



**KENYA FORESTRY RESEARCH
INSTITUTE**

TENDER NO. KEFRI/015/2018-2019

TENDER FOR SUPPLY OF SCIENTIFIC EQUIPMENTS

CLOSING DATE: 29TH JANUARY, 2019

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Kenya Forestry Research Institute (KEFRI) was established in June 1986 to undertake research and development in forestry and allied natural resources. The organization's headquarters is in Muguga, 25 kilometers from Nairobi city, off the Nairobi - Naivasha road. KEFRI has six (6) Centers and nine (9) Sub-Centers all involved in research activities.

- 1.1 The Institute invites sealed bids from eligible candidates for supply, delivery, installation, testing and commissioning of scientific equipment.
- 1.2 Tender documents can be downloaded free of charge from the KEFRI website www.kefri.org or IFMIS website tenders.go.ke. Tenderers who download the tender document and intend to submit a bid are required to submit their particulars to KEFRI through **Email: procurement@kefri.org** for the purpose of receiving any further clarification and/or addendum.
- 1.3 Completed tender documents are to be enclosed in plain sealed envelopes marked with tender reference number and be deposited in the Tender Box at Kenya Forestry Research Institute Headquarter, Muguga or be addressed to:

**The Director
Kenya Forestry Research Institute
P.O BOX 20412,
NAIROBI 00200**

So as to be received on or before **Tuesday, 29th January, 2019 at 10.00 am.**

- 1.4 Prices quoted should be net inclusive of all taxes and delivery and shall remain valid for **120 days** from the closing date of the tender.
- 1.5 Tenders will be opened immediately thereafter in the presence of the Candidates or their representatives who choose to attend at the Kenya Forestry Research Institute in the Auditorium Room.

SECTION II - INSTRUCTIONS TO TENDERERS

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SECTION II - INSTRUCTIONS TO TENDERERS

2.1 Eligible Tenderers

- 2.1.1 This Invitation for Tenders is open to all tenderers eligible as described in the Invitation to Tender. Successful tenderers shall complete the supply of goods by the intended completion date specified in the Schedule of Requirements Section VI.
- 2.1.2 The procuring entity's employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender.
- 2.1.3 Tenderers shall provide the qualification information statement that the tenderer (including all members of a joint venture and subcontractors) is not associated, or have been associated in the past, directly or indirectly, with a firm or any of its affiliates which have been engaged by the Institute to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the goods under this Invitation for tenders.
- 2.1.4 Tenderers shall not be under a declaration of ineligibility for corrupt and fraudulent practices.

2.2 Eligible Goods

- 2.2.1 All goods to be supplied under the contract shall have their origin in eligible source countries.
- 2.2.2 For purposes of this clause, "origin" means the place where the goods are mined, grown, or produced. Goods are produced when, through manufacturing, processing, or substantial and major assembly of components, a commercially-recognized product results that is substantially different in basic characteristics or in purpose or utility from its components
- 2.2.3 The origin of goods is distinct from the nationality of the tenderer.

2.3 Cost of Tendering

- 2.3.1 The Tenderer shall bear all costs associated with the preparation and submission of its tender, and the Institute, will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.
- 2.3.2 The price to be charged for the tender document shall not exceed **Kshs.1000/=**
- 2.3.3 All firms found capable of performing the contract satisfactorily in accordance with the set prequalification criteria shall be prequalified.

2.4. The Tender Document

2.4.1 The tender document comprises the documents listed below and addenda issued in accordance with clause 2.6 of these instructions to Tenderers

- (i) Invitation to Tender
- (ii) Instructions to tenderers
- (iii) General Conditions of Contract
- (iv) Special Conditions of Contract
- (v) Schedule of requirements
- (vi) Technical Specifications
- (vii) Tender Form and Price Schedules
- (viii) Tender Security Form
- (ix) Contract Form
- (x) Performance Security Form
- (xi) Bank Guarantee for Advance Payment Form
- (xii) Manufacturer's Authorization Form
- (xiii) Confidential Business Questionnaire

2.4.2 The Tenderer is expected to examine all instructions, forms, terms, and specifications in the tender documents. Failure to furnish all information required by the tender documents or to submit a tender not substantially responsive to the tender documents in every respect will be at the tenderers risk and may result in the rejection of its tender.

2.5 Clarification of Documents

2.5.1 A prospective tenderer requiring any clarification of the tender document may notify the Institute in writing or by post at the Entity's address indicated in the Invitation to Tender. The Procuring entity will respond in writing to any request for clarification of the tender documents, which it receives not later than seven (7) days prior to the deadline for the submission of tenders, prescribed by the procuring entity. Written copies of the Procuring entities response (including an explanation of the query but without identifying the source of inquiry) will be sent to all prospective tenderers that have received the tender document.

2.5.2 The procuring entity shall reply to any clarifications sought by the tenderer within 3 days of receiving the request to enable the tenderer to make timely submission of its tender.

2.6 Amendment of Documents

2.6.1 At any time prior to the deadline for submission of tenders, the Procuring entity, for any reason, whether at its own initiative or in response to a clarification requested by a prospective tenderer, may modify the tender documents by amendment.

2.6.2 All prospective candidates that have received the tender documents will be notified of the amendment in writing or by post and will be binding on them.

2.6.3 In order to allow prospective tenderers reasonable time in which to take the amendment into account in preparing their tenders, the Procuring entity, at its discretion, may extend the deadline for the submission of tenders.

2.7 **Language of Tender**

2.7.1 The tender prepared by the tenderer, as well as all correspondence and documents relating to the tender exchange by the tenderer and the Procuring entity, shall be written in English language, provided that any printed literature furnished by the tenderer may be written in another language provided they are accompanied by an accurate English translation of the relevant passages in which case, for purposes of interpretation of the tender, the English translation shall govern.

2.8 **Documents Comprising of Tender**

2.8.1 The tender prepared by the tenderers shall comprise the following components

- (a) a Tender Form and a Price Schedule completed in accordance with paragraph 2.9, 2.10 and 2.11 below
- (b) documentary evidence established in accordance with paragraph 2.1 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;
- (c) Documentary evidence established in accordance with paragraph 2.2 that the goods and ancillary services to be supplied by the tenderer are eligible goods and services and conform to the tender documents.
- (d) tender security furnished in accordance with paragraph 2.14

2.9 **Tender Forms**

2.9.1 The tenderer shall complete the Tender Form and the appropriate Price Schedule furnished in the tender documents, indicating the goods to be supplied, a brief description of the goods, their country of origin, quantity, and prices.

2.10 **Tender Prices**

2.10.1 The tenderer shall indicate on the appropriate Price Schedule the unit prices and total tender price of the goods it proposes to supply under the contract

2.10.2 Prices indicated on the Price Schedule shall include all costs including taxes, insurances and delivery to the premises of the entity.

2.10.3 Prices quoted by the tenderer shall be fixed during the Tender's performance of the contract and not subject to variation on any account. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to paragraph 2.22

2.10.4 The validity period of the tender shall be 120 days from the date of opening of the tender.

2.11 Tender Currencies

2.11.1 Prices shall be quoted in Kenya Shillings unless otherwise specified in the Appendix to Instructions to Tenderers.

2.12 Tenderers Eligibility and Qualifications

2.12.1 Pursuant to paragraph 2.1, the tenderer shall furnish, as part of its tender, documents establishing the tenderers eligibility to tender and Its qualifications to perform the contract if it's tender is accepted.

2.12.2 The documentary evidence of the tenderers eligibility to tender shall establish to the Institute's satisfaction that the tenderer, at the time of submission of its tender, is from an eligible source country as defined under paragraph 2.1

2.12.3 The documentary evidence of the tenderers qualifications to perform the contract if its tender is accepted shall be established to the Institute's satisfaction;

- (a) that, in the case of a tenderer offering to supply goods under the contract which the tenderer did not manufacture or otherwise produce, the tenderer has been duly authorized by the goods' Manufacturer or producer to supply the goods.
- (b) that the tenderer has the financial, technical, and production capability necessary to perform the contract;
- (c) that, in the case of a tenderer not doing business within Kenya, the tenderer is or will be (if awarded the contract) represented by an Agent in Kenya equipped, and able to carry out the Tenderer's maintenance, repair, and spare parts-stocking obligations prescribed in the Conditions of Contract and/or Technical Specifications.

2.13 Goods Eligibility and Conformity to Tender Documents

2.13.1 Pursuant to paragraph 2.2 of this section, the tenderer shall furnish, as part of its tender documents establishing the eligibility and conformity to the tender documents of all goods which the tenderer proposes to supply under the contract

2.13.2 The documentary evidence of the eligibility of the goods shall consist of a statement in the Price Schedule of the country of origin of the goods and services offered which shall be confirmed by a certificate of origin issued at the time of shipment.

2.13.3 The documentary evidence of conformity of the goods to the tender documents may be in the form of literature, drawings, and data, and shall consist of:

- (a) a detailed description of the essential technical and performance characteristic of the goods;
- (b) a list giving full particulars, including available source and current prices of spare parts, special tools, etc., necessary for the proper and continuing

- functioning of the goods for a period of two (2) years, following commencement of the use of the goods by the Institute; and
- (c) a clause-by-clause commentary on the Institute's Technical Specifications demonstrating substantial responsiveness of the goods and service to those specifications, or a statement of deviations and exceptions to the provisions of the Technical Specifications.

2.13.4 For purposes of the documentary evidence to be furnished pursuant to paragraph 2.13.3(c) above, the tenderer shall note that standards for workmanship, material, and equipment, as well as references to brand names or catalogue numbers designated by the Institute in its Technical Specifications, are intended to be descriptive only and not restrictive. The tenderer may substitute alternative standards, brand names, and/or catalogue numbers in its tender, provided that it demonstrates to the Institute's satisfaction that the substitutions ensure substantial equivalence to those designated in the Technical Specifications.

2.14 Tender Security

2.14.1 The tenderer shall furnish, as part of its tender, a tender security for the amount specified in the Appendix to Invitation to Tenderers.

2.14.2 The tender security shall be in the amount of 0.5 – 2 per cent of the tender price.

2.14.3 The tender security is required to protect the Procuring entity against the risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to paragraph 2.14.7

2.14.4 The tender security shall be denominated in Kenya Shillings or in another freely convertible currency, and shall be in the form of a bank guarantee or a bank draft issued by a reputable bank located in Kenya or abroad, or a guarantee issued by a reputable insurance company in the form provided in the tender documents or another form acceptable to the Procuring entity and valid for thirty (30) days beyond the validity of the tender.

2.14.5 Any tender not secured in accordance with paragraph 2.14.1 and 2.14.3 will be rejected by the Procuring entity as non-responsive, pursuant to paragraph 2.22

2.14.6 Unsuccessful Tenderer's tender security will be discharged or returned as promptly as possible but not later than thirty (30) days after the expiration of the period of tender validity prescribed by the Procuring entity.

2.14.7 The successful Tenderer's tender security will be discharged upon the tenderer signing the contract, pursuant to paragraph 2.27 and furnishing the performance security, pursuant to paragraph 2.28

2.14.8 The tender security may be forfeited:

- (a) if a tenderer withdraws its tender during the period of tender validity specified by the procuring entity on the Tender Form; or
- (b) in the case of a successful tenderer, if the tenderer fails:

- (i) to sign the contract in accordance with paragraph 2.27
or
- (ii) to furnish performance security in accordance with paragraph 2.28

2.15.1 Validity of Tenders

- 2.15.1 Tenders shall remain valid for **90 days** or as specified in the Invitation to Tender after the date of tender opening prescribed by the Institute, pursuant to paragraph 2.18. A tender valid for a shorter period shall be rejected by the Procuring entity as non-responsive.
- 2.15.2 In exceptional circumstances, the Procuring entity may solicit the Tenderer's consent to an extension of the period of validity. The request and the responses thereto shall be made in writing. The tender security provided under paragraph 2.14 shall also be suitably extended. A tenderer may refuse the request without forfeiting its tender security. A tenderer granting the request will not be required nor permitted to modify its tender.

2.16 Format and Signing of Tender

- 2.16.1 The Institute shall prepare two copies of the tender, clearly marking each "**ORIGINAL TENDER**" and "**COPY OF TENDER,**" as appropriate. In the event of any discrepancy between them, the original shall govern.
- 2.16.2 The tender document shall be typed or written in indelible ink and shall be signed by the tenderer or a person or persons duly authorized to bind the tenderer to the contract. The latter authorization shall be indicated by written power-of-attorney accompanying the tender. All pages of the tender shall be numbered, except for an amended printed literature and shall be initialed by the person or persons signing the tender.
- 2.16.3 The tender shall have no interlineations, erasures, or overwriting except as necessary to correct errors made by the tenderer, in which case such corrections shall be initialed by the person or persons signing the tender.

2.17 Sealing and Marking of Tenders

- 2.17.1 The Tenderer shall seal the original and each copy of the tender in separate envelopes, duly marking the envelopes as "**ORIGINAL**" and "**COPY.**" The envelopes shall then be sealed in an outer envelope.
- 2.17.2 The inner and outer envelopes shall:
 - (a) be addressed to the Institute at the address given in the Invitation to Tender:
 - (b) bear, tender number and name in the Invitation for Tenders and the words, "**DO NOT OPEN BEFORE,**" **Tuesday, 29th January, 2019.** The inner envelopes shall also indicate the name and address of the tenderer to enable the tender to be returned unopened in case it is declared "late".

2.17.3 If the outer envelope is not sealed and marked as required by paragraph 2.17.2, the Institute will assume no responsibility for the tender's misplacement or premature opening.

2.18 Deadline for Submission of Tenders

2.18.1 Tenders must be received by the Procuring entity at the address specified under paragraph 2.6 no later than **Tuesday, 29th January, 2019**.

2.18.2 The Institute may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 2.6, in which case all rights and obligations of the Procuring entity and candidates previously subject to the deadline will therefore be subject to the deadline as extended

2.19 Modification and Withdrawal of Tenders

2.19.1 The tenderer may modify or withdraw its tender after the tender's submission, provided that written notice of the modification, including substitution or withdrawal of the tenders, is received by the Institute prior to the deadline prescribed for submission of tenders.

2.19.2 The Tenderer's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of paragraph 2.17 A withdrawal notice may also be sent by cable, telex but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.

2.19.3 No tender may be modified after the deadline for submission of tenders.

2.19.4 No tender may be withdrawn in the interval between the deadline for submission of tenders and the expiration of the period of tender validity specified by the tenderer on the Tender Form. Withdrawal of a tender during this interval may result in the Tenderer's forfeiture of its tender security, pursuant to paragraph 2.14.7

2.19.5 The Institute may at any time terminate procurement proceedings before contract award and shall not be liable to any person for the termination.

2.19.6 The Institute shall give prompt notice of the termination to the tenderers and on request give its reasons for termination within 14 days of receiving the request from any tenderer.

2.20 Opening of Tenders

2.20.1 The Procuring entity will open all tenders in the presence of tenderers' representatives who choose to attend, on **Tuesday, 29th January, 2019** and in the location specified in the Invitation to Tender.

The tenderers' representatives who are present shall sign a register evidencing their attendance.

- 2.20.2 The tenderers' names, tender modifications or withdrawals, tender prices, discounts and the presence or absence of requisite tender security and such other details as the Institute, at its discretion, may consider appropriate, will be announced at the opening.
- 2.20.3 The Procuring entity will prepare minutes of the tender opening.

2.21 Clarification of Tenders

- 2.21.1 To assist in the examination, evaluation and comparison of tenders the Institute may, at its discretion, ask the tenderer for a clarification of its tender. The request for clarification and the response shall be in writing, and no change in the prices or substance of the tender shall be sought, offered, or permitted.
- 2.21.2 Any effort by the tenderer to influence the Institute in the Institute's tender evaluation, tender comparison or contract award decisions may result in the rejection of the tenderers' tender.

2.22 Preliminary Examination

- 2.22.1 The Institute will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether required sureties have been furnished, whether the documents have been properly signed, and whether the tenders are generally in order.
- 2.22.2 Arithmetical errors will be rectified on the following basis. If there is a discrepancy between the unit price and the total price that is obtained by multiplying the unit price and quantify, the unit price shall prevail, and the total price shall be corrected. If the candidate does not accept the correction of the errors, its tender will be rejected, and its tender security forfeited. If there is a discrepancy between words and figures the amount in words will prevail
- 2.22.3 The Institute may waive any minor informality or non-conformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or effect the relative ranking of any tenderer.
- 2.22.4 Prior to the detailed evaluation, pursuant to paragraph 2.23 the Institute will determine the substantial responsiveness of each tender to the tender documents. For purposes of these paragraphs, a substantially responsive tender is one, which conforms to all the terms and conditions of the tender documents without material deviations. The Institute's determination of a tender's responsiveness is to be based on the contents of the tender itself without recourse to extrinsic evidence.
- 2.22.5 If a tender is not substantially responsive, it will be rejected by the Institute and may not subsequently be made responsive by the tenderer by correction of the non conformity.

2.23 Conversion to Single Currency

2.23.1 Where other currencies are used, the procuring entity will convert these currencies to Kenya Shillings using the selling exchange rate on the date of tender closing provided by the Central Bank of Kenya.

2.24 Evaluation and Comparison of Tenders

2.24.1 The Procuring entity will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 2.22

2.24.2 The tender evaluation committee shall evaluate the tender within 30 days of the validity period from the date of opening the tender.

2.24.3 A tenderer who gives false information in the tender document about its qualification or who refuses to enter into a contract after notification of contract award shall be considered for debarment from participating in future public procurement.

2.25 Preference

2.25.1 Preference where allowed in the evaluation of tenders shall not exceed 15%.

2.26 Contacting the Institute

2.26.1 Subject to paragraph 2.21 no tenderer shall contact the Institute on any matter related to its tender, from the time of the tender opening to the time the contract is awarded.

2.26.2 Any effort by a tenderer to influence the Institute in its decisions on tender, evaluation, tender comparison, or contract award may result in the rejection of the Tenderer's tender.

2.27 Award of Contract

(a) Post-qualification

2.27.1 In the absence of pre-qualification, the Institute will determine to its satisfaction whether the tenderer that is selected as having submitted the lowest evaluated responsive tender is qualified to perform the contract satisfactorily.

2.27.2 The determination will take into account the tenderer financial, technical, and production capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 2.12.3 as well as such other information as the Institute deems necessary and appropriate.

2.27.3 An affirmative determination will be a prerequisite for award of the contract to the tenderer. A negative determination will result in rejection of the Tenderer's

tender, in which event the Institute will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

(b) **Award Criteria**

2.27.4 The Institute will award the contract to the successful tenderer(s) whose tender has been determined to be substantially responsive and has been determined to be the lowest evaluated tender, provided further that the tenderer is determined to be qualified to perform the contract satisfactorily.

(c) **Institute's Right to Vary quantities**

2.27.5 The Institute reserves the right at the time of contract award to increase or decrease the quantity of goods originally specified in the Schedule of requirements without any change in unit price or other terms and conditions

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(d) **Institute's Right to accept or Reject any or All Tenders**

2.27.6 The Institute reserves the right to accept or reject any tender, and to annul the tendering process and reject all tenders at any time prior to contract award, without thereby incurring any liability to the affected tenderer or tenderers or any obligation to inform the affected tenderer or tenderers of the grounds for the Institute's action

2.28 Notification of Award

2.28.1 Prior to the expiration of the period of tender validity, the Institute will notify the successful tenderer in writing that its tender has been accepted.

2.28.2 The notification of award will constitute the formation of the Contract but will have to wait until the contract is finally signed by both parties

2.28.3 Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 2.28, the Institute will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 2.14

2.29 Signing of Contract

2.29.1 At the same time as the Institute notifies the successful tenderer that its tender has been accepted, the Institute will send the tenderer the Contract Form provided in the tender documents, incorporating all agreements between the parties.

2.29.2 The parties to the contract shall have it signed within 30 days from the date of notification of contract award unless there is an administrative review request.

2.29.3 Within thirty (30) days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Institute.

2.30 Performance Security

- 2.30.1 Within Thirty (30) days of the receipt of notification of award from the Institute, the successful tenderer shall furnish the performance security in accordance with the Conditions of Contract, in the Performance Security Form provided in the tender documents, or in another form acceptable to the Institute.
- 2.30.2 Failure of the successful tenderer to comply with the requirements of paragraph 2.27 or paragraph 2.28 shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Procuring entity may make the award to the next lowest evaluated Candidate or call for new tenders.

2.31 Corrupt or Fraudulent Practices

- 2.31.1 The Institute requires that tenderers observe the highest standard of ethics during the procurement process and execution of contracts when used in the present regulations, the following terms are defined as follows;
- (i) “corrupt practice” means the offering, giving, receiving, or soliciting of any thing of value to influence the action of a public official in the procurement process or in contract execution; and
 - (ii) “fraudulent practice” means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Procuring entity, and includes collusive practice among tenderer (prior to or after tender submission) designed to establish tender prices at artificial non-competitive levels and to deprive the Procuring entity of the benefits of free and open competition;
- 2.31.2 The Institute will reject a proposal for award if it determines that the tenderer recommended for award has engaged in corrupt or fraudulent practices in competing for the contract in question.
- 2.31.3 Further a tenderer who is found to have indulged in corrupt or fraudulent practices risks being debarred from participating in public procurement in Kenya.

Appendix to Instructions to Tenderers

The following information regarding the particulars of the tender shall complement supplement or amend the provisions of the instructions to tenderers. Wherever there is a conflict between the provision of the instructions to tenderers and the provisions of the appendix, the provisions of the appendix herein shall prevail over those of the instructions to tenderers

| INSTRUCTIONS TO TENDERERS REFERENCE | PARTICULARS OF APPENDIX TO INSTRUCTIONS TO TENDERS |
|--|---|
| 2.1.1- Eligibility | <i>All qualified, registered and authorized dealers of the specified scientific equipment are eligible to bid</i> |
| 2.18.1- Deadline for Submission of Tenders | <i>Tenders will close on Tuesday, 29th January, 2019.</i> |
| 2.24 –Evaluation Criteria | <i>As in (I)&(II) below</i> |
| 2.29.1 | <i>A successful Bidder shall provide a Performance Security of 10% of the contract sum</i> |

Evaluation Criteria:-

The evaluation criteria shall be as follows:-

(A). Preliminary Evaluation

Bidders must provide the following **Mandatory Requirements:-**

- i. Valid Certificate of Company Registration/Incorporation
- ii. Tax Compliance Certificate
- iii. Copy of Letter of Manufacturer's Authorization
- iv. Duly filled and signed Confidential Business Questionnaire Form
- v. Duly completed and signed Form of Tender
- vi. Tender Security of **1% of the Tender Sum**

(b). Detailed Technical Evaluation Criteria

| S/No. | Evaluation Criteria | Maximum Score |
|-------|--|-----------------|
| 1. | Compliance with Technical Specifications of the specified equipment | 50 marks |
| 2. | Evidence of past performance (Provide copies of LPOs, Contracts or Letter of Contract Award from at least two (4) clients where similar goods have been supplied (5 marks each)) | 20 marks |

| | | |
|--------------------|--|------------------|
| 3. | Qualifications of technical personnel: At least one technical person with a university degree in a relevant field <ul style="list-style-type: none"> • Master’s Degree – 20 marks • Bachelor’s Degree – 10 marks | 20 marks |
| 4. | Reference Letters from at least two (2) clients where similar goods have been supplied (5 marks each) | 10 marks |
| TOTAL SCORE | | 100 marks |

The pass mark at the technical evaluation stage is 80%. Bidders who attain the minimum technical score of 80% will qualify for Financial Evaluation. Bidders who score below the pass mark will be disqualified from further evaluation.

(II). Financial Evaluation

A bidder who quotes the lowest Financial Proposal after having attained the minimum technical score of 80% and having satisfied all the requirements of the tender will be considered for award of the contract.

SECTION III: GENERAL CONDITIONS OF CONTRACT

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SECTION III - GENERAL CONDITIONS OF CONTRACT

3.1 Definitions

3.1.1 In this Contract, the following terms shall be interpreted as indicated:-

- (a) “The Contract” means the agreement entered into between the Institute and the tenderer, as recorded in the Contract Form signed by the parties, including all attachments and appendices thereto and all documents incorporated by reference therein.
- (b) “The Contract Price” means the price payable to the tenderer under the Contract for the full and proper performance of its contractual obligations
- (c) “The Goods” means all of the equipment, machinery, and/or other materials, which the tenderer is required to supply to the Procuring entity under the Contract.
- (d) “The Institute” means the organization purchasing the Goods under this Contract.
- (e) “The Tenderer” means the individual or firm supplying the Goods under this Contract.

3.2 Application

3.2.1 These General Conditions shall apply in all Contracts made by the Institute for the procurement installation and commissioning of equipment

3.3 Country of Origin

3.3.1 For purposes of this clause, “Origin” means the place where the Goods were mined, grown or produced.

3.3.2 The origin of Goods and Services is distinct from the nationality of the tenderer.

3.4 Standards

3.4.1 The Goods supplied under this Contract shall conform to the standards mentioned in the Technical Specifications.

3.5 Use of Contract Documents and Information

3.5.1 The tenderer shall not, without the Institute’s prior written consent, disclose the Contract, or any provision therefore, or any specification, plan, drawing, pattern, sample, or information furnished by or on behalf of the Institute in connection therewith, to any person other than a person employed by the tenderer in the performance of the Contract.

- 3.5.2 The tenderer shall not, without the Institute's prior written consent, make use of any document or information enumerated in paragraph 3.5.1 above
- 3.5.3 Any document, other than the Contract itself, enumerated in paragraph 3.5.1 shall remain the property of the Institute and shall be returned (all copies) to the Institute on completion of the Tenderer's performance under the Contract if so required by the Procuring entity

3.6 **Patent Rights**

- 3.6.1 The tenderer shall indemnify the Institute against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods or any part thereof in the Procuring entity's country

3.7 **Performance Security**

- 3.7.1 Within thirty (30) days of receipt of the notification of Contract award, the successful tenderer shall furnish to the Institute the performance security in the amount specified in Special Conditions of Contract.
- 3.7.2 The proceeds of the performance security shall be payable to the Institute as compensation for any loss resulting from the Tenderer's failure to complete its obligations under the Contract.
- 3.7.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to the Institute and shall be in the form of a bank guarantee or an irrevocable letter of credit issued by a reputable bank located in Kenya or abroad, acceptable to the Procuring entity, in the form provided in the tender documents.
- 3.7.4 The performance security will be discharged by the Institute and returned to the Candidate not later than thirty (30) days following the date of completion of the Tenderer's performance obligations under the Contract, including any warranty obligations, under the Contract

3.8 **Inspection and Tests**

- 3.8.1 The Institute or its representative shall have the right to inspect and/or to test the goods to confirm their conformity to the Contract specifications. The Institute shall notify the tenderer in writing in a timely manner, of the identity of any representatives retained for these purposes.
- 3.8.2 The inspections and tests may be conducted in the premises of the tenderer or its subcontractor(s), at point of delivery, and/or at the Goods' final destination if conducted on the premises of the tenderer or its subcontractor(s), all reasonable facilities and assistance, including access to drawings and production data, shall be furnished to the inspectors at no charge to the Institute.
- 3.8.3 Should any inspected or tested goods fail to conform to the Specifications, the Institute may reject the equipment, and the tenderer shall either replace the

- rejected equipment or make alterations necessary to make specification requirements free of costs to the Institute.
- 3.8.4 The Institute's right to inspect, test and where necessary, reject the goods after the Goods' arrival shall in no way be limited or waived by reason of the equipment having previously been inspected, tested and passed by the Institute or its representative prior to the equipment delivery.
- 3.8.5 Nothing in paragraph 3.8 shall in any way release the tenderer from any warranty or other obligations under this Contract.
- 3.9 Packing**
- 3.9.1 The tenderer shall provide such packing of the Goods as is required to prevent their damage or deterioration during transit to their final destination, as indicated in the Contract.
- 3.9.2 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
- 3.10 Delivery and Documents**
- 3.10.1 Delivery of the Goods shall be made by the tenderer in accordance with the terms specified by Institute in its Schedule of Requirements and the Special Conditions of Contract
- 3.11 Insurance**
- 3.11.1 The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacturer or acquisition, transportation, storage, and delivery in the manner specified in the Special conditions of contract.
- 3.12 Payment**
- 3.12.1 The method and conditions of payment to be made to the tenderer under this Contract shall be specified in Special Conditions of Contract
- 3.12.2 Payments shall be made promptly by the Institute as specified in the contract
- 3.13 Prices**
- 3.13.1 Prices charged by the tenderer for goods delivered and services performed under the Contract shall not, with the exception of any price adjustments authorized in Special Conditions of Contract, vary from the prices by the tenderer in its tender.
- 3.13.2 Contract price variations shall not be allowed for contracts not exceeding one year (12 months)

3.13.3 Where contract price variation is allowed, the variation shall not exceed 10% of the original contract price.

3.13.4 Price variation request shall be processed by the Institute within 30 days of receiving the request.

3.14. Assignment

3.14.1 The tenderer shall not assign, in whole or in part, its obligations to perform under this Contract, except with the Institute's prior written consent

3.15 Subcontracts

3.15.1 The tenderer shall notify the Institute in writing of all subcontracts awarded under this Contract if not already specified in the tender. Such notification, in the original tender or later, shall not relieve the tenderer from any liability or obligation under the Contract

3.16 Termination for default

3.16.1 The Institute may, without prejudice to any other remedy for breach of Contract, by written notice of default sent to the tenderer, terminate this Contract in whole or in part

(a) if the tenderer fails to deliver any or all of the goods within the period(s) specified in the Contract, or within any extension thereof granted by the Institute.

(b) if the tenderer fails to perform any other obligation(s) under the Contract

(c) if the tenderer, in the judgment of the Procuring entity has engaged in corrupt or fraudulent practices in competing for or in executing the Contract

3.16.2 In the event the Institute terminates the Contract in whole or in part, it may procure, upon such terms and in such manner as it deems appropriate, equipment similar to those undelivered, and the tenderer shall be liable to the Institute for any excess costs for such similar goods.

3.17 Liquidated Damages

3.17.1. If the tenderer fails to deliver any or all of the goods within the period(s) specified in the contract, the procuring entity shall, without prejudice to its other remedies under the contract, deduct from the contract prices liquidated damages sum equivalent to 0.5% of the delivered price of the delayed items up to a maximum deduction of 10% of the delayed goods. After this the tenderer may consider termination of the contract.

3.18 Resolution of Disputes

- 3.18.1 The Institute and the tenderer shall make every effort to resolve amicably by direct informal negotiation and disagreement or dispute arising between them under or in connection with the contract
- 3.18.2 If, after thirty (30) days from the commencement of such informal negotiations both parties have been unable to resolve amicably a contract dispute, either party may require adjudication in an agreed national or international forum, and/or international arbitration.

3.19 Language and Law

- 3.19.1 The language of the contract and the law governing the contract shall be English language and the Laws of Kenya respectively unless otherwise stated.

3.20 Force Majeure

- 3.20.1 The tenderer shall not be liable for forfeiture of its performance security 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.

SECTION IV - SPECIAL CONDITIONS OF CONTRACT

4.1. Special Conditions of Contract shall supplement the General Conditions of Contract. Whenever there is a conflict, between the GCC and the SCC, the provisions of the SCC herein shall prevail over these in the GCC.

42. Special conditions of contract as relates to the GCC

| | |
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| REFERENCE OF GCC | SPECIAL CONDITIONS OF CONTRACT |
|-------------------------|--|
| 3.7.1 | <i>The successful bidder will furnish KEFRI with a Performance Security of 10% of the contract price</i> |
| 3.12.1 | <i>Payment shall be made upon inspection and acceptance of the goods by KEFRI</i> |
| 3.18.1 | <i>As in 3.18.1 above</i> |

SECTION V - TECHNICAL SPECIFICATIONS

5.1 General

- 5.1.1 These specifications describe the requirements for goods. Tenderers are requested to submit with their offers the detailed specifications, drawings, catalogues, etc for the products they intend to supply
- 5.1.2 Tenderers must indicate on the specifications sheets whether the equipment offered comply with each specified requirement.
- 5.1.3 All the dimensions and capacities of the equipment to be supplied shall not be less than those required in these specifications. Deviations from the basic requirements, if any shall be explained in detail in writing with the offer, with supporting data such as calculation sheets, etc. The Institute reserves the right to reject the products, if such deviations shall be found critical to the use and operation of the products.
- 5.1.4 The tenderers are requested to present information along with their offers as follows:
- (i) Shortest possible delivery period of each product
 - (ii) Information on proper representative and/or workshop for back-up service/repair and maintenance including their names and addresses.

5.2 PARTICULARS

| Item Description | UOM | Quantity | Specifications |
|---------------------------------------|-------------------|----------------------|--|
| Prototype development boards | Pieces | 10 | LPC1768FBD100: 512kB flash, 64kB SRAM, Ethernet, USB, LQFP100 |
| Ultra Violet PCB exposure unit | Pieces | 1 | |
| Photosensitive PCBs | Pieces | 10 | Single-Sided Fotoboard (2) Pre-sensitised 'FR4 |
| Acetone | Pieces | 5 | Printed Circuit Board Etching chemicals |
| Sodium silicate | Pieces | 5 | Printed Circuit Board Etching chemicals |
| Ferric chloride | Pieces | 5 | Printed Circuit Board Etching chemicals |
| Surgical Gloves | Pieces | 50 | |
| GSM Modules | Pieces | 5 | 3G/GPRS/GSM Shield for Arduino with GPS - European version SIM5320E |
| 3D Printer | Pieces | 1 | Ultimaker 2+ 3D Printer |
| Ultrasonic Sensor | Pieces | 5 | Maxbotix Ultrasonic Rangefinder - LV-EZ1 - LV-EZ1 |
| Ultrasonic Sensor | Pieces | 20 | HC-SR04 Ultrasonic Sensor |
| Turbidity sensor | Pieces | 10 | Analog Turbidity Sensor for Arduino |
| Translucent paper | Pieces | 100 | PCB Artwork Film |
| 3D printing material | Pieces | 5 | Ultimaker PLA |
| Coaxial cable | Pieces | 100 meters | |
| Coaxial cable connectors | Pieces | 4 (2 male, 2 female) | Mini BNC Coaxial RF / Coaxial Connectors & Accessories |
| 9W Solar Panels | Pieces | 10 | 9Watt 6V |
| Solar Charger Units | Pieces | 10 | USB / DC / Solar Lithium Ion/Polymer charger - v2 |
| 32GB SD cards | Pieces | 10 | |
| Tipping Bucket Rainauge | Pieces | 5 | Tipping bucket rain guage compatible with Arduino |
| Temperature and Humidity Sensor | Pieces | 10 | AM2302 (wired DHT22) |
| Waterproof casings | Pieces | 10 | Plastic Dustproof Waterproof IP65 Junction Box Universal Electrical Project Enclosure White 4"x4"x 2.8" (100x100x70mm) |
| MEMS Microphones | Pieces | 10 | Adafruit Silicon MEMS Microphone Breakout - SPW2430 |
| Pi NoIR cameras | Pieces | 2 | Raspberry Pi NoIR Camera |
| MBED compatible camera | Pieces | 5 | OV7670 Camera |
| Battery Power Banks | Pieces | 5 | 10000mAh |
| Ethanol | Pieces | 5 | |
| Entomological Pins | Pieces | 10 | |
| Butterfly envelops | Pieces | 10 | |
| Ziplock bags | Pieces | 5 | |
| Baits | Pieces | 1 | |
| Cabinet | Pieces | 1 | 4 feet by 3 feet |
| Automatic climatic data | Daily (2010-2018) | 1 | Subscription: to daily min and max Rainfall, Temperature, Wind, Relative Humidity and net radiation |
| Manual and Automatic River gauge data | Daily (2010-2018) | 1 | Quarterly subscription: daily River gauge measurements, river discharge |
| Historical climatic data | Daily (1984- | 34×12 | Daily min and max rainfall, temperature, wind, Relative humidity and net radiation |

| | | | | |
|--|---|-------|--|-------------------------------------|
| | 2018) | | | |
| DEM data | 5km by 5km grid | 600 | Subscription to 12.5m spatial resolution DEM | |
| SPOT 5 Remote sensing data | km ² | 15251 | 10 m resolution Multispectral bands, | |
| Landsat multispectral images | | | Subscription for downloading Landsat data for the year 1985, 1990, 1995, 2000, 2005,2010, 2015 and 2018 for Jan-April season | |
| Wildlife and livestock counts data | | 34×12 | Monthly Wildlife and livestock census data, Wildlife and livestock population density in shapefiles | |
| Field data Accessories | piece | 1 | Garmin Map 64s, 2.6" sunlight-readable color screen, High-sensitivity GPS and GLONASS receiver with quad helix antenna, 8 GB of internal memory and a microSD™ card slot, 250,000 preloaded caches for paperless caching from Geocaching.com | |
| Field Data loggers | Piece | 2 | Intel stand-alone data loggers Integrated software and batteries. SanDisk secure Digital Card, CPU: 2.5GHz Intel Core i7-6500U (dual-core, 4MB cache, up to 3.1GHz with Turbo Boost) Graphics: Intel HD Graphics 520. RAM: 8GB LPDDR3 SDRAM (1,866MHz) Screen: 13.3-inch, 1,920 x 1,080 FHD IPS UWVA BrightView Corning Gorilla Glass WLED-backlit display | |
| Projecting devices for display during climate change workshops | piece | 1 | DX 221 Projector, | |
| Advanced processing Workstation | piece | 1 | Advanced HP Workstation Z440-MT-Xeon E5-1620V43.5 GHZ-8GHz-1 TB Faster microprocessor, Large amount of random access memory (RAM), High-speed graphic adapters, UNIX operating system, Local area Network (LAN), Router | |
| Staff level gauges | piece | 2 | Sensor Type | Tipping bucket/magnetic reed switch |
| | | | Material | 5 mm thick cast aluminium |
| | | | Operating environment | Vertical staff gauges |
| | | | Accuracy | 2 cm |
| | | | Weight | net approx. 6.2 kg per m |
| | | | Length of staff gauge | 200 – 1000 mm |
| | | | Colour background | White or yellow |
| | | | Figures and E pattern | Black |
| Handheld electromagnetic water flow meter with automatic discharge calculation | piece | 2 | Velocity measurement | |
| | | | Measurement method | Magnetic-inductive |
| | | | Measuring range: | 0 ... 6 m/s |
| | | | Accuracy | |
| | | | Accuracy at 0 ... 3 m/s | ±2 % of meas. value ±0.015 m/s |
| | | | Accuracy at 0 ... 5 m/s | ±4 % of meas. value ±0.015 m/s |
| | | | Zero stability | ±0.015 m/s |
| | | | Resolution | |
| | | | 0.001 at measured value | <10 |
| | | | 0.01 at measured value | <100 |
| | | | 0.1 at measured value | >100 |
| | | | Depth measurement (option) | Included in the unit |
| | | | Absolute pressure sensor | with single point calibration |
| | | | Measuring range: | 0 ... 3.05 m |
| Accuracy: | The larger of ±2% of measured value or ±0.015 m | | | |
| Methods for velocity | | | | |

| | | | | |
|--|-------|---|--------------------------------------|--|
| | | | measurement | |
| | | | Streams: | 1, 2, 3, 5, and 6 point measurement (ISO / USGS standards) |
| | | | Conduits (canalization): | 0.9 x Vmax; 0.2/0.4/0.8; 2D |
| | | | | velocity integrating method |
| | | | Conduit profiles: | Circular, rectangular, trapezoidal, 2/3 egg, inverted 2/3 egg |
| | | | Methods for discharge calculation | |
| | | | EN ISO 748 | Mid and Mean section method |
| | | | Power supply | Lithium-ion battery |
| | | | Lifetime | 18 hours typ. (20°C) |
| | | | Data memory capacity | Up to 10 measuring locations (of 32 vertical profiles each) |
| | | | Temperature | -20 ... +60°C (operation/storage) |
| | | | Handheld unit display | |
| | | | Graphic colour display, transfective | LCD 3.5', QVGA |
| | | | Handheld unit interface: | USB Mini B type, 5-pin |
| | | | Export format | TSV (Tab Separated Value) file format |
| | | | Operating modes | Real-time velocity measurement, Discharge profile (stream/conduit) |
| | | | Noise suppression | 50 Hz, 60 Hz (adjustable) |
| | | | Cable lengths | 2 m, 6 m, 12 m, and 30 m |
| | | | Material | |
| | | | Sensor housing: | ABS, glass-fiber reinforced |
| | | | Handheld unit: | Polycarbonate, moulded, by shock-absorbing elastomer (TPE) |
| | | | Dimensions and weight | |
| | | | Sensor body: | |
| | | | L x W x H: | 11.9 cm x 4.3 cm x 6.3 cm |
| | | | Weight: | 0.5 kg (with 6 m cable) |
| | | | Handheld unit: | |
| | | | L x W x H: | 21.8 cm x 9.3 cm x 5.3 cm |
| | | | Weight: | 0.68 kg |
| | | | IP class of protection | |
| | | | Sensor: | IP68 |
| | | | Handheld unit: | IP67 (USB cap attached) |
| OTT C31 Universal Current Meter for discharge measurements | piece | 2 | Flow velocity | |
| | | | Measuring range | 0.025 ... 10 m/s |
| | | | Current meter | 1 pulse/revolution |
| | | | Reed relay contact | lifetime > 1 million contacts switches |
| | | | Electrical | |
| | | | Operating voltage range | max. 9V DC |
| | | | Magnetic switch | pressure-tight up to 30bar |
| | | | Material | |
| | | | Meter body | stainless steel |
| | | | Propeller | aluminium |

| | | | | | | |
|--|---|---|---------------------------------|--|--|--|
| | | | | alternative -plastic - Hostaform C , yellow | | |
| | | | Dimensions & weight | | | |
| | | | Size dia. x length | ø35 x 310mm | | |
| | | | Weight w/o propeller | 1.26 kg | | |
| Rain Gauge with 6 in. Orifice | piece | 4 | Sensor Type | Tipping bucket/magnetic reed switch | | |
| | | | Material | Anodized aluminium | | |
| | | | Operating Temperature Range | 0° to 50°C | | |
| | | | Resolution | 1 tip | | |
| | | | Volume per Tip | 4.73 ml/tip (0.16 fl. oz/tip) | | |
| | | | Rainfall per Tip | 0.254 mm (0.01 in.) | | |
| | | | Accuracy | 1.0% up to 2 in./h (50 mm/h) | | |
| | | | Cable Type | 2-conductor shielded | | |
| | | | Funnel Collector Diameter | 15.4 cm (6.06 in.) | | |
| | | | Height | 24.1 cm (9.5 in.) | | |
| | | | Cable Weight | 0.1 kg (0.2 lb) per 3.05 m (10 ft) length | | |
| | | | Tipping Bucket Weight | 0.9 kg (2.0 lb) | | |
| | | | | | | |
| | | | Compatibility | With <u>CR300</u> datalogger | | |
| Handheld Soil moisture and temperature probe | piece | 2 | Measurement | Volumetric water content and soil temperature | | |
| | | | Accuracy | ± 0.03 m³.m⁻³ (3%) | | |
| | | | | With soil-specific calibration | | |
| | | | | ± 0.5°C (0 to 40°C for temp sensor) | | |
| | | | | | | ± 0.75°C (-20 to +60°C for temp sensor) |
| | | | Soil moisture measurement range | Full accuracy over: | | |
| | | | | 0 to 0.7 m³.m⁻³ | | |
| | | | | Full range : 0 to 1.0 m ³ .m ⁻³ | | |
| | | | Salinity range | 50 to 500 mS.m⁻¹ | | |
| | | | | Salinity errors < 0.035 m ³ .m ⁻³ from 0.05 to 0.4 m ³ .m ⁻³ . Can be calibrated up to 2000 mS.m ⁻¹ | | |
| | | | Temperature range | Full accuracy over: 0 to 40°C | | |
| | | | Output | 0 to 1.0 V differential | | |
| | | | | Corresponding to 0 to ~0.6 m ³ .m ⁻³ | | |
| | | | | Resistance 5.8Ω to 28Ω for temp sensor | | |
| | | | Power requirement | 5-14 V, ~18 mA for 1s | | |
| | Minimum 5 V with 100 m cable | | | | | |
| Environmental | IP68 (-40 to +70°C) | | | | | |
| Sample volume | ~55 x 70 mm diameter | | | | | |
| | Sample volume is weighted towards soil immediately surrounding the rods | | | | | |
| Dimensions and weight | Overall: 143 x 40 mm diameter | | | | | |

| | | | | |
|--------------------------|-------|-------------------------------------|---------------------------------|--|
| | | | | Rods: 51 mm x 2.5 mm diameter |
| | | | | Weight: 0.1 kg (exc. cable) |
| | | | Sensor calibrations | Individual sensors are interchangeable |
| | | | | Recalibration advised every 3 years (depending on use) |
| | | | Soil calibrations | Generalised Mineral and Organic soil calibrations are supplied |
| | | | HH150 Meter | |
| | | | Accuracy | 0.5% of full scale over 5-40 °C (±7.5mV – negligible effect on SM150 accuracy) |
| | | | Resolution | 0.1% of voltage reading |
| | | | Battery life/standby life | 2 x GP alkaline AAA/ 10000 readings/1 year |
| | | | Environmental | Non-condensing |
| | | | Compliance | CE, FCC & ROHS |
| Rainfall Simulator | piece | 1 | Ordering specifications | Spray head assembly supported by metal stand |
| | | | | Storage tank from which water is pumped to spray head via flow meter and control valve |
| | | | | Small square test plots |
| | | | | Field test plots |
| | | | | Tilting stand for test plots |
| | | | | Sample vessels |
| | | | | Rain gauges |
| | | | | Complete with instruction manual |
| | | | Dimensions | |
| | | | Height: | 2.70m |
| | | | Width: | 2.65m |
| | | | Depth: | 1.60m |
| | | | Electricity | |
| | | | FEL3-A: | 220-240V, 1ph, 50Hz |
| <u>Spectroradiometer</u> | piece | 2(SS-110 (1 Unit) & SS-12 (1 Unit)) | Wavelength Range | 340 to 820 nm - SS-110 (1 Unit) |
| | | | | 635 to 1100 nm - SS-12 (1 Unit) |
| | | | Wavelength Measurement Internal | 1.0 nm |
| | | | Wavelength Resolution | 3.0 nm |
| | | | Wavelength Accuracy | ± 0.5 nm |
| | | | Wavelength Repeatability | ± 0.2 nm |
| | | | Analog to Digital Resolution | 14 bit |
| | | | Signal to Noise Ratio | 1500:1 (at maximum signal) |
| | | | Stray Light | ≤ 0.25 % at 590 nm ≤ 0.25 % at 850 nm |
| | | | Dark Noise | ≤ 3 counts |
| | | | Integration Time Range | 10 ms to 10 s |
| | | | Measurement Sensitivity | Greater than 10 % of max |

| | | | | |
|-------------------------------|-------|---|--|--|
| | | | | sensitivity for wavelengths greater than 380 nm |
| | | | | Greater than 10 % of max sensitivity for wavelengths less than 1030 nm |
| | | | Measurement Repeatability | Less than 1.0 % (wavelengths greater than 400 nm) |
| | | | | Less than 1.0 % (wavelengths less than 1020 nm) |
| | | | Directional (Cosine) Response | ± 5 % at 75° zenith angle |
| | | | Fields of View | 180° (upward-facing); 25° or 150° (downward-facing) |
| | | | Temperature Response | -0.1 ± 0.1 % per C |
| | | | Irradiance Calibration Uncertainty | ± 5 % |
| | | | Current Draw | 190 mA (USB) |
| | | | Power Requirement | 1 Watt (USB) Interface Cable 5 m jacket with USB (for computer) |
| | | | Software | Apogee Spectrovision (windows compatible, XP and later; Mac compatible 10.9 and later) |
| | | | Operating Environment | -20 to 70 C, 0 to 100% relative humidity |
| | | | Thread Size (for Mounting) | ¼"-20 |
| | | | Dimensions | 89.3 mm height, 50.8 mm width, 38.1 mm depth |
| | | | Mass | 300 g |
| | | | Warranty | 1 year against defects in materials and workmanship |
| Handheld Infrared Thermometer | Piece | 1 | Backlit display for use in poorly lit areas | Yes |
| | | | Holds temperature readings | Yes |
| | | | Range | -32 to 760°C (-25 to 1400°F) |
| | | | MIN/MAX/AVG | All |
| | | | Datalogging | Yes |
| | | | Distance to spot ratio | 50:01:00 |
| | | | Hi-Lo alarm | Yes |
| | | | Optional RTD probe (contact temperature measurement) | Yes |
| | | | Emissivity | Digitally adjustable (from 0.1 to 1.0 by 0.01) |
| | | | Measurement Accuracy | |
| | | | -32 to -26°C (-25 to -15°F) | ±3°C (±5°F) |
| | | | -26 to -18°C (-15 to 0°F) | ±2.5°C (±4°F) |
| | | | -18 to 23°C (-0 to 73°F) | ±2°C (±3°F) |
| | | | | For targets above 23°C (73°F): ±1% of reading or ±1°C (±2°F), whichever is greater |

SECTION VI PRICE SCHEDULE FOR GOODS

Name of tenderer _____ Tender Number _____

| No. | Item Description. | UOM | Quantity Required | Country of origin | Unit price | Total Price |
|-----|--------------------------------|--------|----------------------|-------------------|------------|-------------|
| 1. | Prototype development boards | Pieces | 10 | | | |
| 2. | Ultra Violet PCB exposure unit | Pieces | 1 | | | |
| 3. | Photosensitive PCBs | Pieces | 10 | | | |
| 4. | Acetone | Pieces | 5 | | | |
| 5. | Sodium silicate | Pieces | 5 | | | |
| 6. | Ferric chloride | Pieces | 5 | | | |
| 7. | Surgical Gloves | Pieces | 50 | | | |
| 8. | GSM Modules | Pieces | 5 | | | |
| 9. | 3D Printer | Pieces | 1 | | | |
| 10. | Ultrasonic Sensor | Pieces | 5 | | | |
| 11. | Ultrasonic Sensor | Pieces | 20 | | | |
| 12. | Turbidity sensor | Pieces | 10 | | | |
| 13. | Translucent paper | Pieces | 100 | | | |
| 14. | 3D printing material | Pieces | 5 | | | |
| 15. | Coaxial cable | Pieces | 100 meters | | | |
| 16. | Coaxial cable connectors | Pieces | 4 (2 male, 2 female) | | | |
| 17. | 9W Solar Panels | Pieces | 10 | | | |
| 18. | Solar Charger Units | Pieces | 10 | | | |
| 19. | 32GB SD cards | Pieces | 10 | | | |
| 20. | Tipping Bucket Rainauge | Pieces | 5 | | | |

| | | | | | | |
|-----|--|-------------------|-------|--|--|--|
| 21. | Temperature and Humidity Sensor | Pieces | 10 | | | |
| 22. | Waterproof casings | Pieces | 10 | | | |
| 23. | MEMS Microphones | Pieces | 10 | | | |
| 24. | Pi NoIR cameras | Pieces | 2 | | | |
| 25. | MBED compatible camera | Pieces | 5 | | | |
| 26. | Battery Power Banks | Pieces | 5 | | | |
| 27. | Ethanol | Pieces | 5 | | | |
| 28. | Entomological Pins | Pieces | 10 | | | |
| 29. | Butterfly envelops | Pieces | 10 | | | |
| 30. | Ziplock bags | Pieces | 5 | | | |
| 31. | Baits | Pieces | 1 | | | |
| 32. | Cabinet | Pieces | 1 | | | |
| 33. | Automatic climatic data | Daily (2010-2018) | 1 | | | |
| 34. | Manual and Automatic River gauge data | Daily (2010-2018) | 1 | | | |
| 35. | Historical climatic data | Daily (1984-2018) | 34×12 | | | |
| 36. | DEM data | 5km by 5km grid | 600 | | | |
| 37. | SPOT 5 Remote sensing data | km ² | 15251 | | | |
| 38. | Landsat multispectral images | | | | | |
| 39. | Wildlife and livestock counts data | | 34×12 | | | |
| 40. | Field data Accessories | piece | 1 | | | |
| 41. | Field Data loggers | Piece | 2 | | | |
| 42. | Projecting devices for display during climate change | piece | 1 | | | |

| | | | | | | |
|-----|--|--------|-------------------------------------|--|--|--|
| | workshops | | | | | |
| 43. | Advanced processing Workstation | piece | 1 | | | |
| 44. | Staff level gauges | pieces | 2 | | | |
| 45. | Handheld electromagnetic water flow meter with automatic discharge calculation | pieces | 2 | | | |
| 46. | OTT C31 Universal Current Meter for discharge measurements | pieces | 2 | | | |
| 47. | Rain Gauge with 6 in. Orifice | pieces | 4 | | | |
| 48. | Handheld Soil moisture and temperature probe | pieces | 2 | | | |
| 49. | Rainfall Simulator | piece | 1 | | | |
| 50. | <u>Spectroradiometer</u> | piece | 2(SS-110 (1 Unit) & SS-12 (1 Unit)) | | | |
| 51. | Handheld Infrared Thermometer | Piece | 1 | | | |

Signature of tenderer _____

- Note:** 1. In case of discrepancy between unit price and total, the unit price shall prevail.
2. Bidders may quote for **ALL** or **ANY** equipment.

SECTION VIII - STANDARD FORMS

Notes on the sample Forms

1. Form of Tender - The form of tender must be completed by the tenderer and submitted with the tender documents. It must also be duly signed by duly authorized representatives of the tenderer.
2. Confidential Business Questionnaire Form -This form must be completed by the tenderer and submitted with the tender documents.
3. Tender Security Form-When required by the tender documents the tender shall provide the tender security either in the form included herein or in another format acceptable to the procuring entity.
4. Contract Form-The Contract Form shall not be completed by the tenderer at the time of submitting the tender. The Contract Form shall be completed after contract award and should incorporate the accepted contract price.
5. Performance Security Form -The performance security form should not be completed by the tenderers at the time of tender preparation. Only the successful tenderer will be required to provide performance security in the form provided herein or in another form acceptable to the procuring entity.
6. Bank Guarantee for Advance Payment Form - When Advance payment is requested for by the successful bidder and agreed by the procuring entity, this form must be completed fully and duly signed by the authorized officials of the bank.
7. Manufacturers Authorization Form - When required by the Tender documents this form must be completed and submitted with the tender documents. This form will be completed by the manufacturer of the goods where the tenderer is an agent.

8.1 **FORM OF TENDER**

Date _____

Tender No. _____

To: _____
[name and address of procuring entity]

Gentlemen and/or Ladies:

1. Having examined the tender documents including Addenda Nos. [insert numbers].the receipt of which is hereby duly acknowledged, we, the undersigned, offer to supply deliver, install and commission (..... (insert equipment description) in conformity with the said tender documents for the sum of (total tender amount in words and figures) or such other sums as may be ascertained in accordance with the Schedule of Prices attached herewith and made part of this Tender.

2. We undertake, if our Tender is accepted, to deliver install and commission the equipment in accordance with the delivery schedule specified in the Schedule of Requirements.

3. If our Tender is accepted, we will obtain the guarantee of a bank in a sum of equivalent to _____ percent of the Contract Price for the due performance of the Contract , in the form prescribed by(Procuring entity).

4. We agree to abide by this Tender for a period of [number] days from the date fixed for tender opening of the Instructions to tenderers, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

5. This Tender, together with your written acceptance thereof and your notification of award, shall constitute a Contract, between us. Subject to signing of the Contract by the parties.

6. We understand that you are not bound to accept the lowest or any tender you may receive.

Dated this _____ day of _____ 20 _____

[signature]

[in the capacity of]

Duly authorized to sign tender for an on behalf of _____



| | Part 2 (c) – Registered Company | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|------------|--|-------------|---------------------|-------------|---------------------|--------|--|--|--|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|----|-------|-------|-------|---|-------|-------|-------|
| | <p>Private or Public</p> <p>State the nominal and issued capital of company-</p> <p style="padding-left: 40px;">Nominal Kshs.</p> <p style="padding-left: 40px;">Issued Kshs.</p> <p>Given details of all directors as follows</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 10%;"></th> <th style="width: 40%;">Name</th> <th style="width: 30%;">Nationality</th> <th style="width: 20%;">Citizenship Details</th> </tr> </thead> <tbody> <tr> <td>Shares</td> <td></td> <td></td> <td></td> </tr> <tr> <td>1.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>2.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>3.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>4.</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> <tr> <td>5</td> <td>.....</td> <td>.....</td> <td>.....</td> </tr> </tbody> </table> | | Name | Nationality | Citizenship Details | Shares | | | | 1. | | | | 2. | | | | 3. | | | | 4. | | | | 5 | | | |
| | Name | Nationality | Citizenship Details | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Shares | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 3. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 4. | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | Signature of Candidate | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

If a Kenya Citizen, indicate under “Citizenship Details” whether by Birth, Naturalization or registration.

8.3 TENDER SECURITY FORM

Whereas [name of the tenderer]
(hereinafter called "the tenderer") has submitted its tender dated
[date of submission of tender] for the supply, installation and commissioning of
.....[name and/or description of the equipment] (hereinafter called
"the Tender") KNOW ALL PEOPLE by these
presents that WE of having our registered
office at (hereinafter called "the Bank"), are bound unto
..... [name of Procuring entity] (hereinafter called "the Procuring
entity") in the sum of for which payment well and truly to be
made to the said Procuring entity, the Bank binds itself, its successors, and assigns
by these presents. Sealed with the Common Seal of the said Bank this _____
day of _____ 20 _____.

THE CONDITIONS of this obligation are:-

1. If the tenderer withdraws its Tender during the period of tender validity specified by the tenderer on the Tender Form; or
2. If the tenderer, having been notified of the acceptance of its Tender by the Procuring entity during the period of tender validity:
 - (a) fails or refuses to execute the Contract Form, if required; or
 - (b) fails or refuses to furnish the performance security in accordance with the Instructions to tenderers;

We undertake to pay to the Procuring entity up to the above amount upon receipt of its first written demand, without the Procuring entity having to substantiate its demand, provided that in its demand the Procuring entity will note that the amount claimed by it is due to it, owing to the occurrence of one or both of the two conditions, specifying the occurred condition or conditions.

This tender guarantee will remain in force up to and including thirty (30) days after the period of tender validity, and any demand in respect thereof should reach the Bank not later than the above date.

[signature of the bank] _____
(Amend accordingly if provided by Insurance Company)

8.4 CONTRACT FORM

THIS AGREEMENT made the _____ day of _____ 20 _____ between [*name of Procurement entity*] of [*country of Procurement entity*] (hereinafter called “the Institute) of the one part and [*name of tenderer*] of [*city and country of tenderer*] (hereinafter called “the tenderer”) of the other part;

WHEREAS the Procuring entity invited tenders for certain goods] and has accepted a tender by the tenderer for the supply of those goods in the sum of [*contract price in words and figures*] (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 Conditions of Contract referred to:
2. The following documents shall be deemed to form and be read and construed as part of this Agreement viz:
 - (a) the Tender Form and the Price Schedule submitted by the tenderer
 - (b) the Schedule of Requirements
 - (c) the Technical Specifications
 - (d) the General Conditions of Contract
 - (e) the Special Conditions of contract; and
 - (f) the Procuring entity’s Notification of Award
3. In consideration of the payments to be made by the Institute to the tenderer as hereinafter mentioned, the tender hereby covenants with the Institute to provide the goods and to remedy defects therein in conformity in all respects with the provisions of the Contract
4. The Institute hereby covenants to pay the tenderer in consideration of the provisions of the goods 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 their respective laws the day and year first above written.

Signed, sealed, delivered by _____ the _____ (for the Procuring entity

Signed, sealed, delivered by _____ the _____ (for the tenderer in the presence of _____

(Amend accordingly if provided by Insurance Company)

8.5 PERFORMANCE SECURITY FORM

To
[name of Procuring entity]

WHEREAS [name of tenderer] (hereinafter called “the tenderer”) has undertaken , in pursuance of Contract No. _____ [reference number of the contract] dated _____ 20 _____ to supply [description of goods] (hereinafter called “the Contract”).

AND WHEREAS it has been stipulated by you in the said Contract that the tenderer shall furnish you with a bank guarantee by a reputable bank for the sum specified therein as security for compliance with the Tenderer’s performance obligations in accordance with the Contract.

AND WHEREAS we have agreed to give the tenderer a guarantee:

THEREFORE WE hereby affirm that we are Guarantors and responsible to you, on behalf of the tenderer, up to a total of [amount of the guarantee in words and figure] and we undertake to pay you, upon your first written demand declaring the tenderer to be in default under the Contract and without cavil or argument, any sum or sums within the limits of [amount of guarantee] as aforesaid, without you needing to prove or to show grounds or reasons for your demand or the sum specified therein.

This guarantee is valid until the _____ day of _____ 20 _____

Signed and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

8.6 BANK GUARANTEE FOR ADVANCE PAYMENT FORM

To
[name of Procuring entity]

[name of tender]

Gentlemen and/or Ladies:

In accordance with the payment provision included in the Special Conditions of Contract, which amends the General Conditions of Contract to provide for advance payment, [name and address of tenderer](hereinafter called “the tenderer”) shall deposit with the Institute entity a bank guarantee to guarantee its proper and faithful performance under the said Clause of the Contract in an amount of [amount of guarantee in figures and words].

We, the [bank or financial institutions], as instructed by the tenderer, agree unconditionally and irrevocably to guarantee as primary obligator and not as surety merely, the payment to the Institute on its first demand without whatsoever right of objection on our part and without its first claim to the tenderer, in the amount not exceeding [amount of guarantee in figures and words]

We further agree that no change or addition to or other modification of the terms of the Contract to be performed there-under or of any of the Contract documents which may be made between the Institute and the tenderer, shall in any way release us from any liability under this guarantee, and we hereby waive notice of any such change, addition, or modification.

This guarantee shall remain valid in full effect from the date of the advance payment received by the tenderer under the Contract until [date].

Yours truly,

Signature and seal of the Guarantors

[name of bank or financial institution]

[address]

[date]

8.7 MANUFACTURER'S AUTHORIZATION FORM

To *[name of the Procuring entity]*

WHEREAS*[name of the manufacturer]* who are established and reputable manufacturers of
[name and/or description of the goods] having factories at
..... *[address of factory]* do hereby authorize
..... *[name and address of Agent]* to submit a tender, and subsequently negotiate and sign the Contract with you against tender No.
..... *[reference of the Tender]* for the above goods manufactured by us.

We hereby extend our full guarantee and warranty as per the General Conditions of Contract for the goods offered for supply by the above firm against this Invitation for Tenders.

[signature for and on behalf of manufacturer]

Note: This letter of authority should be on the letterhead of the Manufacturer and should be signed by a person competent.

8.8 LETTER OF NOTIFICATION OF AWARD

Address of Procuring Entity

To: _____

RE: Tender No. _____

Tender Name _____

This is to notify that the contract/s stated below under the above mentioned tender have been awarded to you.

1. Please acknowledge receipt of this letter of notification signifying your acceptance.
2. The contract/contracts shall be signed by the parties within 30 days of the date of this letter but not earlier than 14 days from the date of the letter.
3. You may contact the officer(s) whose particulars appear below on the subject matter of this letter of notification of award.

(FULL PARTICULARS) _____

SIGNED FOR ACCOUNTING OFFICER

8.9 FORM RB 1

REPUBLIC OF KENYA
PUBLIC PROCUREMENT ADMINISTRATIVE REVIEW BOARD

APPLICATION NO.....OF.....20.....

BETWEEN

.....APPLICANT

AND

.....RESPONDENT (*Procuring Entity*)

Request for review of the decision of the..... (*Name of the Procuring Entity*) of
.....dated the...day of20.....in the matter of Tender
No.....of20...

REQUEST FOR REVIEW

I/We.....,the above named Applicant(s), of address: Physical
address.....Fax No.....Tel. No.....Email, hereby request the
Public Procurement Administrative Review Board to review the whole/part of the above
mentioned decision on the following grounds , namely:-

- 1.
 - 2.
- etc.

By this memorandum, the Applicant requests the Board for an order/orders that: -

- 1.
 - 2.
- etc

SIGNED(Applicant)

Dated on.....day of/...20...

FOR OFFICIAL USE ONLY

Lodged with the Secretary Public Procurement Administrative Review Board on
..... day of20.....

SIGNED

Board Secretary