



TENDER DOCUMENT

FOR

**SUPPLY, DELIVERY, CONFIGURATION, TESTING AND COMMISSIONING OF VIRTUAL LIBRARY TIER2 DATA
CENTRE**

TENDER NUMBER: KNL/HQ/T002/2020-2021

CLOSING DATE: 28th AUGUST,2020

AT 10.00 A.M. EAST AFRICAN TIME

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SECTION I - INVITATION FOR TENDERS

Date: 18th August, 2020

TENDER No. KNL/HQ/T002/2020-2021: TENDER FOR SUPPLY, DELIVERY, CONFIGURATION, TESTING AND COMMISSIONING OF VITRUAL LIBRARY TIER 2 DATA CENTRE

Kenya National Library Service (knls) is a state corporation whose mandate is to promote, establish, Kenya National Library Service (knls) is a state corporation whose mandate is to promote, establish, equip, manage, maintain and develop libraries in Kenya.

Knls invites sealed tenders from eligible candidates for the following tender.

Reference Number	Tender Name	Tender Security Amount	Closing date	Eligibility
KNL/HQ/T002/2020-2021	Supply, Delivery, Configuration, Testing And Commissioning Of Virtual Library Tier 2 Data Centre	Ksh.200,000.00	28 th August ,2020 at 10.00am.	Open National Tender

Interested eligible bidders may obtain tender documents at the procurement offices located at BuruBuru Office, 3rd floor, Mumias Road/Oldonyo Sabuk Road Junction, BuruBuru-Nairobi during normal working hours upon payment of a non-refundable tender fee of **Ksh.1000.00 per set** or download free of charge from knls website, **www.knls.ac.ke** or Public Procurement Information Portal **www.tenders.go.ke**.

All bidders who download the tender document **MUST** register with procurement office by sending an email to **tender@knls.ac.ke** .

Tendering will be conducted through the National Competitive bidding procedures specified in the Public Procurement and Disposal Act, 2015 and Public Procurement and Asset Disposal Regulations,2020.

Enquires can be made via email:**tender@knls.ac.ke** or telephone number 0728 607 627.

Bidders are advised to regularly visit knls website to obtain any additional information (Addendum on the tender). All addenda/ additional information on the tender shall be posted on knls website as they become available

Tenders must be accompanied by a tender security in the format and amount provided.

Completed tender documents shall be deposited in the tender box located on 3rd floor reception area, Mumias Road/Oldonyo sabuk Road Junction, BuruBuru-Nairobi on or before **Friday 28th August, 2020 at 10.00am**. The tender document will be opened immediately thereafter in the conference room, Mumias Road/Oldonyo sabuk Road Junction, on **Friday 28th August, 2020 at 10.00am** -Nairobi, Director's wing, in the presence of bidders or their representatives who wish to attend.

Late bids shall be rejected.

Ag. Chief Executive Director
Kenya National Library Service
Mumias Road/Oldonyo sabuk Road Junction, Buruburu
P.O. Box 30573 -00100
NAIROBI, KENYA.

Prices quoted should be net inclusive of all taxes and applicable levies and must be in Kenya Shillings, and shall remain valid for 90 days from the closing date of the tender

SECTION II: INSTRUCTION TO TENDERERS

2.1 Eligible tenderers

- 2.1.1. This Invitation to tender is open to all tenderers eligible as described in the instructions to tenderers. Successful tenderers shall provide the services for the stipulated duration from the date of commencement (hereinafter referred to as the term) specified in the tender documents.
- 2.1.2. Knls employees, committee members, board members and their relative (spouse and children) are not eligible to participate in the tender unless where specially allowed under section 131 of the Act.
- 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 Knls to provide consulting services for the preparation of the design, specifications, and other documents to be used for the procurement of the services under this Invitation for tenders.
- 2.1.4. Tenderers involved in corrupt or fraudulent practices or debarred from participating in public procurement shall not be eligible.

2.2 Cost of tendering

- 2.2.1 The Tenderer shall bear all costs associated with the preparation and submission of its tender, and Knls will in no case be responsible or liable for those costs, regardless of the conduct or outcome of the tendering process.
- 2.2.2 The price to be charged for the tender document shall not exceed Kshs. 1,000/=. Where the tenderers download documents from Knls website or state portal, there shall be no cost.
- 2.2.3 The Knls shall allow the tenderer to review the tender document free of charge before purchase.

2.4 The Tender documents

- 2.4.1. The tender document comprises of the documents listed below and addenda issued in accordance with clause 6 of these instructions to tenders
 - i) Instructions to tenderers
 - ii) General Conditions of Contract
 - iii) Special Conditions of Contract

- iv) Schedule of Requirements
- v) Details of service
- vi) Form of tender
- vii) Price schedules
- viii) Contract form
- ix) Confidential business questionnaire form
- x) Tender security form
- xi) Performance security form

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.

2.4 Clarification of Documents

A prospective candidate making inquiries of the tender document may notify the Knls in writing or by email at the entity's address indicated in the Invitation for tenders. The Knls will respond in writing to any request for clarification of the tender documents, which it receives no later than three (3) 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 who have received the tender documents"

2.4.1. The Knls 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

2.5 Amendment of documents

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 issuing an addendum.

2.5.1. All prospective tenderers who have obtained the tender documents will be notified of the amendment by email and such amendment will be binding on them.

2.5.2. 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.

2.6 Language of tender

2.6.1. The tender prepared by the tenderer, as well as all correspondence and documents relating to the tender exchanged by the tenderer and Knls, shall be written in English language. 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.

2.7 Documents Comprising the Tender

The tender prepared by the tenderer shall comprise the following Components:

(a) A Tender Form and a Price Schedule completed in accordance with paragraph 9, 10 and 11 below.

(b) Documentary evidence established in accordance with Clause 2.11 that the tenderer is eligible to tender and is qualified to perform the contract if its tender is accepted;

(c) Tender security furnished is in accordance with Clause 2.12

(d) Confidential business questionnaire

2.8 Form of Tender

2.8.1 The tenderers shall complete the Form of Tender and the appropriate Price Schedule furnished in the tender documents, indicating the services to be performed.

2.9 Tender Prices

2.9.1 The tenderer shall indicate on the Price schedule the unit prices where applicable and total tender prices of the services it proposes to provide under the contract.

2.9.2 Prices indicated on the Price Schedule shall be the cost of the services quoted including applicable taxes payable.

2.9.3 Prices quoted by the tenderer shall remain fixed during the term of the contract unless otherwise agreed by the parties. A tender submitted with an adjustable price quotation will be treated as non-responsive and will be rejected, pursuant to paragraph 2.22.

2.9.4 Contract price variations shall not be allowed for contracts not exceeding one year (12 months)

2.9.5 Where contract price variation is allowed, the variation shall not exceed 25% of the original contract price.

2.9.6 Price variation requests shall be processed by the Knls within 30 days of receiving the request.

2.10 Tender Currencies

2.10.1 Prices shall be quoted in Kenya Shillings unless otherwise specified in the appendix to in Instructions to Tenderers

2.11 Tenderers Eligibility and Qualifications.

- 2.11.1 Pursuant to Clause 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.
- 2.11.2 The documentary evidence of the tenderers qualifications to perform the contract if its tender is accepted shall establish to the Procuring entity's satisfaction that the tenderer has the financial and technical capability necessary to perform the contract.

2.12 Tender Security

- 2.12.1 The tenderer shall furnish, as part of its tender, a tender security for the amount and form specified in the appendix to Invitation to tender.
- 2.12.2 The tender security shall be in the amount not exceeding 0.5 – 2 per cent of the tender price.
- 2.12.2 The tender security is required to protect the Knls against the risk of Tenderer's conduct which would warrant the security's forfeiture, pursuant to paragraph 2.12.7
- 2.12.3 The tender security shall be denominated in a Kenya Shillings or in another freely convertible currency and shall be in the form of:
 - a) A bank guarantee.
 - b) Such insurance guarantee approved by the Public Procurement Oversight Authority.
- 2.12.4 Any tender not secured in accordance with paragraph 2.12.1 and 2.12.3 will be rejected by the Knls as non-responsive, pursuant to paragraph
- 2.12.5 Unsuccessful tenderer's security will be discharged or returned as promptly as possible as but not later than thirty (30) days after the expiration of the period of tender validity prescribed by the procuring entity.
- 2.12.6 The successful tenderer's tender security will be discharged upon the tenderer signing the contract, pursuant to paragraph 2.29, and furnishing the performance security, pursuant to paragraph 2.30.
- 2.12.7 The tender security may be forfeited:
 - (a) If a tenderer withdraws its tender during the period of tender validity specified by the Knls 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 30

Or

To furnish performance security in accordance with paragraph 31.
(c) If the tenderer rejects, correction of an error in the tender.

2.13 **Validity of Tenders**

- 2.13.1 Tenders shall remain valid for One hundred and twenty (120) days or as specified in the invitation to tender after 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 Knls as nonresponsive.
- 2.13.2 In exceptional circumstances, the Knls 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 2.12 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.

2.14 **Format and Signing of Tender**

- 2.14.1 The tenderer shall prepare One original and copy of the tender (in separate envelopes), clearly marked "**ORIGINAL**" Technical and Financial proposals in separate envelopes and "**COPY**" Technical and Financial proposals as appropriate and enclosed in an outer envelope. In the event of any discrepancy between them, the original shall govern.
- 2.14.2 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. All pages of the tender, except for un-amended printed literature, shall be initialed by the person or persons signing the tender.
- 2.14.3 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.

2.15 **Sealing and Marking of Tenders**

- 2.15.1 The tenderer shall seal the original and the copy of the tender **in separate envelopes**, duly marking the envelopes as "ORIGINAL TENDER" and "COPY OF TENDER". The envelopes shall then be sealed in an outer envelope.

The two inner envelopes and the larger outer envelope shall:

- (a) be addressed to the Knls at the address given in the invitation to tender
- (b) Bear, tender number and description: Supply, Delivery, Configuration, Testing and Commissioning of Virtual Library Tier 2 Data Centre. and the words: "DO NOT OPEN BEFORE **Friday 28th August, 2020 at 10.00am**"

2.15.3 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".

2.15.4 If the outer envelope is not sealed and marked as required by paragraph 2.15.2, the Knls will assume no responsibility for the tender's misplacement or premature opening.

2.16 Deadline for Submission of Tenders

2.16.1 Tenders must be received by the Knls at the address specified under paragraph

2.15.2 no later than **Friday 28th August, 2020 at 10.00am**

2.16.2 The Knls may, at its discretion, extend this deadline for the submission of tenders by amending the tender documents in accordance with paragraph 6, in which case all rights and obligations of the Knls and candidates previously subject to the deadline will thereafter be subject to the deadline as extended.

2.17 Modification and withdrawal of tenders

2.17.1 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 tender's is received by the Knls prior to the deadline prescribed for the submission of tenders.

2.17.2 The Tenderer's modification or withdrawal notice shall be prepared, sealed, marked, and dispatched in accordance with the provisions of paragraph 2.15. A withdrawal notice may also be sent by email, but followed by a signed confirmation copy, postmarked not later than the deadline for submission of tenders.

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

2.17.4 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 2.12.7.

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

2.17.6 Knls 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.

2.18 Opening of Tenders

- 2.18.1 Knls will open all tenders in the presence of tenderers' representatives who choose to attend **on Friday 28th August, 2020 at 10.00am** and in the location specified in the invitation to tender. The tenderers' representatives who are present shall sign a register evidencing their attendance.
- 2.18.3 The tenderers' names, tender modifications or withdrawals, tender prices, discounts, and the presence or absence of requisite tender security and such other details as knls, at its discretion, may consider appropriate, will be announced at the opening.
- 2.18.4 The Knls will prepare minutes of the tender opening which will be submitted to the tenderers that signed the tender opening register and will have made the request.

2.19 Clarification of tenders

- 2.19.1 To assist in the examination, evaluation and comparison of tenders, Knls 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 shall be sought, offered, or permitted.
- 2.19.2 Any effort by the tenderer to influence the Knls in the procuring entity's tender evaluation, tender comparison or contract award decisions may result in the rejection of the tenderers tender.

2.20 Preliminary Examination and Responsiveness

- 2.20.1 Knls will examine the tenders to determine whether they are complete, whether any computational errors have been made, whether required securities have been furnished whether the documents have been properly signed, and whether the tenders are generally in order.
- 2.20.2 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 quantity, 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 may be forfeited. If there is a discrepancy between words and figures, the amount in words will prevail. Knls will consider total amount as indicated in the form of tender as final and absolute without any correction.
- 2.20.3 The Knls may waive any minor informality or nonconformity or irregularity in a tender which does not constitute a material deviation, provided such waiver does not prejudice or affect the relative ranking of any tenderer.

2.20.4 Prior to the detailed evaluation, pursuant to paragraph 23, the Knls 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.

2.20.5 If a tender is not substantially responsive, it will be rejected by the Knls and may not subsequently be made responsive by the tenderer by correction of the nonconformity.

2.21 Conversion to a single currency

2.11Where other currencies are used, the Knls will convert those currencies to Kenya shillings using the selling exchange rate on the date of tender closing provided by the central bank of Kenya.

2.22.1 **Evaluation and comparison of tenders.**

2.22.2 The Knls will evaluate and compare the tenders which have been determined to be substantially responsive, pursuant to paragraph 2.20

2.22.3 The comparison shall be of the price including all costs as well as duties and taxes payable on all the materials to be used in the provision of the services.

2.22.4 The Procuring entity's evaluation of a tender will take into account, in addition to the tender price, the following factors, in the manner and to the extent indicated in paragraph 2.22.4 and in the technical specifications:

(a) Operational plan proposed in the tender;

(b) Deviations in payment schedule from that specified in the Special Conditions of Contract;

2.22.5 Pursuant to paragraph 22.3 the following evaluation methods will be applied:

(a) **Operational Plan.**

The Knls requires that the services under the Invitation for Tenders shall be performed at the time specified in the Schedule of Requirements. Tenders offering to perform longer than Knls required delivery time will be treated as non-responsive and rejected.

(b) **Deviation in payment schedule.**

Tenderers shall state their tender price for the payment on a schedule outlined in the special conditions of contract. Tenders will be evaluated on the basis of this base

price. Tenderers are, however, permitted to state an alternative payment schedule and indicate the reduction in tender price they wish to offer for such alternative payment schedule. The Knls may consider the alternative payment schedule offered by the selected tenderer.

2.22.6 The tender evaluation committee shall evaluate the tender within fifteen (15) days from the date of opening the tender.

2.22.7 To qualify for contract awards, the tenderer shall have the following: -

- 2.22.8 (a) Necessary qualifications, capability experience, services, equipment and facilities to provide what is being procured.
- (b) Legal capacity to enter into a contract for procurement
- (c) Shall not be insolvent, in receivership, bankrupt or in the process of being wound up and is not the subject of legal proceedings relating to the foregoing
- (d) Shall not be debarred from participating in public procurement.

2.23 **Contacting the Knls**

2.23.1 Subject to paragraph 2.19, no tenderer shall contact the Knls on any matter relating to its tender, from the time of the tender opening to the time the contract is awarded.

2.23.2 Any effort by a tenderer to influence the Knls in its decisions on tender evaluation tender comparison or contract award may result in the rejection of the tenderers tender.

2.24 **Award of Contract**

a) Post qualification

2.24.1 In the absence of pre-qualification, the Knls 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.

2.24.2 The determination will take into account the tenderer's financial and technical capabilities. It will be based upon an examination of the documentary evidence of the tenderers qualifications submitted by the tenderer, pursuant to paragraph 2.1.2, as well as such other information as the Procuring entity deems necessary and appropriate.

2.24.3 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 Knls will proceed to the next lowest evaluated tender to make a similar determination of that Tenderer's capabilities to perform satisfactorily.

b) **Award Criteria**

2.24.3 Subject to paragraph 2.29 the Knls will award the contract to the successful tenderer 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.

2.24.4 The Knls 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. If the Knls determines that none of the tenderers is responsive; the Knls shall notify each tenderer who submitted a tender.

2.24.5 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 **Notification of award**

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

2.25.2 The notification of award will signify the formation of the Contract subject to the signing of the contract between the tenderer and the Knls pursuant to clause 2.29.

Simultaneously the other tenderers shall be notified that their tenders have not been successful.

2.25.3 Upon the successful Tenderer's furnishing of the performance security pursuant to paragraph 31, the Knls will promptly notify each unsuccessful Tenderer and will discharge its tender security, pursuant to paragraph 2.12

2.26 **Signing of Contract**

2.26.1 At the same time as the Knls notifies the successful tenderer that its tender has been accepted, the Knls will simultaneously inform the other tenderers that their tenders have not been successful.

2.26.2 Within fifteen (15) days of receipt of the Contract Form, the successful tenderer shall sign and date the contract and return it to the Procuring entity.

2.26.3 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.

2.27 Performance Security

2.27.1 Within fifteen (15) 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.

2.27.2 Failure of the successful tenderer to comply with the requirement of paragraph 2.29 or paragraph 2.30.1 shall constitute sufficient grounds for the annulment of the award and forfeiture of the tender security, in which event the Knls may make the award to the next lowest evaluated or call for new tenders.

2.28 Corrupt or Fraudulent Practices

2.28.1 The Procuring entity requires that tenderers observe the highest standard of ethics during procurement process and execution of contracts. A tenderer shall sign a declaration that he has not and will not be involved in corrupt or fraudulent practices.

2.28.2 The Knls 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;

2.28.3 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: Eligibility	Tender eligible to Citizen Contractors. These are firms that are Kenyan owned with One hundred percent (100%) shareholding. Attach Authentic CR12.
2.5 Clarification	Clarifications to the tender shall be responded to for request received no later than 3 days to the tender closing date. Request for clarification should be sent to tender@knls.ac.ke and must be received at least 3 days prior to tender closure. Bidders are advised from time to time to be checking knls website or state portal for any uploaded further information on this tender.
2.7 Language of tender	Tender shall be prepared and all corresponded to in English
2.10.2 Tender prices	Prices indicated in the tender price schedule shall include all cost including taxes, insurance and delivery to Knls Head office
2.11.1 Tender currencies	Prices shall be in Kenya Shillings
2.12 Tender eligibility and qualifications	Proof of eligibility, qualification documents of evidence (see evaluation criteria)
2.14 Tender security	The tender security shall be of the amount Kes 200,000.00 in the form of an irrevocable bank guarantee from a reputable commercial bank. The tender security shall be valid for at least 30 days beyond tender validity i.e. valid for at least 150 days)
2.15 Tender validity	Tender validity duration 120 days from the date of opening
2.16,2.17 Sealing and Marking of tender	Tender documents and must be submitted in a plain sealed envelope and marked "Tender for Supply,Delivery,Configuration,Testing and Commissioning Of Virtual Library Tier 2 Data Centre
2.18 Deadline and Submission of Tender	The tender documents should be dropped in the tender box located at BuruBuru Office, 3 rd floor, Mumias Road/Oldonyo Sabuk Road Junction, Buruburu-Nairobi before submission deadline Tender closing and opening date and time (Friday 28th August, 2020 at 10.00am)
2.22.2 Preliminary Examination	Tender sum as submitted and read out during tender opening is absolute and shall not be subject to correction, adjustment or amendment on any way - Sec.82 of PPADA 2015
2.27.1 Award of contract	Knls may at its own discretion conduct due diligence on the eligible bidders to establish their ability to perform the contract

2.29 Evaluation Criteria

The bids received shall be evaluated in the stages detailed below:

Stage 1. Compliance to Mandatory requirement

Stage 2. Compliance to Technical Specifications

Stage 3. Compliance to technical requirements on capacity to deliver the contract.

Stage 4. Financial evaluation

Stage 5. Due Diligence

Stage 1: Mandatory Requirements

The following mandatory requirements must be met notwithstanding other requirements in the tender document:

No	Requirements	Yes/No
MR1.	Copy of Certificate of incorporation/Registration	
MR 2	Valid tax compliance certificate	
MR 3.	Dully filled and signed Confidential business questionnaire	
MR 4.	Submit Valid business permit	
MR 5.	Submission of Bid Bond/tender security of Kes 200,000.00 valid for 150 days from reputable bank	
MR 6.	Duly filled, stamped and signed tender form	
MR 7	Duly signed and stamped site visit certificate	
MR 8	Addendums issued must be attached (if any)	
MR 9	Mandatory Evidence of Vendor Skilled Partner Level – 3-Star or higher. (Attach Manufacturers authorization form)	
MR 10	Must have set of their documents paginated (serialized) to ensure compliance with Section 78(5) of PPADA,2015(from first to last page)	
MR 11	Must submit certified audited accounts for the last three consecutive years (2017,2018 and 2019)	

Bidder must comply with all the above requirements to proceed to the second stage of technical evaluation on capacity to deliver the contract.

Stage 2. Compliance to Technical Specifications
TECHNICAL EVALUATION CRITERIA

Item	Technical Requirement	Score
1	GENERAL EXPERIENCE OF FIRM <p>a The firm must demonstrate experience in implementation of three (3) successfully datacenter projects of not less than 50 million each in the last seven years. Provide contact details of the firm and award letter or SLA/Contract/Purchase order or completion certificates. (Each project 10 marks)</p>	30
2.	QUALIFICATION OF KEY PERSONNEL AND EXPERIENCE <p><u>A) TECHNICAL PROJECT LEAD (15 Marks)</u></p> <p>i. Attach Detailed Signed and Stamped CV with over five years' experience (4-5 years 'experience; 5 marks, 3-4 years' experience; 3 marks, 2-3 years' experience; 1mark, Below 2 years; 0 marks)</p> <p>ii. Proof of CCIE (Cisco Certified Internetwork Expert) or CCNP (Cisco Certified Network Profession) or HCNA (Huawei Certified Network Associate) or SCP (Systems, Capability and Performance) – 4 marks</p> <p>iii. Proof of CDCP (Certified Data Centre Professional) certification – 3marks</p> <p>iv. PMP/PRINCE 2 Certified- 3marks</p> <p>To be checked against attached certifications</p> <p><u>B. THREE (3) TECHNICAL SUPPORT STAFF (15 Marks)</u></p> <p>i. Attach Detailed signed and stamped CV with over three years 'experience, Bachelors' Degrees in related field of three (3) technical support staff – 3 marks each (maximum marks 9)</p> <p>ii. OEM Certified in at least two domains- 1 mark per domain per staff (Max marks 6)</p> <p>To be checked against attached certifications</p> <p>NB: The CVs must be in the format provided in the tender document and signed by the proposed professional and the authorized representative submitting the proposal</p>	30
3	Detailed Site Survey Report - Submit Detailed report for the site – 10 marks	10
	Design Documents and Connectivity Diagrams both active and passive components together with cabling components together with cabling - 4 marks each	8

	Detailed work plan and duration of a period not exceeding 120 days after signing the contract (Implementation Plan in Gantt Chart). The bidder MUST show how new network elements will be integrated into the existing infrastructure a. Outlined Gantt Chart showing resources, duration and activities – 8 Marks b. Gantt chart without full details – 0 marks c. No Gantt Chart – 0 Marks	8
	Detailed Seamless Migration Work Plan with clear deliverables and milestones - 8marks	8
4	Policies/solution Documents and Brochures - 6 marks	6
		100

NB: For a bidder to qualify to proceed to the financial Stage, they must score a minimum of 70% at the technical capacity evaluation stage.

Stage 3. Financial Evaluation

- Financial evaluation shall involve checking completeness of financial bids all aspects of the scope must be priced as per the price schedule.
- Presence of a duly filled, signed and stamped tender form and price schedule
- Award shall be based on the most compliant lowest evaluated cost
- Tender sum as submitted and read out during tender opening is absolute and shall not be subject to correction, adjustment or amendment on any way Sec.82 of PPADA 2015
- if the bid which results in lowest evaluated bid price is seriously unbalanced meaning that has inconsistency pricing of identical items of bills of quantity or has any form of front loading of rates, shall lead to disqualification of bidder at the detailed financial evaluation and analysis stage

NB: The prices quoted in the form of tender shall be inclusive of all other costs and taxes.

Stage 4. Due Diligence

Knls may prior to award of the tender determine to its satisfaction whether the selected bids will qualify to perform the contract satisfactorily by carrying out a due diligence visit as required

SECTION IV: GENERAL CONDITIONS OF CONTRACT

1. Definitions

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

- (a) the Purchaser is Kenya National Library Services of, P.O. Box 30573 - 00100, Nairobi. Kenya and includes knls legal representative's successors or assigns.
- (b) "The Contract" means the agreement entered into between the Purchaser and the Supplier, 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 Supplier under the Contract for the full and proper performance of its contractual obligations.
- (c) "The Goods" Goods – Means all equipment machinery, Telepresence equipment and / or other materials which the supplier is required to supply to the purchaser under the contract.
- (d) "The Service" means those services ancillary to the supply of the Goods, such as transportation and insurance, and any other incidental services, such as installation, commissioning, provision of technical assistance, training, and other such obligations of the Supplier covered under the Contract.
- (e) "GCC" means the General Conditions of Contract contained in this section.
- (f) "The Bidder" means the individual or firm who participates in the tender and submits a bid.

2. Application

2.1 These General Conditions shall apply in all Contracts made by Kenya National Library Services for the procurement of the Goods.

3. Country of Origin

For purposes of this clause "Origin" means where the goods were produced.

4. Standards

- 4.1 The Services provided under this Contract shall conform to the standards mentioned in the Technical Specifications.

5. Use of Contract Documents and Information

- 5.1 The Candidate shall not, without Kenya National Library Services, pattern, sample, or information furnished by or on behalf of Knls in connection therewith, to any person other than a person employed by the tenderer in the performance of the Contract.
- 5.2 The tenderer shall not, without Kenya National Library Service 's prior written consent, make use of any document or information enumerated in paragraph 5.1 above.
- 5.3 Any document, other than the Contract itself, enumerated in paragraph 5.1 shall remain the Property of Kenya National Library Service and shall be returned (all copies Kenya National Library Service on completion of the Tenderer's
- 5.4 Performance under the Contract if so required by Knls

6. Patent Rights

- 6.1 The tenderer shall indemnify Kenya National Library Service against all third-party claims of infringement of patent, trademark, or industrial design rights arising from use of the Goods / Services or any part thereof in Kenya.

7. Performance Security

- 7.1 Within thirty (30) days of receipt of the notification of Contract award, the successful tenderer shall furnish to Kenya National Library Service the performance security in the amount specified in Special Conditions of Contract.
- 7.2 The proceeds of the performance security shall be payable to Kenya National Library Service as compensation for any loss resulting from the Tenderer's failure to complete its obligations under the Contract.
- 7.3 The performance security shall be denominated in the currency of the Contract, or in a freely convertible currency acceptable to Kenya National Library Service 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 Kenya National Library Service, in the form provided in the tender documents.
- 7.4 The performance security will be discharged by Kenya National Library Service 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.

8. Inspection and Tests

8.1 Kenya National Library Service or its representative shall have the right to inspect and/or to test the Services to confirm their conformity to the Contract specifications. Kenya National Library Service shall notify the tenderer in writing, in a timely manner, of the identity of any representatives retained for these purposes.

8.2 The inspections and tests may be conducted on 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 Kenya National Library Service.

8.3 Should any inspected or tested Goods fail to conform to the Specifications, Kenya National Library Service may reject the Goods, and the tenderer shall either replace the rejected Goods or make alterations necessary to meet specification requirements free of cost to Kenya National Library Service.

8.4 Kenya National Library Service '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 Goods having previously been inspected, tested, and passed by Kenya National Library Service or its representative prior to the Goods' delivery.

8.5 Nothing in paragraph 8 shall in any way release the tenderer from any warranty or other obligations under this Contract.

10. Delivery and Documents

10.1 Delivery of the Goods shall be made by the tenderer in accordance with the terms specified by Kenya National Library Service in its Schedule of Requirements and the Special Conditions of Con

11. Insurance

11.1 The Goods supplied under the Contract shall be fully insured against loss or damage incidental to manufacture or acquisition, transportation, storage, and delivery in the manner specified in the Special conditions of contract.

12. Payment

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.

12.2 Payments shall be made promptly by Kenya National Library Service as specified in the contract.

13. Prices

- 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.

14. Assignment

- 14.1 The tenderer shall not assign, in whole or in part, its obligations to perform under this Contract, except with Kenya National Library Service 's prior written consent.

15. Subcontracts

- 15.1 The tenderer shall notify Kenya National Library Service 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.

16. Termination for Default

- 16.1 Kenya National Library Service 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 the Service within the period(s) specified in the Contract, or within any extension thereof granted by Kenya National Library Services
- (b) if the tenderer fails to perform any other obligation(s) under the Contract.

- (c) if the tenderer, in the judgment of Kenya national Library Services has engaged in corrupt or fraudulent practices in competing for or in executing the Contract.

- 16.2 In the event Kenya National Library Service terminates the Contract in whole or in part, it may procure, upon such terms and in such manner as it deems appropriate, Service similar to those undelivered, and the tenderer shall be liable to Kenya National Library Service for any excess costs for the Service.

17. Liquidated Damages

- 17.1 If the tenderer fails to deliver of the Service within the period(s) specified in the contract, Kenya National Library Service 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 Service up to a maximum deduction of 10%. After this the tenderer may consider termination of the contract.

18. Resolution of Disputes

18.1 Kenya National Library Services and the tenderer shall make every effort to resolve amicably by direct informal negotiation any disagreement or dispute arising between them under or in connection with the contract.

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 adjudicate in an agreed national or international forum and/or international arbitration.

19. Language and Law

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.

20. Force Majeure

20.1 The tenderer shall not be liable for forfeiture of its performance security, or termination for default if and to the extent that its delay in performance or other failure to perform its obligations under the Contract is the result of an event of Force Majeure.

Taxation

"Taxes" means all present and future taxes, levies, duties, charges, assessments, deductions or withholdings whatsoever, including any interest thereon, and any penalties and fines with respect thereto, wherever imposed, levied, collected, or withheld pursuant to any regulation having the force of law and "Taxation" shall be construed accordingly.

General Conditions of Contract

Local Taxation

- 1.0 Nothing in the Contract shall relieve the Contractor and/or his Sub-Contractors from their responsibility to pay any taxes, statutory contributions and levies that may be levied on them in Kenya in respect of the Contract.
- 1.1 The Contract Price shall include all applicable taxes and shall not be adjusted for any of these taxes.
- 1.2 The Contractor shall be deemed to be familiar with the tax laws in the Employer's Country and satisfied themselves with the requirements for all taxes, statutory contributions and duties to which they may be subjected during the term of the Contract.
- 1.3 In instances where discussions are held between the Employer and the Contractor regarding tax matters, this shall not be deemed to constitute competent advice and hence does not absolve the Contractor of their responsibility in relation to due diligence on the tax issue as per 1.2 above.

2.0 Tax Deduction

- 2.1 If the Employer is required to make a tax deduction by Law, then the deduction shall be made from payments due to the Contractor and paid directly to the Kenya Revenue Authority. The Employer shall upon remitting the tax to Kenya Revenue Authority furnish the Contractor with the relevant tax deduction certificates.
- 2.2 Where the Contractor is paid directly by the Financiers and the Employer is not able to deduct tax, then the Contractor will be required to pay the tax deduction to Kenya

Revenue Authority in the name of the Employer and furnish the Employer with an original receipt thereof as evidence of such payment. In absence of the said evidence, the Employer will not process any subsequent payments to the Contractor.

3.0 **Tax Indemnity**

- 3.1 The Contractor shall indemnify and hold the Employer harmless from and against any and all liabilities, which the Employer may incur for any reason of failure by the Contractor to comply with any tax laws arising from the execution of the Contract whether during the term of the Contract or after its expiry.
- 3.2 The Contractor warrants to pay the Employer (within fourteen (14) days of demand by the Employer), an amount equal to the loss, liability or cost which the Employer determines has been (directly or indirectly) suffered by the Employer for or on account of the Contractor's Tax liability arising from the Contract.
- 3.2.1 Where the amount in 3.2 above remains unpaid after the end of the fourteen (14) days moratorium, the Employer shall be entitled to compensation for financing

SECTION V: SPECIAL CONDITIONS OF CONTRACT

1.0 Introduction

Knls has embraced transformation of Service Delivery in Libraries by introducing technology based library services. The Virtual Library will enhance access to information sources and enable Kenyans to participate and contribute to the Nation's socio-economic transformation and development. Through the Virtual Library, knls Board will identify and avail information materials relevant to the Big Four Agenda, among others.

The upcoming National Library of Kenya building has made a provision for a Data center and Digitization Hub that will host the proposed Virtual Library.

2.0 The need

The reading culture in Kenya has been rated poor and this is attributed to limited access to credible information sources, reading habits and low purchasing power for reading materials. Most Kenyans who frequent the Public Libraries have one agenda of reading for exams. The demand for curriculum books as compared to that of other reading materials available in these Libraries is proof that few Kenyans will visit a library to read novels, story books or other inspirations information materials. Leisure and Lifelong reading habits remains a reserve for a small percentage of the population hence the need for a transformative intervention that will create interest and improve the reading habits.

It is also evident that there is a shift from usage of print books to eBooks that are accessible through various convenient platforms. The emergence of a global Digital revolution presents an opportunity for National Library of Kenya to diversify library services to include electronic systems that support integration of variety of information sources and enable quick, efficient and flexible access by citizens. Such integration would encourage reading both publicly and privately.

3.0 Project description

A **Virtual Library** is a collection of resources that are stored and organized in Digital Format with easy and affordable access, anywhere, any time. The Virtual Library will be domiciled at the ultra-modern National Library of Kenya (NLK) building and will be sustained through a business model in which knls will earn income from promoting information products (book sales or lending) and transactions on behalf of stakeholders.

The Virtual Library System encompasses four Key components namely;

- i. Hardware infrastructure
- ii. Virtual Library application systems
- iii. Virtual Library standards
- iv. Digital resources collection

4.0 Project Objectives

The main goal of the project is to create a hybrid Virtual Library System that will provide a sustainable online access to digitally produced content to Kenyan Communities. The key objectives of the project are:

- a) To avail affordable virtual library services to Kenyan communities with limited or no access to libraries through a Virtual Library System.
- b) To create a platform for sustainable lifelong reading and independent learning.
To enhance employability and wealth creation through ecommerce, for the book industry

In view of the above the bidders are encouraged to understand knls vision and the link between Virtual Library and Datacenter before proposing the data center system and other requirements

TECHNICAL SPECIFICATIONS

DATA CENTER TECHNICAL SPECIFICATIONS

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
1.	Environment monitoring system	Water Leakage Detection system	1	<ol style="list-style-type: none"> 1. The water leak detection system shall consist of a detection panel and cable running under the raised floor on the entire data center extension. 2. Water Leak detection module should have Webpage interface for viewing conditions and modifying configurations, Optimal scalability sensing cable Easy integration with existing systems. 3. Digital and addressable sense cable (with microprocessor and a high visibility LED embedded) to detect and pin-points the location of water and base liquids leaks at any point along its length. 		
		Rodent Repellent System	1	<ol style="list-style-type: none"> 1. The system proposed should protect all the equipment with relevant type of transducers. Once powered up, these transducers should produce very high frequency variable sound waves (above 20 Kilo Hertz) continuously which irritate the rodents and are forced to evacuate. The plinth area to be covered shall be based on the site survey visit. 2. The sound output should be between 80 - 110 decibels (dB) and not audible to humans. 3. The system should comply with EN 60255-26:2009 and BS EN 60255-22-7:2003 standards. 		
2.	Fire Systems	Very Early Smoke Detector System (VESDA)		<ol style="list-style-type: none"> 1. The VESDA system shall be integrated with fire panel. 2. The system shall consist of a highly sensitive LASER-based smoke detector, aspirator and filter. 3. The system shall monitor for filter contamination automatically 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<ol style="list-style-type: none"> 4. The system shall have a clean air supply to maintain laser chamber cleanliness all the time 5. Monitoring contamination of the filter (dust & dirt etc.) and to notify automatically when maintenance is required. 6. The Detector, Filter, Aspirator and Relay Outputs shall be housed in a mounting box and shall be arranged in such a way that air is drawn continuously from the fire risk area by the aspirator and a sample passed through the Dual Stage Filter and then to the detector 7. Equipment shall include a high level interface with the fire alarm system & BMS 8. All Media / filters required for smooth functioning of air and gas purification systems, VESDA systems, has to be supplied by the bidder and maintained as and when required, for the entire period of Warranty and AMC. 		
		Fire alarm and Suppression System		<ol style="list-style-type: none"> 1. Must be designed specifically for use in a data centre. 2. Must comply with BS 5839, BS EN 15004, BS 5266 and BS 5306 standards. 3. Suppression systems must use chemicals that do not damage sensitive equipment. 4. Suppression systems must not pose harm to building occupants. 5. The system should be able to automatically switch off air conditioning during the release of the extinguishing agent. 6. Addressable fire alarm panel shall be provided. 7. All voids of the rooms shall be provided with fire detection systems. 8. Inergen gas shall be used for the data center with provision for portable hand held fire suppression system. 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				9. Provision for manual actuators should be done for manual override including abort button.		
		Fire exit Signs		1. The Signs shall have capacity to absorb light in the course of normal working and glow in the dark once the lights have gone out.		
3.	Heating, ventilation and air conditioning (HVAC) System	Data Centre Cooling	N+1	1. Cooling and related equipment must be sized to account for: <ul style="list-style-type: none"> • The size of the cooling load of all equipment. • Humidification effects. • Redundancy should a unit fail. • Appropriate future growth projections. 2. Automatic monitoring and control of cooling, heating, humidification, dehumidification and air-filtration among others must be installed. 3. Criteria in determination of the air conditioner placement should be effective in addressing the current planned load, and their adaptability to change in configuration. 4. The air flow patterns of the hardware installed must be considered ensuring that units are not laid out in a manner that exhausts air from one unit into the intake of the next. 5. Cooling units shall be at least 35kW sensible cooling capacity in-row units and shall be integrated in the containment system. 6. Units shall have Variable Speed EC Fans 7. Units shall be DX air cooled with R410a refrigerant. 8. High efficiency DATA CENTER Inverter Scroll compressor with capacity modulation. 9. Cooling capacity shall be permanently optimized in a closed loop by continual monitoring of the cold aisle temperature fed back through intelligent control to adjust the mechanical unloader in the scroll compressor thus adjusting the vertical position of the orbital scroll with respect to the fixed scroll.		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<p>The orbital scroll shall always be run at full speed. Use of a drive or other methods to reduce the scroll speed to regulate capacity shall NOT be accepted.</p> <p>10. Air conditioning models should be controlled by microprocessor-based controller. It can be programmed to control the function of every device within the unit via I/O.</p>		
		Humidity/temt temperature control		<ol style="list-style-type: none"> 1. The temperature ranges to be monitored shall be +18°C~ +45°C. The humidity monitoring range should be 0 – 100% none condensing. 2. Temperature control accuracy: ±1°C, temperature change rate< 5°C/hour 3. Humidity adjustment range: 20% ~ 80%RH, humidity control accuracy: 5 %RH 4. Temperature and Humidity controls should be as recommended by the manufacturers 5. Temperature and humidity monitoring should be for both at the front and the back of the racks. 6. Monitoring of other dry contact sensors like door status sensor should be provided 		
		System monitoring		<ol style="list-style-type: none"> 1. All infrastructure systems supporting machine space services must be monitored on a continual basis. 2. Monitoring must be at a central location, that is, Network Operations Centre (NOC). 3. Monitoring system must support a master reporting console that can also be accessed remotely (including history logs) and must notify the ICT staff of alarms at the Data Centre. 4. Systems monitoring must incorporate the offsite backup location 		
		Pipe system		<ol style="list-style-type: none"> 1. Pipes must be constructed of high quality rust and coolant resistant material. 2. Pipe loops must have valves in several locations that allow sections of the loop to be isolated without interruption to the rest of the loop. 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
		Air delivery and return management		3. Pipe loops must have isolation valves for the cooling unit.		
				1. Hot aisle and cold aisle zone containment design 2. Cold air delivery must be managed such that the required amount of air can be delivered to any necessary equipment location. 3. Hot air return must be managed to extract air directly to cooling unit without mixing with cold air delivery		
4.	Security Systems	IP CCTV Surveillance System	10 Cameras One NVR	1. Adequately covering the interior and the exterior parts of the data center (no blind spots/corners) with 5 cameras—in the datacenter, 1 in staging area and 4 on the outer public areas of the data center 2. The IP based closed circuit surveillance system shall use state of the art technology and shall comply with the industry standards. 3. All the cameras proposed shall be Power over Ethernet (PoE) supported. 4. The system shall support open architecture and shall not have any proprietary equipment to ensure future compatibility with third party systems. 5. Data Centre cameras shall terminate in the data center 16 channel NVR and monitoring done at IT NOC. space 5 TB 6. All cameras shall be at least 4MP- 360 bidirectional, night-vision 7. One 55" HDR Full HD Smart Multisystem LED TV. 8. Cameras (Key features): <ul style="list-style-type: none"> a) IP Fixed Dome Camera b) 1.8" (4 MP) Progressive Scan c) 2560 x 1440 Resolution @ 30 fps d) EXIR 2.0 with up to 100 ft (30 m) or 165 ft (50 m) IR Range e) New Anti-IR Reflection Capsule f) 2.8 to 12 mm or 8 to 32 mm Motorized Varifocal Lens Options 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				g) Ultra-Low Light, 0.002 Lux (with f/1.2 Lens), Darkfighter Technology h) H.265+, H.265, H.264+, H.264 i) 5 Defined Streams and 5 Custom Streams j) 140dB WDR, Lightfighter Technology k) Alarm and Audio Input/output l) 12 VDC Accessory Output m) MicroSD Card Slot Supports 256 GB n) Anti-Fog Coating on Inside of Lens Cover o) IP67, IK10 Protection p) 12 VDC and PoE (802.3af) 9. Network Video Recorder (NVR) – Key features a) Up to 12 MP Resolution Recording b) Up to 16 IP Cameras Can Be Connected c) H.265+/H.265/H.264+/H.264/MPEG4 Compression d) HDMI Video Output up to 4K (3840 × 2160) e) Plug and Play with up to 8 or 16 Independent PoE Network Connections f) Long Distance (100 to 300 m) Network Transmission via PoE g) 80 Mbps/160 Mbps Incoming Bandwidth h) Up to 2 SATA Interfaces of 3 TB each i) Smart Search and Smart Playback j) Alarm and Audio I/O		
		Access Control/Access Actuator		1. The access control shall be placed on the data center doors. 2. The access control system shall be IP based Biometric and card reader with a keypad access control system.		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<ol style="list-style-type: none"> 3. Emergency break glass unit Heavy Duty Door closure units with an override key switch 4. Dual-door Magnetic Locks shall be installed in the doors for activation by the readers. 5. Fingerprint matching algorithm which provides less than 1.5 second user recognition 6. Scalable and with functionality to integrate with Active Directory 7. The system should maintain a record of each access granted and should give raise alarm in case of more than 3 wrong attempts 8. Audio-visual indication for acceptance and rejection of valid/invalid fingerprints 9. Streamlined and slim design for narrow spaces 10. Wiegand input & output 11. Network interface by TCP/IP or RS485 12. 1 touch a-second user recognition 13. Store 3,000 fingerprint templates, 30,000 cards and 100,000 transactions 14. Algorithm Full Access Control Features 15. Webserver 16. Anti-pass back 17. Access control interface for 3rd party electric lock, door sensor, exit button, alarm and doorbell 18. Built-in serial and Ethernet ports Built-in USB port allow 19. All operations can be done on a TFT-LCD color screen. 		
5.	Power	Power Distribution Board	2	<ol style="list-style-type: none"> 1. Separate Power Cabling for Data Center 2. Should have an 200A Automatic Transfer Switch 3. Power Distribution (Pathways should be done beneath the Raised floor) 4. Input: 3 power feeds into the building providing power to the data Centre from two different substations via different routes Include Raw power, building generator input, 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<p>Datacenter Generator input and Building ups input.</p> <p>5. Input Voltage range: 80–280 V AC, single-phase, 138–485 V AC, Generator three-phase (frequency 40-70HZ)</p> <p>6. Output: Redundant A & B power feeds to IT equipment via the two sets of UPS</p> <p>7. Output range - 220/230/240 V AC; single-phase output; a voltage system can be selected by setting a voltage level over the LCD.</p> <p>8. Overload Capacity - In normal mode, when the UPS is overloaded to a range between 105% and 125%, the UPS transfers to the bypass mode in 5 minutes if the bypass is normal, or disconnects the power output if the bypass is abnormal.</p> <p>9. In normal mode, when the UPS is overloaded to a range between 125% and 150%, the UPS transfers to the bypass mode in 1 minute if the bypass is normal, or disconnects the power output if the bypass is abnormal.</p> <p>10. In normal mode, when the UPS is overloaded to more than 150%, the UPS transfers to the bypass mode in 0.1 second if the bypass is normal, or disconnects the power output if the bypass is abnormal.</p> <p>11. Installation mode: -Rack mounted (W x D) 86 mm x 430 mm x 615 mm</p> <p>12. Surge Protection: YD/T1095-2000 YD/T944-2007</p> <p>13. The AC input meets class D surge protection requirements (differential mode and common mode: 5 kA, 8/20 μs).</p>		
		Power Cable Management (beneath the raised floor)		Install cable trays of dimension at least 250mm width under the raised floor on the back of the racks. Power cables shall be properly managed under the raised floor.		
		Batteries with inverters for Clean Power		Appropriate type and Number of Batteries with a Standby time of not less than 8hours on full load.		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
		UPS	2 sets (N+N)	<ol style="list-style-type: none"> 1. Modular 40kVA [20+20kVA] scalable to 100kVA on each autonomy 2. UPS should be On-line, double conversion 3. UPS should have efficiency up to 96.2 % from full load to 20% loading 4. Power factor of 1 (unit) and pure sinewave output waveform. 5. UPS cabling should be factory terminated and be done through the modular contained data centre racks fully integrated. 6. Distribution boards for the UPS power should be integrated in the main DATA CENTER LV board in N + N configuration from the dual UPS. 7. Supplier to ensure proper sizing of the cables and breakers. 8. UPS should have IEC/EN 62040-1/2 compliance 9. Ups rated input voltage is 415v,50/60HZ ,3ph+N+pe 10. Wide input voltage range:138 -485 Vac 11. The ups Provides Rs485 communications port for easily monitoring its parameters and status. The monitoring system should terminate at the NOC center 12. Two (N+1) 32U Cabinets with vendor neutral mounting rails that are fully adjustable and compatible with all EIA-310 (Electrical Industry Alliance Standards). 13. Battery bank should support at least 15min backup time after the state grid off. Lithium battery is preferred, and battery cell material should utilize LFP for reliability. 14. The battery cell should comply with UL1642 、IEC62619, UN38.3 and provides the certificate. Design life no less than 15 years, 5000 cycles @50% DOD. 		
6.	Computing solutions and hardware	Cabinet system	6	<ol style="list-style-type: none"> 1. 42U Cabinets with vendor neutral mounting rails that are fully adjustable and compatible with all EIA-310 (Electrical Industry Alliance Standards). 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<ol style="list-style-type: none"> 2. Cabinets must have dual access points for power and data pathways at the top and bottom of the cabinet. 3. The cabinets will be configured in a standard hot aisle cold aisle configuration. 4. The cold aisle edge of the equipment enclosures must line up with the edge of the floor tiles and have a perforated door. The front door is a single-swing double-layered glass door that prevents condensation. 5. Hot aisle: The back should be contained with glass that is manually opened. This will ensure maximum hot air return to the cooling units. 6. Hot and cold aisles must be wide enough to ensure adequate access to equipment and safe staff work space. 7. Blanking panels will be installed in any unused rack space to minimize cold/hot air mixing. 8. All cabinets must be lockable. Removable and lockable steel latched side panels 9. Rack loading must not exceed the weight rated capacity for the raised floor. 10. should have Front and rear air channels 11. Adjustable nut style mounting rails adjustable in 1 inch increments 		
		Servers	6	<ol style="list-style-type: none"> 1. 2U Rackmount server with mounting rails 2. Four (4)x Intel Xeon Gold 5218(2.3GHz/16-Core/22MB/125W)Processor (with heatsink). Minimum 4 Processor sockets. 16 cores per processor or above at minimum 2.3 Ghz base frequency. Cache memory 22MB (1 x 22MB) Level 3 cache. Industry Standard Intel C622 Chipset 3. 24 RDIMM Slots Available. Minimum Memory of 512 GB (8x64GB) and Maximum 1.54 TB 24 x 64 GB RDIMM at 2933 MT/s. 4. Network Ports 4 x 1GbE embedded. Installed Dual Port 10Gb SFP+ Converged Network Adapter 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<ol style="list-style-type: none"> 5. Two VGA connector 1 front; 1 rear 6. Upto Eight (8) USB 3.0 port connectors 7. One KVM console connector (supplies two USB 2.0 connectors, one VGA DB15 connector, and one serial port (RS232) RJ45 connector) 8. One IP Based KVM Switch 9. One Keyboard and One Pointing device (Mouse) 10. Hypervisor Operating System- Latest Version of VMware ESXi or Nutanix AHV 11. Internal storage- 300GB SAS and appropriate size of SSD Cache 12. Servers should boot from SAN for ease of operating system server replacements, ease of backup of the boot images in the SAN as part of the overall SAN backup procedures including snapshots on the boot image. 13. Raid Controllers Support Embedded Software RAID (6 Gbps) 14. Complete system management software and tools 15. Security Controller Include Trusted Platform Module that can securely store artifacts used to authenticate the platform (server) 16. Fully redundant hot swappable power and cooling for the system 17. Support remote management even when the server is off 18. Hardware failure alerting mechanism 19. Operating system for servers and VMs – Genuine Latest versions Windows server, UNIX, or Red Hat 		
		storage	2	<ol style="list-style-type: none"> 1. Dual redundant power supply 2. Must be designed to deliver Proven five 9s availability (99.999%) using Asymmetric Active-Active and Symmetric Active-Active storage processor configurations 3. At least 40 TB usable capacity across 2 tiers of disks as: 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<ul style="list-style-type: none"> • 50% of total capacity be SAS (20TB) plus 1 hot spare • 50% of total capacity be SATA (20TB) total capacity) with 1 Hot Spare • 1TB of RAW secondary cache capacity plus hot spare (scalable to 10TB) • Bidders must provide evidence of capacity calculations used. <ol style="list-style-type: none"> 4. Connectivity – minimum of 4 x 10G SFP+ Ethernet to be supplied. Support for NFS, CIFS (SMB), FTP and SFTP; FC, iSCSI and VMware Virtual Volumes (VVols) or equivalent 5. Replication – all required licenses for replication between the two devices, support for point-in-time recovery preferred. 6. Should support minimum 4 and up to 125 drives per array and should be able to scale up to 500TB 7. Must maximize efficiency through thin provisioning, Block/File Compression and Block/File De-Duplication. 8. The Storage Must provide RAID 0/1/5/6/10 and allow transparent migrations between different RAID configurations. 9. Should be capable of prioritizing Host IO requests over back-end IO array for better serviceability of servers 10. Storage system must support known virtualization vendors with storage awareness and array offloading features. 11. Equipped with Fully Automated Storage Tiering for and Array Memory Expansion capabilities. System must be able to dynamically optimize data placement across not less than 3 tiers of data storage (e.g. Flash, SAS, and NL-SAS) based on user policy and Auto-Tiering. 12. Array must support bus rebalancing for improved performance with Portable drive feature where disk drives can be moved to different enclosures without causing data loss or RAID reconfiguration 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<p>13. System must ensure data integrity is maintained at all times using dedicated cache mirroring channels, write journaling, proactive sparing, and automatic high-speed failover to ensure zero data loss.</p> <p>14. Storage system must be capable of checking and reporting disk level errors (disk sniffing).</p> <p>15. SSD Caching - The system must be able to dynamically allocate, expand, and utilize read/write cache in every storage processor with the ability to utilize SLC SSD disk drives for caching.</p> <p>16. System must have write cache persistence even during controller failure event. In such event, cache contents must be preserved indefinitely</p> <p>17. Three (3) years manufacturer's 24x7 support.</p>		
		Networking Infrastructure for the Data center and NOC	N+1	<p>1. Must seamless plug in into the existing infrastructure</p> <p>2. Fiber (minimum laser-optimized 50microns' multimode fiber with minimum of 24 cores) and UTP (Cat 6E color coded) networks setup</p> <p>3. Four (4) x POE 24-Port 10G SFP Stackable Managed Switch</p> <p>4. Appropriate Next Generation firewall(NGFW) on perimeter for the Datacenter compatible or to work with the existing Gateway firewall</p> <p>5. Cable management beneath the ceiling (N+1) separate for Fibre and UTP</p>		
		Data Center Switch	2	<p>The switch is at least 1 U high</p> <p>Power supplies and fan modules work in 1+1 mode.</p> <p>The switch supports front-to-back and back-to-front airflow.</p> <p>The switch provides a minimum of 6*40G/100GEQSFP28 interfaces</p> <p>The switch provides a minimum of 48*10GE SFP+ interfaces</p>		
		Firewall	2	<p>10 Gbps FW + SA + IPS + Antivirus throughput</p> <p>Firewall 6 * 10GE (SFP+) and 16 * GE ports</p> <p>At least 3Gbps SSL Inspection Throughput</p>		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				6,000,000 concurrent sessions and 2000,000 new sessions		
		Edge Router	2	1*10GE SFP+2*GE wan Ports ; 8*GE LAN Ports With 2 external slots.		
		Virtualization and clustering	-	<ol style="list-style-type: none"> 2 clusters with provision for unlimited VM Virtualization using VMware vRealize Operations Standard licensing. Processor licensing - license all processors supplied with the mentioned servers above (6). Supported features - Performance monitoring and analytics, capacity management and planning, remediation and troubleshooting, out-of-the-box dashboards and reporting. Automated orchestration of failover and fail-back using Site Recovery Manager Standard licensing Processor licensing - license 1 x 25 Virtual Machine Pack Supported features - centralized recovery plans, non-disruptive testing, automated disaster recovery failover, planned data Center Migration, array-based replication support, automated re-protection and failback. Manufacturer support – 3 Year Basic Support Provision of all server software Training – knowledge transfer to be provided by the bidder. 		
7.	NoC Center	Laptop	7	<ol style="list-style-type: none"> Intel® Core™ i7-1065G7 (1.3 GHz, up to 3.9 GHz, 8 MB cache, 4 cores 13.3" diagonal HD SVA Bright View WLED-backlit – Ultra Thin 16 GB DDR4-2666 SDRAM (2x8GB) 512 GB Intel SSD + 32 GB Intel Optane memory Licensed Windows 10 pro and Microsoft Office 2019 Professional Full-size keyboard with separate Numeric keypad and optical Mouse Wide Vision HD Camera with Dual digital microphone 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				8. Integrated 10/100/1000 GbE LAN 9. 1 headphone/microphone combo; 2 USB 3.1 Gen 1 Type-A (Data Transfer Only); 1 USB 3.1 Gen 1 Type-C (Data Transfer Only, 5 Gb/s signaling rate); 1HDMI Port 10. 1 multi-format SD media card reader 11. Dual speakers, HP Audio Boost 12. Intel 802.11b/g/n/ac (1x1) Wi-Fi and Bluetooth 5 Combo 13. Supports battery fast charge to last upto 8hours 14. 1-year warranty 15. Backpack carrier bag for the laptop		
		LAN for NOC Center		Telephony a) Hybrid IP PBX switch with VoIP and video features. Up to 25 extensions b) 4 GSM gateways with SIM cards for the key providers c) Executive Video-phone IP phones with LCD display (7 pcs) d) Video conference camera and microphone compatible with Google Meet. Call accounting software for the proposed IP PBX system.		
		System and Monitoring		All Monitoring and management system for various datacenter components must terminate at the NOC Center One 55" HDR Full HD Smart Multisystem LED TV wall mounted LED screen for status display for all systems and video conferencing Provision of a data center monitoring software. <u>Data Center Monitoring system</u> 1. Able to integrate with and display real-time performance of the following third party systems on the screen with <ul style="list-style-type: none"> Air Conditioning performance Access control CCTV system in place Fire suppression system 		

No	Item Group	Item description	QTY	Technical Specifications	Bidders Response	Responsive Non Responsive
				<ul style="list-style-type: none"> Environment Monitoring systems Power systems (UPS and others) <p>2. Should be able to monitor real-time health status, performance, fault and availability of Multi-vendor computing equipment and network monitoring specifically but not limited to:</p> <ul style="list-style-type: none"> Branch networks Servers SAN Storage Network active devices <p>3. Should provide automated forecasting, alerting, and reporting on all monitored aspects</p> <p>4. Should provide Customizable performance and availability reports</p> <p>5. Should have advanced alerting systems via email, SMS for all monitored systems and equipment</p> <p>6. Adequate training should be provided for the monitoring systems and support of the system should be provide for at least one year from the date of commissioning.</p>		
8.		Training		<p>Adequate hands on Training for the NOC officers on each of systems installed and certification for four officers' in all aspects of the data center for 4 weeks.</p> <ul style="list-style-type: none"> Certified VMware professional or equivalent Certified Data Centre Management Professional or equivalent 		

SCHEDULE OF REQUIREMENTS

Bidders are required to make a comprehensive list of all the components. It is the responsibility of the bidder to provide all critical components in sufficient quantities. Bidders are required to take to the technical specifications in section VII and note of the following requirements among others:

No	Description	Quantity
Supply, Installation, configuration, testing and commissioning of Environment monitoring system		
1.	Water Leakage Detection system	Bidder specify
2.	Rodent Repellent System	Bidder specify
Supply, Installation, configuration, testing and commissioning of Fire Systems		
3.	Very Early Smoke Detector System (VESDA) terminating at the NOC	Bidder specify
4.	Fire alarm and Suppression System	Bidder specify
5.	Fire Exit Signs	Bidder specify
6.	Training on the fire system	Bidder specify
Supply, Installation, configuration, testing and commissioning of HVAC System		
7.	Data Centre Cooling system (Air conditioning)	N+1
8.	Humidity and temperature control system	Bidder specify
9.	Cooling, Humidity and temperature monitoring system terminating at the NOC	1
10.	Pipe system	Bidder specify
11.	Air delivery and return management	Bidder specify
12.	Training on the HVAC system	Bidder specify
Supply, Installation, configuration, testing and commissioning of Security Systems		
13.	IP CCTV Surveillance System Termination at the NOC	Bidder specify
14.	PoE IP CCTV Cameras 4MP, 360 Degree with clear Night Vision	10
15.	Access Control/ system Access Actuator termination at the NOC	Bidder specify
16.	16 Channel NVR	1
17.	Training on the Surveillance and the actuator system	Bidder Specify
Supply, Installation, configuration, testing and commissioning of Power systems		
18.	Power Distribution Board and system terminating at the NOC	1
19.	Power Cable tray (beneath the raised floor)	Redundant
20.	Batteries with inverters for Clean Power	Bidder specify
21.	20Kva x 4 Rack mountable Uninterruptable Power supply Unit configured as two sets (redundancy) stacked in 32u Cabinets	4
22.	Training on power systems	Bidder specify
Supply, Installation, configuration, testing and commissioning of Network infrastructure within the datacenter and NOC		
23.	Fiber cable (minimum laser-optimized 50microns' multimode fiber with minimum of 24 cores)	Bidder specify

24.	Data Cable Management beneath the ceiling separate for UTP and Fibre	N+1
25.	CAT 6E color coded Ethernet Cable	Bidder specify
26.	POE 24-Port 10G SFP Stackable Managed Ethernet Switch	4
27.	Patch Cords	Bidder Specify
28.	Next Generation firewall(NGFW) on the Perimeter for the Datacenter compatible or to work with the existing Gateway firewall	Bidder specify
Supply, Installation, configuration, testing and commissioning Computing solutions and hardware		
29.	Cabinet system configured as Hot and cold Aisle containments	6
30.	UPS	N+N (2 sets)
31.	Servers	6
32.	Data Centre switch	2
33.	Firewall	2
34.	Edge Router	2
35.	Virtualization and clustering	Bidder specify
36.	40TB (Usable space) San Storage or equivalent	1
37.	Training on Virtualization and other Computing systems	Bidder specify
Setup, configuration and Equipping of Network operations office		
38.	Laptop	7
39.	LAN for NOC Centre and IP telephone	7
40.	55" HDR Full HD Smart Multisystem LED TV and accessories	2
41.	Datacenter Monitoring system	Bidder specify

Bidders to submit requirements compliance in a separate sheet

TERMS OF REFERENCE

The bidder is required to offer total solution for the comprehensive responsibilities of design, supply, installation, commissioning, warranty support, and post warranty comprehensive Annual Maintenance Contract (AMC) of the total solution comprising of hardware and software along with perennial licenses as per scope of work.

The Bidder shall provide all necessary infrastructure components that would be necessary as per the defined requirements and maintain the same throughout the warranty and Annual Maintenance Contract period.

Knls requires the Bidder to make a visit to the site prior to submission of bid.

SCOPE OF WORKS

knls will provide the room for the Data Centre setup at our Upper hill Centre with dimensions at least 15ft by 20ft. The Bidder shall execute the entire Scope of Work covered under this tender on a turnkey basis including supply, installation, implementation, testing, commissioning and warranty services for equipment supplied as per the proposed design and to meet the desired objectives. The broad scope of work of the project will include, but is not limited to, the following activities:

SITE PREPARATION:

Visit and study the civil works and other infrastructure available on the site and perform required civil works essential for installing/implementing various Data Centre Infrastructure systems / components under the scope of this tender.

Supply / create Infrastructure comprising of civil works and interiors as per the detailed technical specifications provided in Technical specification section. The selected Bidder will only use the acceptable materials and brands with good workmanship to provide Class A finish which is long lasting and easily maintainable.

Supply / create Infrastructure facilities comprising of AC, UPS, Electrical works, Fire Safety Systems including Very Early Smoke Detection Apparatus, Access Control, CCTV Surveillance etc., as per the detailed specifications provided in the Technical specification section.

Installation and integration shall mean to install and configure every component and subsystem component(s), integrating the Building Management System with the required components, integrating the facility components.

The training requirements as mentioned in below training section shall be completed after the final acceptance test; the schedule shall be decided in consultation with knls

THE UAT (USER ACCEPTANCE TESTING)

UAT shall include all hardware and software items installed at the data center as per the layout drawings and technical specifications and availability of all systems shall be verified. The bidder shall be required to demonstrate all the features / facilities / functionalities. The bidder will arrange the test equipment required for performance verification and will also provide documented test results.

The bidder shall provide documentary proof with brochures of back-to-back support with OEMs of the third party products. These include UPS, Precision AC, Fire detection and Suppression System, VESDA System, etc., before UAT sign off

TRAINING AND CONTINUOUS KNOWLEDGE

The Bidder shall conduct onsite training to familiarize Knls's technical team with the operations and maintenance procedures of the Data Centre. The training shall cover all the systems involved in the build of the Data Centre. Training material shall be provided (hard copy and soft copy), which shall include the presentations used for training and also the required relevant documents for the topics being covered. The best solution is only as good as it has been configured. To this end, Knls will require continuous training on the solution proposed and industry training to keep up with the growing trends.

Certification training must be provided at a vendor approved Authorized Training Centre (ATC). Knowledge Transfer during deployment and handover will be critical.

DOCUMENTATION

The Bidder shall be responsible for preparing process documentation related to the operation and maintenance of each component of the Data Centre. The prepared process document shall be formally approved and signed off by knls

All documentation (as built drawings, equipment labelling details, cable routes, manuals, data sheets, software, maintenance schedule, communication and escalation details etc.) related to the Data Centre shall be completed and submitted to knls, in hardcopy, before the final acceptance test. Documentation will include but not limited to:

1. **Operation and Maintenance Manuals:** Operating Manuals will comprise instructions on equipment safety checks, startup and close- down procedures, daily operation and full

descriptions of operating features. Diagrams will show the full diagrammatic network, Power structures, and physical layout of the system and components.

Maintenance Manuals will comprise full descriptive and maintenance details on each and every item of equipment supplied. Suppliers and spare parts references, contacts, telephone numbers, and addresses will be supplied where relevant.

2. **Wiring Schematics:** The contractor will submit wiring schematics, either on A1 or A0 size of drawing sizes. Detailing individual subsystem-wise cabling including data and electrical cabling and will be appropriately color coded. The layout shall detail location of all components.
3. **Equipment Configurations:** Configuration details of individual equipment will be recorded and presented as a part of the documentation.

All the documents will be presented in hard copy (2 sets) and soft copy (2 sets) formats.

The Bidder shall be responsible for preparing documentation required for certification wherever applicable or as required by knls.

PREVENTIVE MAINTENANCE

The bidder shall carry out scheduled preventive maintenance activities to keep all the Data Centre Infrastructure systems in optimum working conditions. Preventive maintenance should be carried out at least once in every quarter, which includes but is not limited to:

- a) Checking for any loose contacts in the cables and connections.
- b) Run diagnostics tests on equipment
- c) Cleaning and removal of dust and dirt from the interior and exterior of the equipment.
- d) Updating wiring and connection diagrams, whenever modifications are made.
- e) Checking and listing all wear and tear of the equipment and site environment.
- f) Ensuring no flammable material is present in Data Centre area.
- g) Clearing up of any unnecessary items / spares.
- h) The bidder shall maintain records of all maintenance (preventive & breakdown) of the systems and shall maintain a logbook on site that may be inspected by KNLS at any time.
- i) The bidder shall stock and provide adequate onsite and offsite spare parts and spare components to ensure that the Uptime commitment as per the SLA is met.

ADDITIONAL NOTES TO BIDDERS

DAMAGE TO EXISTING EQUIPMENT

Damage attributable to the Contractor (or the Contractor's agents and/or assignees) to any of the existing plant or equipment or systems will be repaired or replaced at the Ministry's specification. All costs associated with such repairs and/or replacements will be borne by the Contractor on a cost-plus basis.

VARIATION OF SCOPE OF WORK

Knls reserves the right at the time of the contract to vary the scope of the work, including amending the quantity of the data points, goods and materials. Such amendments should not result in any changes to any unit prices, other than where pricing was expressly specified to be subject to discount or other reduction on account of higher volume.

BIDDER'S RESPONSIBILITIES

The bidder shall do the work with due care and diligence and in accordance with the contractual agreement terms as signed in the contract and in strict adherence to best industry practices.

WARRANTY AND SUPPORT

The Bidder shall be required to give a warranty of 3 years. The Bidder shall warrant that all the work installations and equipment are free from defects and if any defect is discovered; then the Bidder shall take immediate action to replace the damaged device as required during the warranty period.

The support period for the infrastructure shall be 3 years' warranty

PRICE SCHEDULE

No	Description	Quantity	Unit price	Total Price (VAT Inclusive)
Supply, Installation, configuration, testing and commissioning of Environment monitoring system				
	Water Leakage Detection system	Lot		
1.	Rodent Repellent System	Lot		
Supply, Installation, configuration, testing and commissioning of Fire Systems				
2.	Very Early Smoke Detector System (VESDA) terminating at the NOC	Lot		
3.	Fire alarm and Suppression System	Lot		
4.	Fire Exit Signs	Lot		
5.	Training on the fire system	Lot		
Supply, Installation, configuration, testing and commissioning of HVAC System				
6.	Data Centre Cooling system (Air conditioning)	N+1		
7.	Humidity and temperature control system	Lot		
8.	Cooling, Humidity and temperature monitoring system terminating at the NOC	1		
9.	Pipe system	Lot		
10.	Air delivery and return management	Lot		
11.	Training on the HVAC system	Lot		
Supply, Installation, configuration, testing and commissioning of Security Systems				
12.	IP CCTV Surveillance System Termination at the NOC	Lot		
13.	PoE IP CCTV Cameras 4MP, 360 Degree with clear Night Vision	10		
14.	Access Control/ system Access Actuator termination at the NOC	Lot		
15.	16 Channel NVR	1		
16.	Training on the Surveillance and the actuator system	Lot		
Supply, Installation, configuration, testing and commissioning of Power systems				
17.	Power Distribution Board and system terminating at the NOC	1		
18.	Power Cable tray (beneath the raised floor)	Redundant		
19.	Batteries with inverters for Clean Power	Lot		
20.	20Kva x 4 Rack mountable Uninterruptable Power supply Unit configured as two sets (redundancy) stacked in 32u Cabinets	4		
21.	Training on power systems	Lot		

Supply, Installation, configuration, testing and commissioning of Network infrastructure within the datacenter and NOC

22.	Fiber cable (minimum laser-optimized 50microns' multimode fiber with minimum of 24 cores)	Lot		
23.	Data Cable Management beneath the ceiling separate for UTP and Fibre	N+1		
24.	CAT 6E color coded Ethernet Cable	Lot		
25.	POE 24-Port 10G SFP Stackable Managed Ethernet Switch	4		
26.	Patch Codes	Lot		
27.	Next Generation firewall(NGFW) on the Perimeter for the Datacenter compatible or to work with the existing Gateway firewall	Lot		

Supply, Installation, configuration, testing and commissioning Computing solutions and hardware

28.	Cabinet system configured as Hot and cold Aisle containments	6		
29.	UPS	N+N (2 sets)		
30.	Servers	6		
31.	Data Centre switch	2		
32.	Firewall	2		
33.	Edge Router	2		
34.	Virtualization and clustering	Lot		
35.	40TB (Usable space) San Storage or equivalent	1		
36.	Training on Virtualization and other Computing systems	Lot		

Setup, configuration and Equipping of Network operations office

37.	Laptop	7		
38.	LAN for NOC Centre and IP telephone	7		
39.	55" HDR Full HD Smart Multisystem LED TV and accessories	2		
40.	Datacenter Monitoring system	Lot		
	Total Amount (Inclusive of 14% VAT and other applicable levies)			

Note: All prices shall be documented only in the financial bid document(s)/Price Schedules/Form of Tender submitted in a separate envelope.

TENDER FORMS

To: Kenya National Library services
NAIROBI. Kenya.

Gentlemen and/or Ladies:

Having examined the Tender documents including, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to **Supply, Delivery, Configuration, Testing and Commissioning of Virtual Library Tier 2 Data Center**. in conformity with the said Tender documents for the sum of

_____ of
or such other sums as may be ascertained in accordance with the Schedule of Rates attached herewith and made part of this Tender.

We undertake, if our Tender is accepted, to provide the service in accordance with the delivery schedule specified in the Schedule of Requirements.

If our Tender is accepted, we will obtain the guarantee of a bank in a sum equivalent to 10% percent of the Contract Price for the due performance of the Contract, in the form prescribed by the Employer.

We agree to abide by this Tender for a period of 120 days from the date fixed for Tender opening under Clause 5 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.

Until a formal Contract is prepared and executed, this Tender, together with your written acceptance thereof and your notification of award, shall constitute a binding Contract between us. We understand that you are not bound to accept the lowest or any Tender you may receive.

Dated this _____ day of _____ 2020
[signature] [in the capacity of]

Duly authorized to sign Tender for and on behalf of _____

I: TENDER SECURITY FORM

(To be on the Letterhead of the Bank)

Whereas _____ (hereinafter called "the
Tenderer") has submitted its tender date _____ for the provision of
_____ (hereinafter called "the Tender").

KNOW ALL PEOPLE by these presents that
WE

_____ of _____ (hereinafter called "the Bank"), are bound unto _____ (hereinafter called "the Employer") in the sum for which payment well and truly to be made to the said Employer, the Bank binds itself, its successors, and assigns by these presents. Sealed with the Common Seal of the said Bank this _____ day of _____ 2020.

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
If the Tenderer, having been notified of the acceptance of its Tender by the Employer 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 Employer up to the above amount upon receipt of its first written demand, without the Employer having to substantiate its demand, provided that in its demand the Employer 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 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)

CONTRACT FORM

THIS AGREEMENT made the _____ day of _____ 2020 between Kenya National Library Services of Kenya (hereinafter called "the Employer") of the one part and _____ (hereinafter called "the Contractor") of the other part:

WHEREAS the Employer invited tenders for Tender for Supply, Delivery, Configuration, Testing and Commissioning of Virtual Library Tier 2 Data Center and ancillary services, viz., Provision of Goods and has accepted a tender by the Contractor for the provision of the supply in the sum of

_____ (words) _____ (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 General Conditions of Contract;
 - (d) the Special Conditions of Contract; and
 - (e) the Employer’s Notification of Award.
3. In consideration of the payments to be made by the Employer to the Contractor as hereinafter mentioned, the Contractor hereby covenants with the Employer to provide the services and to remedy defects therein in conformity in all respects with the provisions of the Contract
4. The Employer hereby covenants to pay the Contractor in consideration of the provision of the Goods and services and the remedying of defects therein, the Contract Price or such other sum as may become payable under the provisions of the contract at the times and in the manner prescribed by the contract.

IN WITNESS whereof the parties hereto have caused this Agreement to be executed in accordance with their respective laws the day and year first above written.

[name of bank]

[address]

[date]

MANDATORY CONFIDENTIAL BUSINESS QUESTIONNAIRE

(Must be filled by all applicants or Tenderers' who choose to participate in this tender)

Name _____ of
Applicant(s).....

..

You are requested to give the particulars in Part 1 and either Part 2 (a), 2 (b) or 2 (c), whichever applies to your type of business. Part 2 (d) to part 2 (i / j) must be filled. You are advised that giving wrong or false information on this Form will lead to automatic disqualification of your tender or termination of your contract or debarment of your firm at your cost.

Part 1 – General

Business Name.....Certificate of Incorporation / Registration
No.

.....Location of business premises:

CountryPhysical address
.....Town

.....

Building.....

Floor..... Plot No.

.....

Street / RoadPostal Address

Postal / Country Code..... Telephone No's.....

Fax No's.E-mail address

Website

Contact Person (Full Names) Direct / Mobile No's.....

Title Power of Attorney (Yes / No)

If yes, attach written document.

Nature of Business (Indicate whether manufacturer, distributor, etc)

.....

(Applicable to Local suppliers only)

Local Authority Trading License No. Expiry Date

Value No.....	Added	Tax
------------------	-------	-----

Value of the largest single assignment you have undertaken to date (US D/Kshs)
.....

Was this successfully undertaken? Yes / No. (If Yes, attach reference)

Name (s) of your banker
(s)
.....

..... Branches Tel. No's.
.....

Part 2 (a) – Sole Proprietor (if applicable)

Full names

Nationality..... Country of Origin.....

.....

Company Profile (Attach brochures or annual reports in case of public company)

Part 2 (b) – Partnerships (if applicable) Give details of partners as follows:

Full Names Nationality Citizenship Details Shares

1.

2.

Company Profile (Attach brochures)

Part 2 (c) – Registered Company (if applicable - as per the CR12 form)

Private or public

Company Profile (Attach brochures or annual reports in case of public companies) State the nominal and issued capital of the Company

Nominal	Kshs
.....	
Issued	Kshs
.....	

List of top ten (10) shareholders and distribution of shareholding in the company. Give details of all directors as follows: - Full Names Nationality Citizenship Details Shares

1.....

2.....

Part 2 (d) – Debarment

I/We declare that I/We have not been debarred from any procurement process and shall not engage in any fraudulent, corrupt, coercive and obstructive acts with regard to this or any other tender by the KNLS and any other public or private institutions.

Full

Names.....

Signature.....

....

Dated thisday of20..... In
the capacity

of.....

Duly authorized to sign Tender for and on behalf of

Part 2 (e) – Bankruptcy / Insolvency / receivership.

I/We declare that I/We have not been declared bankrupt or insolvent by the competent Authorities in Kenya and neither are we under receivership:

Full Names.....

Signature

Dated thisday of20..... In the
capacity of

.....

Duly authorized to sign Tender for and on behalf of

Part 2 (f) –

Criminal

Offence I/We,

(Name (s) of

Director (s)):-

a)

b)

Have not been convicted of any criminal offence relating to professional conduct or the making of false statements or misrepresentations as to its qualifications to enter into a procurement contract within a period of three (3) years preceding the commencement of procurement proceedings.

Signed.....

....

For and on behalf of M/s

In the capacity of

Dated thisday of2020

Suppliers' / Company's Official Rubber Stamp

Part 2 (g) – Conflict of Interest

I/We, the undersigned state that I / We have no conflict of interest in relation to this procurement:

a)

b)
 For and on behalf of M/s
 In the capacity of
 Dated this day of2020
 Suppliers' / Company's Official Rubber Stamp

Part 2 (h) – Interest in the Firm:

Is there any person/persons in Knls or any other public institution who has interest in the Firm?
 Yes/No (Delete as necessary) Institution

 (Title) (Signature) (Date)

Part 2(i) – Experience:

Please list here below similar projects accomplished or companies / clients you have supplied with similar items or materials in the last **Seven** years.

	Company Name	Country	Contract/Order No.	Value	Contact person (Full Names)	E-mail address	Cell phone No.
1							
2							

Part 2 (i or j) – Bank account details:

AGPO firms must provide evidence from their bank that the account to which Knls shall make payment has a youth or a woman or a PWD listed in the CR12 form/partnership deed/sole proprietor certificate as a MANDATORY signatory of that account, - Sec.157 (11) of PPADA:

Account No.....Name of the person(s) in the CR12 form OR in the partnership deed
 OR in the sole proprietor
 certificate...../
 ID No (s)...../.....Signature and stamp of the authorized
 Banker Representative.....Date.....

Part 2(j or k) – Declaration

I / We, the undersigned state and declare that the above information is correct and that I / We give knls authority to seek any other references concerning my / our company from whatever sources deemed relevant, e.g. Office of the Registrar of Companies, Bankers, Clients etc.

Full names
Signature.....
For and on behalf of M/s
In the capacity of
Dated thisday of20...
Suppliers' / Company's Official Rubber Stamp

SITE VISIT CERTIFICATE

This is to certify that (IN BLOCK LETTERS)

Name:

Cell Phone No:.....

Email:.....

Being the authorized representative of (IN BLOCK LETTERS)

M/s [Firm/Company]

.....

Official Tel No

Official Email.....

Visited on..... DATE.....

OFFICIAL USE: -

Signed.....

Name of Knls Representative and Designation

.....

NOTE:

1. This form is to be completed at the time of site visit.
2. Bidder to bring along with him duly filled site visit certificate during the site visit.