



Terms of Reference for provision of consulting services for the preparation of project Concept, detailed design, and Construct a New Mechanical Ventilation System for the Bioinformatics and Training rooms at the IDI MKC building.



PART 1: BACKGROUND:

IDI is an independently governed institute within the College of Health Sciences at Makerere University whose *mission is "To strengthen health systems in Africa, with a strong emphasis on infectious diseases, through research and capacity development."* IDI has six operational areas through which it works to achieve its mission: Prevention, Care and Treatment, Training, Research, Laboratory services, Health System Strengthening, and Global Health Security.

IDI is desirous to hire a firm to carry out the above assignment, also detailed in the terms of reference. Successful firm(s) may be called for a meeting with the Institute management prior to the contract award to provide more information.

Any resulting contract shall be subject to the terms and conditions detailed in this Request for Proposal. The Institute reserves the right to add any terms and conditions in the resultant contract.

Address all inquiries and clarifications to the Procurement Manager

Shadia Namaganda

**Infectious Diseases Institute — Knowledge Centre Building,
Makerere University Main Campus**

P.O. Box 22418 | Kampala | Uganda

Phone: +256-(0)312250500 | Mobile: +256- (0)702300635

Email: snamaganda@idi.co.ug

In case you do not hear from the Institute within one week after the submission of your response/ proposal please contact the procurement section for any inquiries

You are advised to respond to this solicitation by submitting your firm's offer or indicating your inability to participate. Such acknowledgment should be sent to the Procurement Manager.

PART 2: PROPOSAL PREPARATION PROCEDURES

Preparation of Proposals:

You are requested to prepare your proposal by completing and returning:

1. The Bid Submission sheets in stated formats;
2. Documents evidence indicating your eligibility as a company (MOU & Articles of Association, Certificate of Incorporation, Trading License, membership to a professional body, and certificate from the relevant regulatory authority)
3. Tax registration and compliance certificates for the applicable taxes, should be addressed to IDI in response to this bid. A hard copy shall be attached to the Bid submitted.



4. Any other relevant information that you may deem relevant to the Institute in this RFP. In required formats

There will be a scheduled site visit on **Tuesday 18 July, 2023** at Infectious Diseases Institute — Knowledge Centre Building, Makerere University Main Campus for all interested consultants at exactly **11:00Hrs** (*please get to the University earlier to clear security*)

Sealing and marking of Proposals:

Proposals should be sealed in two separate envelopes; one marked as “Financial Proposal”, giving a detailed cost structure for this assignment and the other as “Technical Proposal” giving a detailed process of handling the assignment. Each of the above bids shall clearly be marked with the procurement subject above. Envelopes should be sealed in such a manner that opening and resealing cannot be achieved.

PART 3: PROPOSAL EVALUATION AND AWARD CRITERIA

a) Opening of Proposals;

Responses shall be opened and evaluated by the IDI select committee and bidders shall be informed of the results within one month after the deadline. The evaluation committee shall be a multidisciplinary committee with representation from different sections of the institute.

b) Evaluation of Proposals:

The evaluation of Proposals shall be based on compliance to the criteria as described below;

1. Administrative compliance (Eligibility) to the bid preparation and submission procedures specified in this solicitation document. Responses that do not meet administrative compliance procedures shall be rejected and shall not proceed to the opening stage.
2. Adequacy and quality of the proposed methodology, and work plan in responding to the Terms of Reference (TORs) following the structure outlined in form **T-2, and T-3 format**
3. Key staff members of the organization and staff to be assigned to this assignment with relevant qualifications and experience. Attach profile and evidence of qualification/certificates. Use the form **T-4 template**.
4. Evidence of experience in providing this service. The number of years completed in offering this service, clients served either directly as a provider or under subcontract-evidence of contracts/Purchase Orders and Recommendation letters from a minimum of three previous clients served.
5. Proposed budget to carry out the assignment in a format outlined in form **F-1**. Please provide a structured cost and applicable taxes as indicated in form **F-2**. Note that IDI



shall withhold 6% off the total amount before VAT and this shall be remitted to your URA account/TIN.

6. Proposals shall be ranked according to their combined technical and financial scores

c) Best evaluated bid:

Proposals will be evaluated by a panel and the most qualified firm(s) may be requested to make oral presentations. There is no expressed or implied obligation for IDI to reimburse responding firms for any expenses incurred in preparing proposals in response to this request.

The best-evaluated bid shall be one which is substantially responsive to the evaluation criteria stated above and shall be recommended for the award of the contract.

d) Award of contract:

Award of the contract shall be by signing of a Purchase and detailed contract terms between the institute and the Provider/consultant.

e) Payment:

Payments shall be made per deliverable as agreed during the post-award negotiation and or also as stated in the proposal.

f) Right to Reject:

The Institute reserves the right to accept or reject any Proposal or to cancel the bidding process and reject all Proposals at any time prior to contract award.

PART 4: TERMS OF REFERENCE FOR CONSULTANCY SERVICES FOR THE SAID AREAS:

a) African Center of Excellence and Bioinformatics (ACE), and training rooms Facilities

The African Center of Excellence in Bioinformatics & Data Sciences at the Infectious Diseases Institute (IDI) Knowledge Centre, Makerere Office is professionally curated long term (MSc & PhD) and short term (Certificates) academic programs, as well as research and development support units. The facility is located on the ground floor at IDI-MKC building with occupied area of 273m². The space is a dedicated High-Performance Computing cluster, a Tele-learning center, a collaborative room with collaborative spaces, and a Virtual Reality room for the latest 3D & VR pedagogical and diagnostic approaches.

b). The training rooms

The training rooms are used by the IDI training department to offers advanced and specialized courses in the management of HIV and related infectious diseases for the health workers and health managers **the rooms cover an area of approx. 273sqm with average daily occupancy of 250 trainees**



The building is managed and operated by the Operations section comprising the Engineering and facilities teams under Finance and Administration Department. The team undertakes the necessary maintenance and repair works for the installations in the facilities.

There have been concerns by the occupants in these facilities about inadequate ventilation (heat, poor aeration), especially during the dry season.

Although some of the affected areas have the wall splint units installed (Bio-informatic and training rooms), there have been concerns about air recycling with no fresh air supply.

It's upon the above that we intend to hire a firm to fully develop, design and detail, and construct/install a chosen option for mechanical ventilation.

b) Overview of the ventilation improvement project

Key project components

The project aims at providing long-term solutions to the ventilation challenges to the **Bioinformatics and training rooms** at the IDI MKC Facility and is based on a long-term rehabilitation and improvement strategy for the facility. It's closely linked to airflow and ventilation to eliminate workplace airflow challenges as well as Global warming potential improvement on building use. The implementation (construction/installation) may be on a phased approach based on the current usage of the facility and depending on cost implications.

Objectives

The general objectives of the Ventilation improvement project are;

- a) To improve staff comfort, health, and productivity
- b) To provide long-term solutions for Ventilation challenges.
- c) Reduce greenhouse emissions from building use
- d) To improve efficiency by reducing the operational, maintenance, and energy costs in relation to the performance requirements of the facilities

The project has been divided into two parts.

- a) Part 1: Assessment of the most effective Mechanical ventilation system, for selected areas of **Bioinformatics and training rooms** based on the client's needs for the building.
- b) Part 2: Design, construct/install mechanical ventilation systems for the selected areas.

c) General scope of the work



The general scope of the work includes; the identification of the system, design, and installation/construction the identified mechanical ventilation system to improve the existing ventilation and air circulation at MKC facility selected areas of **Bioinformatics and Training rooms**. The current ventilation/cooling mechanisms for the said areas outlined in Table 1. The consultant will be responsible for proposing a system, design, and supervisory aspects of the project.

Table 1: Current Ventilation Mechanisms for Bioinformatics and Training rooms

No.	Ventilation/cooling mechanisms	Space usage	Approx. floor Area (m2)	challenges
1	Wall split units (Air conditioning)	Bioinformatics	255	<ul style="list-style-type: none"> • High load for wall split units • No fresh air supplies • Very low air exchange rate per hour
2	Wall split units (Air conditioning) and Natural ventilation through the windows	Training rooms	The rest of the building 255	<ul style="list-style-type: none"> • High load for wall split units • No fresh air supplies • Very low air exchange rate per hour • Inadequate air follows into rooms with top-hang windows and shared open sitting area

d) Scope of required Consulting services

The required consultancy services are for proposing, detailed engineering design, tendering, and works supervision for the Mechanical ventilation system. The consultant shall carry out detailed design and installation/construction supervision of the full scope of works.

The scope of services has been broken down into the following components for the purpose of clearly defining the deliverables required from the Consultant

- a) Data review/preliminary studies and investigation and identification of the best option
- b) Detailed Engineering design
- c) Undertaking Environmental impact assessment
- d) Tendering
- e) Construction supervision and superintendence over DNP

Data Review /preliminary studies and Investigation

The preliminary data review and investigations stage is aimed at collecting information that will form the basis for the design considering the needs, circumstances, optimization of operation, maintenance, and investment costs. The Consultant shall commence by obtaining



information from physical verification of the facilities, and reviewing all available documents, data, information, and reports about the buildings and ventilation. The Consultant shall be expected to review and comment on the available reports and shall undertake an independent verification and assessment of the information and recommendations therein. Alterations or further alternative proposals other than those proposed in this ToR shall be brought to the attention of the Client and agreed upon prior to implementation.

The Consultant shall be availed with the airflow and ventilation reports and shall identify additional data and literature that is supporting the undertaking of the assignment. Options for mechanical ventilation shall be presented to the client. Possibilities of using some of the existing facilities shall also be considered. This stage should not last more than two (2) weeks. These all shall be presented in the Inception Report that shall inform the Client of what proposed solution to proceed with.

Detailed Engineering Design

This shall be done based on the selected options for mechanical ventilation from the inception report. The consultant shall continue with the preparation of detailed design and investigation of proposed works. These shall include but not be limited to the following;

- a) Perform ventilation calculations for ventilations in the selected areas of the premises. These shall be performed based on recognized codes, standards, or requirements. This will also follow appropriate procedures, documentation, and all to be filled.
- b) Perform Building heat gain/loss load calculations for ventilation systems. Proper duct sizing, considering recommended air temperature and humidity limits (Ventilation load)
- c) Perform proper equipment sizing to satisfy the building load requirements at design conditions.
- d) Assess the possibilities of incorporating the existing ventilation installation into the proposed new system
- e) Assessment of Original Equipment Manufacturer data and total loading requirements. Provisional dehumidification equipment with a mechanical ventilation system to cater for excess latent is acceptable.
- f) Perform design of all permanent works, and all drawings must be detailed and ready to be issued for construction and installation. Missing items/errors in the drawing shall be included or corrected at the consultants' cost.



- g) Mechanical and Electrical components of the design shall consider control requirements, power usage, optimization, and automation of the control of the system.
- h) Propose interventions required to mitigate deterioration of air quality within the distribution system
- i) Provide cost estimates of the selected option that shall include operational, maintenance, and investment cost as a minimum.
- j) Describe risk management issues that will need to be considered at the project implementation stage, during operation, and update them during implementation.

Undertaking Environmental impact assessment (EIA)

The Consultant shall undertake ESIA studies for the proposed works to incorporate but not be limited to the following aspects:

- a) Identification of laws, regulations, guidelines, and relevant institutions that govern the conduct of the EIA.
- b) Collection of environmental and social baseline data against which potential impacts are assessed
- c) Preliminary environmental and social assessment including air quality, noise, etc.
- d) Determination of the potential environmental impacts of the project during the construction and post-construction phases, i.e. positive and negative impacts, direct and indirect impacts, immediate and long-term impacts, and unavoidable or irreversible impacts. Determination of potential impacts of the project during the construction phase for issues identified, measures for mitigation, and reinstatement shall be proposed in an Environmental Management Plan (EMP), on the basis of which the Contractor shall be advised on the eventual mitigation measures. These measures shall then be incorporated into the Operational and Maintenance Manual.
- e) The consultant should note that the contractor is expected to meet all the requirements of the Environmental Social Health and Safety (ESHS) requirements. ESHS specifications shall form part of the works' tender documents.

Tendering

The Consultant shall facilitate the generation of a short list of qualified contractors for the client's approval and subsequent detailed tendering process. This should ensure to have the potential Contractors are shortlisted by the time the detailed designs and tender documents are finalized.

During and after the detailed design, the Consultant shall prepare tender documents, specifications, bills of quantities, and engineering cost estimates for the proposed works.

The consultant shall be expected to propose an appropriate packaging of the project into a maximum of two parts for easy execution of the works.



The Consultant shall include in the tender documents, a requirement that the Contractor has to follow strictly the regulations and laws regarding environment, social issues, health, and safety, which shall be continually monitored by the Consultant and client

The Consultant will assist the Client in the procurement of a Contractor including prequalification and short-listing, responding to bidders' queries and requests for clarifications, preparing and participating in bid evaluation and preparation of evaluation reports, preparing for and participating in contract negotiations, and compilation of contract documents ready for signature.

Construction supervision and superintendence over DNP

The Consultant shall manage the Works pre-commencement period, and supervise the execution of the work after signing the works Contract. The Consultant shall be required to execute all the activities necessary for the successful commencement and execution of the works contract, including the commissioning of the works. The Consultant shall in addition oversee the Defects Notification Period and ensure successful attendance to all defects and the final handover of fully operational facilities to the Client.

The Consultant shall be expected to put in place quality assurance, occupational health and safety, risk, and environmental management systems to ensure that the Contractor complies with construction standards.

Other requirements.

The consultant is expected to undertake the services described in this Terms of Reference in close cooperation with the Project Manager assigned by IDI.

The consultant's tasks for the execution of this work package have been outlined as detailed as possible. However, the consultant shall bear in mind that the list of tasks and activities can by no means be considered a complete description of the consultant's duties. It is the consultant's responsibility to critically verify the scope of services indicated and to extend, reduce or amend it wherever deemed necessary in his own professional judgment. It is to be understood that the consultant shall perform all work as necessary to meet the objectives of the project.

The consultant shall also be required to demonstrate (in their proposal), how they will transfer knowledge to IDI technical staff in regard to operation and maintenance of the installed facilities.

e) Organization of the consultancy

Coordination of the assignment



It shall be the consultant's duty to maintain close contact with the IDI project manager on all aspects of the assignment. As a matter of principle, all formal communications relating to the work will be directed to the attention of the Project Manager. IDI shall also nominate a Project Engineer that will be responsible for the day-to-day coordination and monitoring of the project activities, and supported by the Project Manager.

Staffing requirements

The consultant shall elaborate in his technical offer, the logistical setup and deployment of appropriate skills for the execution of the assignment. The consultant will be expected to present his staffing schedule in a manner that clearly illustrates the role of each of the staff involved in the assignment. Detailed CVs in the provided Format.

Duration of the assignment

The total duration of the assignment is nine (12) months. Two (2) months of design, three (3) months of installation/construction, and three (6) months of Defects Notification Period.

Reporting and meeting requirement

The consultant will be required to produce and submit the following principal reports and documents in the forms, quantities, and timing indicated. This is summarized in Table 2;

Table 2: Reporting requirements

Description	Timing in Months from commencement	No. of Hard copies	No. of Electronic copies
Inception Report	0.5	2	1
Detailed Design Report	1.5	2	1
EIA Report (NEMA Approved)	1.5	2	1
Tender documents	1.0	2	1
Tender Evaluation report	2.0	2	1
construction works contract	2.0	2	1
Construction and installation phase			
Monthly progress and status reports	Monthly	2	1



Substantial project completion report	4.0	2	1
As built drawings and operating manuals	4.0	2	1
Final project completion reports	8.0	2	1

The monthly reports shall contain the key activities undertaken during the month and planned activities for the next month

Stakeholder engagement

To ensure organizational and stakeholder-wide appreciation and ownership of the final design outputs and recommendations, the consultant shall be required to organize the presentation of key reports to stakeholders (Building Committee members). The time and location will be agreed upon by the consultant and project Manager/ Engineer of IDI.

Main locations:



PART 5: BID SUBMISSION PROCEDURE & FORMS

a) Deadline and Place of Submission of bids:

Bids shall be submitted to IDI Knowledge Centre Building Makerere University at the Reception; **NOT LATER THAN 21st July, 2023 at 16:00Hrs (EAT)**

Responses shall be addressed to the addressed to;

The Procurement Manager

**Infectious Diseases Institute — Knowledge Centre Building,
Makerere University Main Campus**

P.O. Box 22418 | Kampala | Uganda

Phone: +256-(0)312250500 | Mobile: +256- (0)702300635

Email: snamaganda@idi.co.ug;

Late bids shall not be accepted



b) Form T-1 (format not to be altered)

TECHNICAL PROPOSAL SUBMISSION FORM

[Location, Date]

To: _____
[Name and address of Client]

Dear Sirs:

We, the undersigned, offer to provide the Services for *[Insert title of Services]* in accordance with your Request for Proposals dated *[Insert Date]*. We are hereby submitting our Proposal, which includes this Technical Proposal and a Financial Proposal sealed in a separate envelope.

[If the Consultant is a Joint Venture, insert the following: We are submitting our Proposal as a Joint Venture with: [Insert a list with the full name and the legal address of each member, and indicate the lead member]. We have attached a copy [insert: "of our letter of intent to form a Joint Venture" or, if a JV is already formed, "of the JV agreement"] signed by every participating member, which details the likely legal structure of and the confirmation of joint and severable liability of the members of the said Joint Venture.

[OR

If the Consultant's Proposal includes Sub-consultants, insert the following: We are submitting our Proposal with the following firms as Sub-consultants: [Insert a list with full name and address of each Sub-consultant.]

We hereby declare that:

- (a) All the information and statements made in this Proposal are true and we accept that any misrepresentation contained in this Proposal may lead to the rejection of our Proposal by the Client;
- (b) Our Proposal shall be valid and remain binding upon us for the period of time, 120 calendar days



- (c) We have no conflict of interest;
- (d) Except as stated, we undertake to negotiate a Contract on the basis [*please specify*].
- (e) Our Proposal is binding upon us and subject to any modifications resulting from the Contract negotiations.
- (f) We undertake, if our Proposal is accepted and the Contract is signed, to initiate the Services related to the assignment no later than the Agreed commencement date.

We acknowledge and agree that the Client reserves the right to annul the selection process and reject all Proposals at any time prior to the Contract award, without thereby incurring any liability to us.

We remain,

Yours sincerely,

Authorized Signature_____ Name and Title of Signatory:

Name of Consultant (company's name or JV's name):

In the capacity of:

Address:

Contact information (phone and e-mail)

[For a Joint Venture, either all members shall sign or only the lead member, in which case the power of attorney to sign on behalf of all members shall be attached]



c) **TECHNICAL PROPOSAL (FORM T-2)**

[Suggested structure of the Technical Proposal]

A - Consultant's Structure and Experience

[Provide here a brief description of the background and organization of your company, and - in case of a joint venture - of each member that will be participating in the Services.]

B - Description of Approach, Methodology, and Work Plan in accordance with the Terms of Reference

a) **Technical Approach and Methodology.**

[Please explain your understanding of the objectives of the Services as outlined in the Terms of Reference (TORs), the technical approach, the methodology you would adopt for implementing the tasks to deliver the expected output(s), and the degree of detail of such output. Include here your comments and suggestions on the TORs. Please do not repeat/copy the TORs here.]

b) **Work Plan.**

[Please outline the plan for the implementation of the main activities/tasks of the Services, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and tentative delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing your understanding of the TORs and your ability to translate them into a feasible working plan. A list of the final documents (including reports) to be delivered as final output(s) should be included here.]

C - Consultant's Organization and Staffing

*[Please describe the structure and composition of your team, including a list of the Experts and relevant technical and administrative support staff, and staffing for training, if the Terms of Reference specify training as a specific component of the Services. Experts' inputs should be specified and should be consistent with the proposed methodology and the TORs requirements. Form T-4 may be used for that purpose. CVs of all experts shall be provided **FORM T-3: WORK SCHEDULE AND PLANNING FOR DELIVERABLES FOR ALL PHASES)***



N ^o	Deliverables ⁴ (D-..)	Months ⁶											Experts involved (E.g. 1,2,3...for each assignment)			
		1	2	3	4	5	6	7	8	9	n		TOTAL		
D-1	[e.g., Deliverable #1: Report A]															
	1) Data collection															
D-2	[e.g., Deliverable #2:.....]															
n																

d) T-4: CURRICULUM VITAE (CV) Format

Position Title and No.	[e.g., K-1, current position]
Name of Expert:	[Insert full name]
Date of Birth:	[day/month/year]
Country of Residence	Citizenship/

Education: [List college/university or other specialized education, giving names of educational institutions, dates attended, degree(s)/diploma(s) obtained]

Employment record relevant to the Services: [Starting with present position, list in reverse order. Please provide dates, name of employing organization, titles of positions held, types of activities performed and location of the assignment, and contact information of previous clients and employing organization(s) who can be contacted for references. Past employment that is not relevant to the Services does not need to be included.]



Period	Employing organization and your title/position. Contact information for references	Country	Summary of activities performed relevant to the Services
<i>[e.g., May 2015 to present]</i>	<i>[e.g., Directorate of, Consultant to... For references: Tel...../email.....; Mr. www, deputy Head of]</i>		

Membership in Professional Associations and Publications:

Language Skills (indicate only languages in which you can work): _____

Adequacy for the Services:

Detailed Tasks Assigned to Consultant's Team of Experts:	Reference to Prior Work/Assignments that Best Illustrates Capability to Handle the Assigned Tasks
<i>[List all deliverables/tasks as in T- 3 in which the Expert will be involved]</i>	



Expert's contact information: [e-mail, phone.....]

Certification:

I, the undersigned, certify that to the best of my knowledge and belief, this CV correctly describes myself, my qualifications, and my experience, and I am available to undertake the Services in case of an award. I understand that any misstatement or misrepresentation described herein may lead to my disqualification or dismissal by the Client.

[day/month/year]

Name of Expert	Signature	Date
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[day/month/year]

Name of authorized	Signature	Date
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Representative of the Consultant
[the same one who signs the Proposal]



e) **FORM F- 1: FINANCIAL PROPOSAL SUBMISSION FORM**

[Location, Date]

To: *[Name and Address of Client]*

Dear Sirs:

We, the undersigned, offer to provide the service for [insert title of the services] in accordance to your Request for Proposal dated [*insert date*].

Our attached Financial Proposal is for the amount of [*Indicate the corresponding to the amount(s) currency*] [*Insert amount(s) in words and figures*], including all direct and indirect local taxes.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of [*insert period*] validity period of the Proposal.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature

Name and Title of Signatory:

In the capacity of:

Address:

E-mail:

[For a Joint Venture, either all members shall sign or only the lead member/consultant, in which case the power of attorney to sign on behalf of all members shall be attached]



f) FORM F-2: SUMMARY OF COSTS

LUMP SUM CONTRACT

Item	Cost
	<i>[Consultant must state the proposed Costs in UGX]</i>
Lump Sum Cost of the Financial Proposal (excluding taxes)	
Activity 1 (deliverable 1)	
Activity 2 (deliverable 2)	
...	
<u>Total Cost of the Financial Proposal (excluding taxes):</u>	
Local Tax Estimates	
<u>Total Estimate for Local Taxes:</u>	
<u>Total Cost of the Financial Proposal (including taxes):</u> <i>[To be put in Form F-1]</i>	

- Note:**
1. Provide a further breakdown of costs.
 2. Payments will be made in the currency expressed above.
 3. Provide a breakdown of how payments should be made.