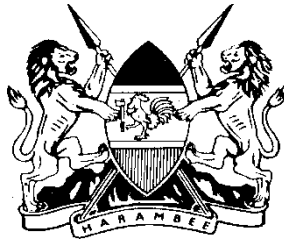


REPUBLIC OF KENYA



**MINISTRY OF LANDS AND PHYSICAL PLANNING
P.O BOX 30450-00100
NAIROBI**

**TENDER DOCUMENT
FOR SUPPLY AND DELIVERY OF MULTI-BEAM
ECHO SOUNDER SYSTEM AND SIDE SCAN
SONAR SYSTEM**

IFMIS TENDER NO 712279-2018/2019

(FEBRUARY, 2019)

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Introduction

- 1.1 This Standard Tender Document has been prepared for use by public entities in Kenya
- 1.2 The following general directions should be observed when using the document.
 - (a) Specific details should be furnished in the Invitation to Tender and in the special conditions of contract. The final documents to be provided to the tenderers should not have blank spaces or give options
 - (b) The Instructions to Tenderers and the general conditions of contract should remain unchanged. Any necessary amendments to these parts should be made through the special conditions of contract and the appendix to instructions to tenderers.
- 1.3
 - (a) Information contained in the Invitation to Tender shall conform to the data and information in the tender documents to enable potential tenderers to decide whether or not to participate and shall indicate any important tender requirements.
 - (b) The Invitation to Tender shall be issued as an advertisement in accordance with the regulations or a letter of invitation addressed to tenderers who have expressed interest following the invitation for expression of interest for which the invitation is issued.

SECTION I

**INVITATION TO TENDER
DATE 26th February 2019**

IFMIS TENDER NO 712279-2018/2019

TENDER NAME : FOR THE SUPPLY AND DELIVERY OF MULTI-BEAM ECHO SOUNDER SYSTEM AND SIDE SCAN SONAR SYSTEM

The Ministry of Lands and Physical Planning invites sealed bids from eligible candidates for supply of and delivery of Multi- Beam Echo Sounder System And Side Scan Sonar System

- 1.1
 - 1.2 Interested eligible candidates may obtain a complete set of tender documents at the Ministry of Lands and Physical Planning website: www.ardhi.go.ke and also at the **IFMIS portal: supplier.treasury.go.ke** and search using the unique **IFMIS Tender Tender Number 712279-2018/2019** provided against the tenders above. Candidates are advised to download, free of charge, and print the attached documents to enable them access all the pages of the tender documents.
 - 1.3 Prices quoted should be net inclusive of all taxes, must be in Kenya shillings and shall remain **valid for 90 days** from the closing date of the tender.
 - 1.4 Tenderers are requested to fill tender securing declaration form.
 - 1.5 Completed tender documents to be submitted through the **IFMIS SUPPLIER PORTAL: www.supplier.treasury.go.ke** as per the requirements contained in the tender so as to be received on or before (**13th March, 2019 at 10.00am East African Time**)
- NOTE:**
- *Bidders who may experience challenges in accessing and uploading their tenders in the IFMIS tender portal should contact the IFMIS Department in Treasury for assistance.*
 - *MANUAL SUBMISSIONS will not be accepted. All tenders must be submitted online.*
- 1.6 Interested eligible candidates may obtain further information and inspect the tender documents at the Ministry of Lands and Physical Planning, Ardhi House, 1st Ngong Avenue, Ngong Road, 12th Floor Wing B, room 1213.
 - 1.7 Tenders will be opened immediately thereafter in the presence of the candidates or their representatives who choose to attend at the Ministry of Lands and Physical Planning, Ardhi House 7th Floor ,Wing C-Training room.

Principal Secretary
Ministry of Lands and Physical Planning

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 Procuring entity 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 procuring entity, 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.1,000/=
- 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 Procuring entity 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; and
- (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 60 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 its tender is accepted.

2.12.2 The documentary evidence of the tenderers eligibility to tender shall establish to the Procuring entity'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 Procuring entity'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 Procuring entity; and
- (c) a clause-by-clause commentary on the Procuring entity'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 Procurement entity 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 Procurement entity'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 **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 Procuring entity, 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 Procuring entity 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 original and all copies of the tender 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, except for unamended printed literature, 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 Procuring entity 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,” **13th March, 2019 at 10.00am East African Time**

2.17.3 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”.

2.17.4 If the outer envelope is not sealed and marked as required by paragraph 2.17.2, the Procuring entity 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 2.17.2 no later than ,” **13th March, 2019 at 10.00am East African Time** The Procuring entity 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 Procuring Entity 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 procuring entity 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 procuring entity 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, at, "**13th March, 2019 at 10.00am East African Time**" 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 Procuring entity, 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 Procuring entity 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 Procuring entity in the Procuring entity'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 Procuring entity 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 Procuring entity 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 Procuring entity 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 Procuring entity'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 Procuring entity 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 Procuring entity

2.26.1 Subject to paragraph 2.21 no tenderer shall contact the Procuring entity 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 Procuring entity 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 Procuring entity 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 Procuring entity 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 Procuring entity 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 Procuring entity 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) Procuring entity's Right to Vary quantities

2.27.5 The Procuring entity 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

(d) Procuring entity's Right to Accept or Reject Any or All Tenders

2.27.6 The Procuring entity 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 Procuring entity's action

2.28 Notification of Award

2.28.1 Prior to the expiration of the period of tender validity, the Procuring entity 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 Procuring entity 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 Procuring entity notifies the successful tenderer that its tender has been accepted, the Procuring entity 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 Procuring entity.

2.30 Performance Security

2.30.1 Within Thirty (30) days of the receipt of notification of award from the Procuring entity, 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 Procuring entity.

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 Procuring entity 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 anything 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 procuring entity 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

Notes on the Appendix to the Instruction to Tenderers

1. The Appendix to instructions to tenderers is intended to assist the procuring entity in providing specific information in relation to the corresponding clause in the instructions to Tenderers included in Section II and has to be prepared for each specific procurement.
2. The procuring entity should specify in the appendix information and requirements specific to the circumstances of the procuring entity, the goods to be procured and the tender evaluation criteria that will apply to the tenders.
3. In preparing the Appendix the following aspects should be taken into consideration;
 - (a) The information that specifies and complements provisions of Section II to be incorporated
 - (b) Amendments and/or supplements if any, to provisions of Section II as necessitated by the circumstances of the goods to be procured to be also incorporated
4. Section II should remain unchanged and can only be amended through the Appendix.
5. Clauses to be included in this part must be consistent with the public procurement law and the regulations.

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	<i>This tender open</i>
2.3.2	<i>This Tender Document will be provided for in the IFMIS system free of charge</i>
2.14.1	<i>Tender Security of kshs. 100,000 is required from the firms participating in this tender.</i>
2.16	<i>Bidders will be required to submit their tenders online in the IFMIS system</i>
2.18.1	<i>Deadline for Submission of Tenders- ,” 13Th March , 2019 at 10.00am.</i>
2.10	<i>Prices quoted must be in Kenya Shillings(Ksh) and be inclusive of VAT</i>
2.22	<i>Evaluation of Tenders will be done online</i>
2.30	<i>Successful tenderers shall furnish a Performance Security of 10% of the contract price.</i>

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 Procuring entity 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 Procuring entity” 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 Procuring entity 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 Procuring entity'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 Procuring entity 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 Procuring entity'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 Procuring entity and shall be returned (all copies) to the Procuring entity 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 Procuring entity 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 Procuring entity 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 Procuring entity 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 Procuring entity 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 Procuring entity 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 Procuring entity or its representative shall have the right to inspect and/or to test the goods to confirm their conformity to the Contract specifications. The Procuring entity 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 Procuring entity.
- 3.8.3 Should any inspected or tested goods fail to conform to the Specifications, the Procuring entity 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 Procuring entity.
- 3.8.4 The Procuring entity'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 Procuring entity 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 Procuring entity 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 Procuring entity 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 procuring entity 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 Procuring entity's prior written consent

3.15 Subcontracts

3.15.1 The tenderer shall notify the Procuring entity 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 Procuring entity 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 Procuring entity
- (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 Procuring entity 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 Procuring entity 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 procuring entity 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

Notes on Special Conditions of Contract

The clauses in this section are intended to assist the procuring entity in providing contract-specific information in relation to corresponding clauses in the General Conditions of Contract.

The provisions of Section IV complement the General Conditions of Contract included in Section III, specifying contractual requirements linked to the special circumstances of the procuring entity and the goods being procured. In preparing Section IV, the following aspects should be taken into consideration.

- (a) Information that complement provisions of Section III must be incorporated and
- (b) Amendments and/or supplements to provisions of Section III, as necessitated by the circumstances of the goods being procured must also be incorporated.

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

REFERENCE OF GCC	SPECIAL CONDITIONS OF CONTRACT
3.5	Performance security is 10% of the contract price
3.7	Payment will be done on receipt of an invoice for the services rendered.
3.8	The prices quoted should be in Kenyan shillings
3.13	Any dispute arising out of the Contract which cannot be amicably settled between the parties shall be referred by either party for arbitration. The parties shall agree on the appointment of an arbitrator or where three arbitrators are required each party shall appoint one arbitrator, while the third shall be appointed by the chairman of the Chartered Institute of Arbitrators, Kenya branch. Failing agreement to concur in the appointment of an Arbitrator/s, the Arbitrator/s shall be appointed by the chairman of the Chartered Institute of Arbitrators, Kenya branch, on the request of the applying party
3.16	The contract shall be interpreted in accordance with the laws of Kenya

EVALUATION AND COMPARISON OF TENDERS

EVALUATION CRITERIA

STAGE ONE: Mandatory Requirement

The preliminary evaluation shall involve checking on mandatory requirements (MR) which include the following:

- 1) *Copy of certificate of registration.*
- 2) *Copy of valid Tax compliance certificate.*
- 3) *Copy of Valid business permit.*
- 4) *Must fill the form of tender in the format provided.*
- 5) *Duly filled and signed confidential business questionnaire*
- 6) *Authorization from the manufacturers*
- 7) *Attached brochures*
- 8) *Fill and sign the compliance form*
- 9) *Litigation history*
- 10) *Sworn statement*
- 11) *Tender security*

STAGE TWO: Technical evaluation

S/NO	DESCRIPTION OF CRITERIA	WEIGHTING SCORE	MAXIMUM MARK
1	<i>Copy of certified Audited financial report for the last three years</i>	<i>5 marks for each report.</i>	15
2	<i>Three letters of recommendation from your previous or current clients</i>	<i>2 marks for each letter provided</i>	6
3	<i>Provision of evidence of having supplied similar items (copy of two orders or contracts)</i>	<i>2 marks for each evidence provided</i>	4
4	<i>Attach brochures</i>	<i>-For the right brochure attached- 70 marks -Brochure that does not meet the right technical specifications- 0 marks</i>	70
5	<i>Authorization from the manufacturers</i>		5

The brochure will be evaluated for compliance with the technical specifications.

The pass mark to proceed to financial evaluation is 70%

STAGE THREE: Financial Evaluation

At this stage, consideration will be as follows:-

- 1) The bidder with the lowest evaluated financial proposal will be recommended for the award of the contract for each item..
- 2) Unrealistic low/high prices shall be rejected depending on the market price of the items tendered.

SECTION V - TECHNICAL SPECIFICATIONS

5.1

Technical Specifications for Multi Beam Echo Sounder System

	SPECIFICATIONS	
Frequency range	200 to 400 kHz in steps of 10 kHz	Mandatory
Beam width	1 * 1 degree at 400 kHz	Mandatory
Max ping rate	50 Hz	Mandatory
Swath coverage sector	Up to 130 degrees (single head) / 200 degrees (dual head)	Mandatory
Sounding patterns	Equiangular, equidistant and high density	Mandatory
No. of soundings per ping	400 (single head, single swath) 800 (single head, dual swath) 1600 (dual head, dual swath)	Mandatory
Roll stabilised beams	+/-15 degrees	Mandatory
Pitch stabilised beams	+/-10 degrees	Mandatory
Yaw stabilised beams	+/-10 degrees (Dual head)	Mandatory

	200 - 400 kHz in 10 kHz step	200 - 400 kHz in 10 kHz step	Mandatory
	CW	FM	
Pulse lengths	14, 27, 54, 135, 324 and 918 µs	3 and 12 ms	Mandatory

i) Motion sensor

It should be specially designed for high precision motion measurements in marine application with high accuracy roll, pitch and heave measurements and be compatible with other systems.

Technical specifications

ROLL AND PITCH OUTPUT		
Angular orientation range	±180°	Mandatory
Angular rate range	±150 °/s	Mandatory
Resolution roll, pitch	0.001°	Mandatory
Angular rate noise	0.025 °/s RMS	Mandatory
Static ²⁾ accuracy	0.02° RMS	Mandatory
Dynamic ¹⁾ accuracy (for a ±5° amplitude)	0.02° RMS	Mandatory
Scale factor error	0.08 % RMS	Mandatory
HEAVE OUTPUT		
Output range	±50 m	Mandatory
Periods (real-time)	0 to 25 s	Mandatory
Periods (delayed)	0 to 50 s	Mandatory
Heave accuracy (real-time)	5 cm or 5 %, whichever is highest	Mandatory
Heave accuracy (delayed)	2 cm or 2 %, whichever is highest	Mandatory
ACCELERATION OUTPUT		
Acceleration range	±30 m/s ²	Mandatory
Acceleration noise ²⁾	0.002 m/s ² RMS	Mandatory
Acceleration accuracy	0.01 m/s ² RMS	Mandatory
ELECTRICAL		
Power requirements	10 to 36 V DC, max. 12 W	Mandatory
Serial ports: Com1 Com2 Com3 & Com4	Bidirectional RS-422 Bidirectional RS-422 from junction box, user configurable RS-232, RS-422	Mandatory

	Input only, user configurable RS-232, RS-422	
Analog channels (junction box)	# 4, ± 10 V, 14 bit resolution	Mandatory
Input serial line	Two RS-232 or RS-422	Mandatory
Ethernet ports	Three output and one input	Mandatory
Ethernet UDP/IP	10/100 Mbps	Mandatory
Digital output variables	24 (max), serial or Ethernet	Mandatory
Output data rate (max)	200 Hz	Mandatory
Timing	<1 ms	Mandatory
ENVIRONMENTAL SPECIFICATIONS		
Temperature range	-5 °C to +55 °C	Mandatory
Humidity range, electronics	Sealed, no limit	Mandatory
Enclosure protection	IP-66	Mandatory
Vibration	IEC 60945/EN 60945	Mandatory
ELECTROMAGNETIC COMPATIBILITY		
Compliance to EMCD, immunity/emission	IEC 60945/EN 60945	Mandatory
OTHER DATA		
MTBF (computed)	100000 h	Mandatory
Housing dimensions	\varnothing 105 x 140 mm (4.134" x 5.525")	Mandatory
Material	Anodised Aluminium	Mandatory
Weight	2.4 kgs	Mandatory
Connector	Souriau 851-36RG 16-26S50	Mandatory
DATA OUTPUT PROTOCOLS		Mandatory
- MRU normal	Atlas Fansweep	Mandatory
NMEA proprietary	TSS1	Mandatory
Sounder	Seapath binary 23	Mandatory
EM3000	PFreeHeave®	Mandatory

1) When the MRU is exposed to a combined two-axes sinusoidal angular motion with 10 minutes duration.

2) When the MRU is stationary over a 30-minute period

ii) The compact heading, attitude and positioning sensor

It should be developed specifically for high precision heading, position, roll, pitch, heave and timing are critical measurements in hydrographic surveying. The product should preferably combines state-of-the-art dual frequency GNSS receivers, inertial technology and processing algorithms in a compact and portable package. Sensors should be interchangeable with other instruments.

Technical specifications

PERFORMANCE		
Heading accuracy	0.2° RMS	Mandatory
Heave accuracy (real-time)	5 cm or 5% whichever is highest	Mandatory
Heave accuracy (delayed signal)	2 cm or 2% whichever is highest	Mandatory
Heave motion periods (real-time)	1 to 25 seconds	Mandatory
Heave motion periods (delayed signal)	1 to 50 seconds	Mandatory
Position accuracy (DGNS or SBAS)	1.1 m (95% CEP)	Mandatory
Position accuracy (RTK in X/Y)	1 cm + 1 ppm RMS	Mandatory
Position accuracy (RTK in Z)	2 cm + 1 ppm RMS	Mandatory
DATA OUTPUTS		
Communication ports	3 serial RS232/RS422 lines and 8 Ethernet UPD/IP ports	Mandatory
Data output interval	Programmable in 0.01-sec. steps and 1PPS pulse	Mandatory
Data update rate	Up to 100 Hz	Mandatory

DIMENSION AND WEIGHT		
Sensor Unit	1200 mm (L) x 200 mm (W) x 100 mm (H), weight 6.5 kg	Mandatory
MRU in light weight subsea bottle	Ø120 x 241 mm, weight 3.7 kg.	Mandatory
OPERATING TEMPERATURE		
Sensor Unit	-40 to +70°C	Mandatory
MRU	-5 to +55°C	Mandatory
POWER		
Sensor Unit	24 V DC, 10 W	Mandatory
MRU	24 V DC, 12 W	Mandatory
HUMIDITY		
Sensor Unit	Hermetically sealed	Mandatory
MRU	Hermetically sealed	Mandatory

iii) **Sound profiler (Moving Vessel Profiler)**

Features

It should have the ability to utilise Xchangeable sensors to facilitate customisation for specific applications. The Moving Vessel Profiler (or MVP) should automatically collect continuous near vertical SV profiles and output the data in real-time for immediate implementation in the MBES. It should also include a seabed avoidance function to ensure it can get maximum water column coverage without risk of damage or loss.

iv) **Bar check**

Features

The bar check should be able to calibrate the depth sounder for draft and also calibrating the speed of sound throughout the water column in survey sites with a maximum water depth of 50 to 75ft.

v) **Hydrographic work station**

▪ **Hardware**

It should be equipped to handle heavy processing requirements and high speed, large-volume data storage demands.

Special features of the HWS should be;

- Data logging from all the Hydrographic components on board the vessel.

- Gridding of sounding data.
- Filtering of sounding data.
- 3-D visualisation of sounding data.
- Storage and visualization of high resolution back-scatter data from the seabed and the water column.

Features

- **CPU:** Intel Core i7 64-bit Quad-Core processor
- **Memory:** 4*4 GByte
- **Graphic card:** Nvidia Quatro K620
- **Storage:** 2*2TB Hard disks
- **USB Interfaces:** 5*USB2.0*USB3.0

Technical specifications

Width	338mm	Mandatory
Height	100mm	Mandatory
Depth	379mm	Mandatory
weight	Approximately 7kg	Mandatory
Power Supply	110/220 VAC, 60/50 Hz	Mandatory
Power Consumption	Maximum 240 W	Mandatory

NB: Dimensions are excluding handles, brackets and rack mounting ears which shall be provided for by the supplier.

▪ Software

Appropriate software for calibrating, collecting and processing MBES, Topographic laser Backscatter and Water column Data.

vi) Installation and training

The supplier shall supervise assembly (mobilization) of the MBES on vessel and provide training to staff on hydrographic survey (data collection, data processing, data visualization and interpretation). Major areas of training shall be:

- Basic package hardware/software and vessel inbound consolidation, inventory, inspection, Integration, and testing on site (**Mombasa, Kenya**).
- Advanced package hardware/software and vessel inbound consolidation, inventory, inspection, Integration, and testing on site (**Mombasa, Kenya**).

vii) Warranty

Two (2) years warranty on the MBES and all components.

viii) Maintenance

▪ **System Maintenance contracts**

The supplier should be able to offer hardware maintenance contracts of the whole system as part of an overall support contract. The tasks should include:

- Annual servicing
- Repairs
- Technical troubleshooting
- Warranty upgrades

The above should be implemented either:

- On-site contracts - where an engineer should come to site to fix the problem
- Return-to-depot contracts - where equipment can be returned to manufacture for repair or replacement.

▪ **Software maintenance contracts**

The suppliers should offer maintenance contracts of all the software that will include:

- Recurring licensing fees
- Product upgrades
- New versions
- Patches and bug fixes

Technical Specifications for Side Scan Sonar System

The system should comprise of the following main components:

- i. Sonar
- ii. Towfish
- iii. Splash-proof topside processor
- iv. Installation and training
- v. Warrant
- vi. Maintenance

FEATURES

- Ultra high resolution images
- Lightweight for one person deployment
- Standard heading, pitch, roll & pressure sensors
- Choice of dual simultaneous frequencies
- Runs on AC or DC
- Pole mount option for shallow water use

Key specifications

SONAR		
Frequencies (Dual Simultaneous)	Choice of either a 400/900 kHz or 600/1600 kHz towfish	Mandatory
Pulse Type	EdgeTech's Full Spectrum® CHIRP (user-selectable CW pulses also included)	Mandatory
Operating Range	150m @ 400 kHz, 75m @ 900 kHz; 120m @ 600 kHz, 35m @ 1600 kHz	Mandatory
Horizontal Beam Width	0.46° @ 400 kHz, 0.28° @ 900 kHz; 0.33° @ 600 kHz, 0.20° @ 1600 kHz	Mandatory
Vertical Beam Width	50°	Mandatory
Resolution Across Track	400 kHz: 2.3 cm, 900 kHz: 1.5 cm, 600 kHz: 1.5 cm, 1600 kHz: 0.6 cm	Mandatory
TOWFISH		
Diameter	9.5 cm (3.75 inches)	Mandatory
Length	112 cm (44 inches)	Mandatory
Weight in Air	20 kg (44 pounds)	Mandatory

Tow Cable Type	Coaxial up to 600m max length (will provide a typical operational depth down to 200m)	Mandatory
Max Depth Rating of Towfish	200m	Mandatory
Material	Stainless Steel	Mandatory
Standard Sensor	Heading, Pitch, Roll, Pressure (Depth)	Mandatory
SPLASH-PROOF TOPSIDE PROCESSOR		
Power Input	12-24 VDC or 115/230 VAC, 50/60 Hz	Mandatory
Connections	AC, DC, Ethernet (to laptop), Towfish	Mandatory
Hardware	Ruggedized splash-proof, drop & shock resistant laptop	Mandatory
Operating System	Windows® 7	Mandatory
Acquisition Software	EdgeTech DISCOVER	Mandatory

ix) Installation and training

The supplier shall supervise assembly (mobilization) of the Side scan Sonar system on vessel and provide training to staff on hydrographic survey (data collection, data processing, data visualization and interpretation).

x) Warranty

Two (2) years warranty on the Side Scan Sonar and all components.

xi) Maintenance

▪ **System Maintenance contracts**

The supplier should be able to offer hardware maintenance contracts of the whole system as part of an overall support contract. The tasks should include:

- Annual servicing
- Repairs

- Technical troubleshooting
- Warranty upgrades

The above should be implemented either:

- On-site contracts - where an engineer should come to site to fix the problem
- Return-to-depot contracts - where equipment can be returned to manufacture for repair or replacement.

▪ **Software maintenance contracts**

The suppliers should offer maintenance contracts of all the software that will include:

- Recurring licensing fees
- Product upgrades
- New versions
- Patches and bug fixes

SECTION VI - SCHEDULE OF REQUIREMENTS

NO	DESCRIPTION	QTY
1	For Supply And Delivery Of Multi- Beam Echo Sonder System	As and when required
2	For Supply And Delivery Of Side Scan Sonar System	As and when required

SECTION VII - PRICE SCHEDULE FOR GOODS

Name of tenderer _____ Tender Number _____ Page _____ of _____

NO	DESCRIPTION	QTY		TOTAL COST(KSHS)
1	For supply and delivery of Multi- Beam Echo Sounder System		as and when required	
2	For supply and delivery of Side Scan Sonar System		as and when required	

Signature of tenderer _____

Note: In case of discrepancy between unit price and total, the unit price shall prevail.

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 _____

8.2 CONFIDENTIAL BUSINESS QUESTIONNAIRE FORM

You are requested to give the particulars indicated in Part 1 and either Part 2(a), 2(b) or 2 (c) whichever applied to your type of business

You are advised that it is a serious offence to give false information on this form

<i>Part 1 – General:</i>				
Business Name				
Location of business premises.				
Plot No.....		Street/Road		
Postal Address		Tel No.	Fax	E mail
Nature of Business				
Registration Certificate No.				
Maximum value of business which you can handle at any one time – Kshs.				
Name of your bankers		Branch		
Part 2 (a) – Sole Proprietor				
Your name in full		Age		
Nationality		Country of origin		
• Citizenship details				
.....				
•				
Part 2 (b) Partnership				
Given details of partners as follows:				
Name	Nationality	Citizenship Details	Shares	
1. ....	.....	.....	.....
2. ....	.....	.....	.....
3. ....	.....	.....	.....
4. ....	.....	.....	.....
Part 2 (c) – Registered Company				
Private or Public				
State the nominal and issued capital of company-				
Nominal Kshs.				
Issued Kshs.				
Given details of all directors as follows				
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 Procuring entity) 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 Procuring entity to the tenderer as hereinafter mentioned, the tender hereby covenants with the Procuring entity to provide the goods and to remedy defects therein in conformity in all respects with the provisions of the Contract
4. The Procuring entity 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 tenderer*]

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 Procuring 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 Procuring entity 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 Procuring entity 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 SWORN STATEMENT

Having studied the tender information for the above project we/I hereby state:

- a. The information furnished in our application is accurate to the best of our knowledge.
- b. That in case of being qualified we acknowledge that this grants us the right to participate in due time in the submission of a tender or quotation on the basis of provisions in the tender or quotation documents to follow.
- c. When the call for Tenders/Quotations is issued the legal technical or financial conditions or the contractual capacity of the firm changes we come ourselves to inform you and acknowledge your right to review the tender made.
- d. We enclose all the required documents and information required for the tender evaluation.

Date.....

Applicant's Name.....

Represented by.....

Signature.....

(Full name and designation of the person signing and stamp or seal)

9.0 LITIGATION HISTORY

Name of Contractor/Supplier

Contractors/Supplier should provide information on any history litigation or arbitration resulting from contracts executed in the last five years or currently under execution.

Year	Award for or against	Name of client cause of Litigation and matter in dispute	Disputed Amount (current value, Kshs. Equivalent)

9.1 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.....of
.....20...

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

SECTION V - TECHNICAL SPECIFICATIONS

10.0

Technical Specifications for Multi Beam Echo Sounder System

	SPECIFICATIONS		COMPLIANCE YES/NO
Frequency range	200 to 400 kHz in steps of 10 kHz	Mandatory	
Beam width	1 * 1 degree at 400 kHz	Mandatory	
Max ping rate	50 Hz	Mandatory	
Swath coverage sector	Up to 130 degrees (single head) / 200 degrees (dual head)	Mandatory	
Sounding patterns	Equiangular, equidistant and high density	Mandatory	
No. of soundings per ping	400 (single head, single swath) 800 (single head, dual swath) 1600 (dual head, dual swath)	Mandatory	
Roll stabilised beams	+/-15 degrees	Mandatory	
Pitch stabilised beams	+/-10 degrees	Mandatory	
Yaw stabilised beams	+/-10 degrees (Dual head)	Mandatory	

	200 - 400 kHz in 10 kHz step	200 - 400 kHz in 10 kHz step	Mandatory	COMPLIANCE YES/NO
	CW	FM		
Pulse lengths	14, 27, 54, 135, 324 and 918 μ s	4 and 12 ms	Mandatory	

xii) Motion sensor

It should be specially designed for high precision motion measurements in marine application with high accuracy roll, pitch and heave measurements and be compatible with other systems.

Technical specifications

ROLL AND PITCH OUTPUT			COMPLIANCE YES/NO
Angular orientation range	±180°	Mandatory	
Angular rate range	±150 °/s	Mandatory	
Resolution roll, pitch	0.001°	Mandatory	
Angular rate noise	0.025 °/s RMS	Mandatory	
Static ²⁾ accuracy	0.02° RMS	Mandatory	
Dynamic ¹⁾ accuracy (for a ±5° amplitude)	0.02° RMS	Mandatory	
Scale factor error	0.08 % RMS	Mandatory	
HEAVE OUTPUT			
Output range	±50 m	Mandatory	
Periods (real-time)	0 to 25 s	Mandatory	
Periods (delayed)	0 to 50 s	Mandatory	
Heave accuracy (real-time)	5 cm or 5 %, whichever is highest	Mandatory	
Heave accuracy (delayed)	2 cm or 2 %, whichever is highest	Mandatory	
ACCELERATION OUTPUT			
Acceleration range	±30 m/s ²	Mandatory	
Acceleration noise ²⁾	0.002 m/s ² RMS	Mandatory	
Acceleration accuracy	0.01 m/s ² RMS	Mandatory	

ELECTRICAL			
Power requirements	10 to 36 V DC, max. 12 W	Mandatory	
Serial ports: Com1 Com2 Com3 & Com4	Bidirectional RS-422 Bidirectional RS-422 from junction box, user configurable RS-232, RS-422 Input only, user configurable RS-232, RS-422	Mandatory	
Analog channels (junction box)	# 4, ± 10 V, 14 bit resolution	Mandatory	
Input serial line	Two RS-232 or RS-422	Mandatory	
Ethernet ports	Three output and one input	Mandatory	
Ethernet UDP/IP	10/100 Mbps	Mandatory	
Digital output variables	24 (max),	Mandatory	

	serial or Ethernet		
Output data rate (max)	200 Hz	Mandatory	
Timing	<1 ms	Mandatory	
ENVIRONMENTAL SPECIFICATIONS			
Temperature range	-5 °C to +55 °C	Mandatory	
Humidity range, electronics	Sealed, no limit	Mandatory	
Enclosure protection	IP-66	Mandatory	
Vibration	IEC 60945/EN 60945	Mandatory	
ELECTROMAGNETIC COMPATIBILITY			
Compliance to EMCD, immunity/emission	IEC 60945/EN 60945	Mandatory	
OTHER DATA			
MTBF (computed)	100000 h	Mandatory	
Housing dimensions	Ø 105 x 140 mm (4.134" x 5.525")	Mandatory	
Material	Anodised Aluminium	Mandatory	
Weight	2.4 kgs	Mandatory	
Connector	Souriau 851-36RG 16-26S50	Mandatory	
DATA OUTPUT PROTOCOLS		Mandatory	
- MRU normal	Atlas	Mandatory	

	Fansweep		
NMEA proprietary	TSS1	Mandatory	
Sounder	Seapath binary 23	Mandatory	
EM3000	PFreeHeav e®	Mandatory	

1) When the MRU is exposed to a combined two-axes sinusoidal angular motion with 10 minutes duration.

2) When the MRU is stationary over a 30-minute period

xiii) The compact heading, attitude and positioning sensor

It should be developed specifically for high precision heading, position, roll, pitch, heave and timing are critical measurements in hydrographic surveying. The product should preferably combines state-of-the-art dual frequency GNSS receivers, inertial technology and processing algorithms in a compact and portable package. Sensors should be interchangeable with other instruments.

Technical specifications

PERFORMANCE			COMPLIANCE YES/NO
Heading accuracy	0.2° RMS	Mandatory	
Heave accuracy (real-time)	5 cm or 5% whichever is highest	Mandatory	
Heave accuracy (delayed signal)	2 cm or 2% whichever is highest	Mandatory	
Heave motion periods (real-time)	1 to 25 seconds	Mandatory	
Heave motion periods (delayed signal)	1 to 50 seconds	Mandatory	
Position accuracy (DGNS or SBAS)	1.1 m (95% CEP)	Mandatory	
Position accuracy (RTK in X/Y)	1 cm + 1 ppm RMS	Mandatory	
Position accuracy (RTK in	2 cm + 1 ppm RMS	Mandatory	

Z)			
DATA OUTPUTS			
Communication ports	3 serial RS232/RS422 lines and 8 Ethernet UPD/IP ports	Mandatory	
Data output interval	Programmable in 0.01-sec. steps and 1PPS pulse	Mandatory	
Data update rate	Up to 100 Hz	Mandatory	
DIMENSION AND WEIGHT			
Sensor Unit	1200 mm (L) x 200 mm (W) x 100 mm (H), weight 6.5 kg	Mandatory	
MRU in light weight subsea bottle	Ø120 x 241 mm, weight 3.7 kg.	Mandatory	
OPERATING TEMPERATURE			
Sensor Unit	-40 to +70°C	Mandatory	
MRU	-5 to +55°C	Mandatory	
POWER			
Sensor Unit	24 V DC, 10 W	Mandatory	
MRU	24 V DC, 12 W	Mandatory	
HUMIDITY			
Sensor Unit	Hermetically sealed	Mandatory	
MRU	Hermetically sealed	Mandatory	

xiv) Sound profiler (Moving Vessel Profiler)

Features

It should have the ability to utilise Xchangeable sensors to facilitate customisation for specific applications. The Moving Vessel Profiler (or MVP) should automatically collect continuous near vertical SV profiles and outputs the data in real-time for immediate implementation in the MBES. It should also include a seabed avoidance function to ensure it can get maximum water column coverage without risk of damage or loss.

xv) Bar check

Features

The bar check should be able to calibrate the depth sounder for draft and also calibrating the speed of sound throughout the water column in survey sites with a maximum water depth of 50 to 75ft.

xvi) Hydrographic work station

▪ Hardware

It should be equipped to handle heavy processing requirements and high speed, large-volume data storage demands.

Special features of the HWS should be;

- Data logging from all the Hydrographic components on board the vessel.
- Gridding of sounding data.
- Filtering of sounding data.
- 3-D visualisation of sounding data.
- Storage and visualization of high resolution back-scatter data from the seabed and the water column.

Features

- **CPU:** Intel Core i7 64-bit Quad-Core processor
- **Memory:** 4*4 GByte
- **Graphic card:** Nvidia Quatro K620
- **Storage:** 2*2TB Hard disks
- **USB Interfaces:** 5*USB2.0*USB3.0

Technical specifications

Width	338mm	Mandatory	COMPLIANCE YES/NO
Height	100mm	Mandatory	
Depth	379mm	Mandatory	
weight	Approximately 7kg	Mandatory	
Power Supply	110/220 VAC, 60/50 Hz	Mandatory	
Power Consumption	Maximum 240 W	Mandatory	

NB: Dimensions are excluding handles, brackets and rack mounting ears which shall be provided for by the supplier.

▪ **Software**

Appropriate software for calibrating, collecting and processing MBES, Topographic laser Backscatter and Water column Data.

xvii) Installation and training

The supplier shall supervise assembly (mobilization) of the MBES on vessel and provide training to staff on hydrographic survey (data collection, data processing, data visualization and interpretation). Major areas of training shall be:

- Basic package hardware/software and vessel inbound consolidation, inventory, inspection, Integration, and testing on site (**Mombasa, Kenya**).
- Advanced package hardware/software and vessel inbound consolidation, inventory, inspection, Integration, and testing on site (**Mombasa, Kenya**).

xviii) Warrant

Two (2) years warranty on the MBES and all components.

xix) Maintenance

▪ **System Maintenance contracts**

The supplier should be able to offer hardware maintenance contracts of the whole system as part of an overall support contract. The tasks should include:

- Annual servicing

- Repairs
- Technical troubleshooting
- Warranty upgrades

The above should be implemented either:

- On-site contracts - where an engineer should come to site to fix the problem
- Return-to-depot contracts - where equipment can be returned to manufacture for repair or replacement.

▪ **Software maintenance contracts**

The suppliers should offer maintenance contracts of all the software that will include:

- Recurring licensing fees
- Product upgrades
- New versions
- Patches and bug fixes

Technical Specifications for Side Scan Sonar System

The system should comprise of the following main components:

- vii. Sonar
- viii. Towfish
- ix. Splash-proof topside processor
- x. Installation and training
- xi. Warrant
- xii. Maintenance

FEATURES

- Ultra high resolution images
- Lightweight for one person deployment
- Standard heading, pitch, roll & pressure sensors
- Choice of dual simultaneous frequencies
- Runs on AC or DC
- Pole mount option for shallow water use

Key specifications

SONAR			COMPLIANCE YES/NO
Frequencies (Dual Simultaneous)	Choice of either a 400/900 kHz or 600/1600 kHz towfish	Mandatory	
Pulse Type	EdgeTech's Full Spectrum® CHIRP (user-selectable CW pulses also included)	Mandatory	
Operating Range	150m @ 400 kHz, 75m @ 900 kHz; 120m @ 600 kHz, 35m @ 1600 kHz	Mandatory	
Horizontal Beam Width	0.46° @ 400 kHz, 0.28° @ 900 kHz; 0.33° @ 600 kHz, 0.20° @ 1600 kHz	Mandatory	
Vertical Beam Width	50°	Mandatory	
Resolution Across Track	400 kHz: 2.3 cm, 900 kHz: 1.5 cm, 600 kHz: 1.5 cm, 1600 kHz: 0.6 cm	Mandatory	
TOWFISH			
Diameter	9.5 cm (3.75 inches)	Mandatory	
Length	112 cm (44 inches)	Mandatory	
Weight in Air	20 kg (44 pounds)	Mandatory	
Tow Cable Type	Coaxial up to 600m max length (will provide a typical operational depth down to 200m)	Mandatory	
Max Depth Rating of Towfish	200m	Mandatory	
Material	Stainless Steel	Mandatory	
Standard Sensor	Heading, Pitch, Roll,	Mandatory	

	Pressure (Depth)		
SPLASH-PROOF TOPSIDE PROCESSOR			
Power Input	12-24 VDC or 115/230 VAC, 50/60 Hz	Mandatory	
Connections	AC, DC, Ethernet (to laptop), Towfish	Mandatory	
Hardware	Ruggedized splash-proof, drop & shock resistant laptop	Mandatory	
Operating System	Windows® 7	Mandatory	
Acquisition Software	EdgeTech DISCOVER	Mandatory	

xx) Installation and training

The supplier shall supervise assembly (mobilization) of the Side scan Sonar system on vessel and provide training to staff on hydrographic survey (data collection, data processing, data visualization and interpretation).

xxi) Warrant

Two (2) years warranty on the Side Scan Sonar and all components.

xxii) Maintenance

▪ **System Maintenance contracts**

The supplier should be able to offer hardware maintenance contracts of the whole system as part of an overall support contract. The tasks should include:

- Annual servicing
- Repairs

- Technical troubleshooting
- Warranty upgrades

The above should be implemented either:

- On-site contracts - where an engineer should come to site to fix the problem
- Return-to-depot contracts - where equipment can be returned to manufacture for repair or replacement.

▪ **Software maintenance contracts**

The suppliers should offer maintenance contracts of all the software that will include:

- Recurring licensing fees
- Product upgrades
- New versions
- Patches and bug fixes

NAME

SIGNATURE

DATE

.....

.....

.....