the Warranty shall be 24 months.</p> <p>For purposes of the Warranty, the named place(s) of destination(s) shall be:</p> <p><b>See GC 23.2</b></p>
<b>GC 28.5 and GC 28.6</b>	The period for repair or replacement shall be: 45 days.

## 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>2</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..

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<sup>2</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**

Not applicable.

## 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

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<b>Contract Agreement .....</b>	<b>312</b>
<b>Performance Security .....</b>	<b>314</b>
<b>Advance Payment Security .....</b>	<b>316</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>**

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<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]*

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<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.]*

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Place, date

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Guarantor's authorized signature(s)

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<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.]*

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Place, date

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Guarantor's authorized signature(s)

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<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.