



MINISTRY OF HEALTH STATE DEPARTMENT OF MEDICAL SERVICES EAST AFRICA'S CENTRE OF EXCELLENCE

Terms of Reference

EAST AFRICA'S CENTRES OF EXCELLENCE FOR SKILLS AND TERTIARY EDUCATION IN BIOMEDICAL SCIENCES – PHASE 1

1.0 INTRODUCTION

Kenya and the Eastern and Central African region are experiencing great need for scientific base of knowledge and skills for urology and nephrology. This is informed by the emerging incidences of Non-Communicable Diseases (NCD) with chronic kidney diseases being one of them. This is further aggravated by the severe shortage of skilled workers coupled with the persistent inability to attract and retain such professionals especially in the public sector.

Previous studies have highlighted the need for the development of skills in biomedical sciences in order to produce the skilled medical workforce as well as address the weak tertiary medical education and research. It will be noted that investment in this area is capital intensive and may have been one of the reasons most African countries are facing the deficit in the skills.

The East African countries have adopted a regional approach to higher education, skills development and service delivery in order to leverage on the economies of scale. This is evident from the EAC Development Strategy 2011/2012 - 2015/16 which prioritizes promotion of education, science and technology for a creative and productive human resource.

The proposed project aims to develop CoEs which are geared towards providing the EAC with the requisite highly skilled and specialized workforce capable of addressing the NCD burden. This will also reduce on the cost to the governments and the households of approximately USD 150 million which is being used annually to seek for services from outside the region.

The CoEs developed forms an EAC network in biomedical sciences. Each of the member state has develop a CoE focusing on a specialized area of expertise based on its comparative advantage mainly availability of basic faculty in the target speciality. In this case, Kenya has developed a Centre of Excellence in Nephrology and Urology in order to address the kidney related diseases.

The institute is located within the Kenyatta National Hospital grounds in Nairobi. The site is currently an open field between the existing hospital buildings and Ngong Road. The structure is complete but the internal of third, fourth floor, and sections of basement have not been completed.

2.0 PROJECT BRIEF

The EAKI has been modeled along the best standards in the field and equipped with appropriate technology including visual technology to facilitate diagnostics of ailments, patients' records management and teaching through video conferencing facilities. The infrastructure includes a newly constructed education, training, research and service delivery complex that has an auditorium for conferences, cafeteria, professional and student lounges, various sized classrooms, eLibrary, video conferencing facilities, research lab, faculty and student desk spaces, administration offices and state of the art 160 bed teaching and referral hospital.

In addition, the complex communicates with the existing infrastructure at KNH and not totally delinked. Sewer lines, water mains, and power lines has been connected at to the main building;

3.0 Design Principles

The planning and design of the building follows the "green building approach".

This include an environmentally optimal use of natural lighting, natural cross ventilation, proper orientation to the sun, maximum use of local materials, rainwater harvesting, highly efficient fixtures and appliances for plumbing and lighting. The use of artificial lighting and mechanical ventilation is limited to where the room utilization requires such for example in the operating theatres.

There is limited land available for the development and thus the design should optimize on the available space. The location and design of solar plant, boiler house, Microwave and oxygen plant shall be carefully located to ensure minimal environmental impact

The institute is a Centre of Excellence and thus all factors with regard to the design, construction and utilization should be considered carefully in a way that it will provide the services as set in the project objectives.

4.0 Scope of consultancy services

4.1 Objectives of the consultancy services

The objective of the consultancy, in line with the project objectives, is to facilitate the establishment of the East African Kidney Institute which is a centre of excellence for kidney related diseases in the East African region. This should be done through the construction of a state-of-the-art complex to the required international standards within budget and on time.

The consultant will accomplish this objective by carrying out planning for the site, assessing the requirements for building and the building services needed, preparation of some required detailed drawings and Bills of Quantities in hard and soft format and share with Public Works. The consultant will also undertake the construction supervision of the works when the contractor has been identified.

4.2 Duties of the consultants

The duties of the consultant entail the post contract phase of the works. Details of the duties are outlined below:

- i. Supervision of the works to ensure that the works are implemented with high standards of workmanship, within the agreed timelines and within the approved budget in accordance with the drawings and specifications.
- ii. Preparing interim valuations for the works in progress, Submit to Public Works for review and approval before submitting to the Project Manager for processing.

- iii. Preparation of the project progress documents including Site Weekly Reports, Financial Appraisals, Variation Orders and other such reports when required.
- iv. Convening, in liaison with the PCU, site meetings & inspections, preparing the minutes and inspection reports at the agreed intervals.
- v. Preparation of the final account, submit to Public Works for review and approval before submission to the Ministry of Health for processing.
- vi. Preparation of the As-Built drawings of the facilities and the final inspection report.
- vii. Issuing of the Practical Completion Certificate and Certificate of Making Good Defects on confirmation that the required status of the works has been accomplished.
- viii. Attending consultative meetings convened by the client to deliberate on the execution of the works.

5.0 Design Provision

Design Scope of Supervision

Basement

- finishes for:
- 2 laboratories,
- Two cold rooms,
- pharmacy,
- SSD,
- Stretchers room

Ground/1st/2nd Floors

- Reception Area
- Reception counters joinery
- Nursing Stations joinery
- Branding & Way-finding
- Window treatments-Roller zebra blinds
- Kitchen finishes on second floor

3rd/4th Floors

- Floor finishes
- Wall finishes
- Ceiling finishes
- Reception area & joinery
- Window treatments- Roller zebra blinds
- Branding & Way-finding

Mechanical Services:

- Sanitary Fittings, Plumbing & Drainage
- Medical Gases Pipeline Systems

- Heating Ventilation & Air Conditioning Systems
- Boiler and Steam System
- Kitchen & Laundry Equipment and L.P Gas Systems
- Borehole Drilling and Equipping
- Hospital Waste Management System

Electrical Works

- General Electrical Installations
- Generator Installation
- Nurse Call System, Security System Installations, Conference Facilities Installations and Structured Cabling Installations
- Building Management System Installation
- Solar installation

6.0 Design Criteria

The consultant is expected to ensure that all factors related to design and construction of a health facility are considered. The aspect of high standards of cleanliness and durability of the materials should be a priority in the design and choice of materials. The consultant should also bear in mind that such a facility is a complex building which requires an extensive network of electrical, mechanical and piping installations. In addition, the following criteria to be observed:

6.1 Architectural design

- Response to site characteristics: topography, landscape, neighbourhood and linkage to the existing hospital infrastructure.
- Resolution of functional / behavioural organization: site planning, internal and external circulation.
- Resolution of design and image:appropriateness, urban infrastructure setting and scale.
- Resolution of structure: construction, technical detail, materials, services and cost.
- Provision of spaces to accommodate modern equipments interneconnected with IT infrastructure to facilitate flow of information/ data within the facility.

6.2 Environmental / Sustainable design

- Use of natural ventilation as much as possible except in circumstances where artificial ventilation is required.
- The building should be of low maintenance with materials that do not weather and durable especially in the high traffic areas such as corridors. The walls and floors should be easy to clean and not affected by the use of detergents that may be used to keep the facility sterile.

• There should also be consideration for the use of renewable energy especially solar power; the consultant will find appropriate location for mounting the photovoltaic panels. This energy would be used to light the walkways and external lighting points.

Expected Outputs

- Requisite approved design drawings
- Agreed upon milestones/reports/outputs according to project time lines
- Progressive quality works reports
- Quarterly progress reports
- Tests certificates for materials and equipment's
- Completion reports

7.0 Implementation Schedule

The estimated duration of the services is fourty two (42) months. The target timelines for undertaking the assignment are as follows:

Table 1: Implementation time frame

ITEM	ACTIVITY DESCRIPTION	DURATION
		(MONTHS)
1.4	Stage 5: Construction stage	18
	Regular monitoring of the construction activities and reporting	
	to the client on progress as detailed in the scope of services.	
	Preparation of the final account and completion report on the	
	executed works.	
1.5	Stage 5: defect liability period	12
	TOTAL PROJECT	30

8.0 Staff requirements

The work requires a multi – disciplinary firm or a consortium with a team of comprising of an Architect, Quantity Surveyor, Electrical Engineer, Mechanical Engineer, Civil/ Structural Engineer, interior designer, graphic designer and an EIA Expert. The minimum staff requirement is indicated below; it is incumbent upon the firm to ensure that they provide adequate manpower to implement the project.

Expertise	Qualification and Experience
Team Leader / Lead	Minimum qualification required is University Degree in Architecture,
Consultant	Quantity Surveying or Civil Engineering with at least ten (10) years
	working experience. Being the Team Leader, the expert will be
	required to have a proven experience of over five (5) years in project
	management. Experience in implementation of health infrastructure
	projects is highly recommended.
Architect	Minimum qualification required is a Degree in Architecture with at
	least Seven (7) years working experience and registered by the
	relevant professional registering bodies
Quantity Surveyor	Minimum qualification required is a Degree in Quantity Surveying
	with at least Seven (7) years working experience and registered by the
	relevant professional registering bodies
Electrical Engineer	Minimum qualification required is a Degree in Electrical Engineering
	with at least Seven (7) years working experience and registered by the
	relevant professional registering bodies
Mechanical	Minimum qualification required is a Degree in Mechanical
Engineer	Engineering with at least Seven (7) years working experience and
	registered by the relevant professional registering bodies
Civil/Structural	Minimum qualification required is a Degree in Civil Engineering with
Engineer	at least Seven (7) years working experience and registered by the
	relevant professional registering bodies
Interior Designer	Minimum qualification required is Bachelor's Degree in Interior
	design and equivalent with over five (5) years' experience.
	Registered with relevant professional bodies.
	Minimum qualification required is Bachelors of arts in design or its
Graphic Designer	equivalent with over five (5) years' experience.
	Registered with relevant professional bodies.

Expertise	Qualification and Experience
EIA Expert	Minimum First Degree and a NEMA recognized EIA registration
	course / Registered EIA Expert with NEMA\ / 5 years of professional
	experience

8.1 Eligible potential consultant firms should provide the following

- i. The lead Company's background and registration.
 - i. Registration of individual consultants/firms by the relevant professional bodies.
 - ii. Internationally recognized certificate of accreditation for International Bidders.
 - iii. Demonstration of having conducted at least five assignments of similar nature as a lead consultant individually or as part of a consortium together with their values, client's names and contacts;
 - iv. Detailed company profiles including financial status and evidence of technical capability to undertake the assignments
 - v. Must possess tax compliance certificate.
 - vi. Other than the above qualification requirements for key staff members the various firms in the consortium should demonstrate to have additional qualified and experienced staff members to carry out the works.
 - vii. Demonstrate by way of proposal that they will adhere to the proposed timelines.

9.0 PROJECT MANAGEMENT

9.1 Project Steering Committee

Overall oversight of the project rests with the Project Steering Committee (PSC) which is chaired by the Principal Secretary, State Department of Medical Services. Other members of the PSC are drawn from Ministry of Health, National Treasury, Ministry of Education, Kenyatta National Hospital and the University of Nairobi while the Project Manager is the Secretary.

9.2 Project Coordinating Unit

The Ministry of Health is the Executing Agency for the project. The Project Coordinating Unit (PCU) is responsible for the technical, administrative and financial control of the project including reporting to the Bank. It is responsible for the implementation of the project that comprises the procurement of goods, works and services as outlined in the Project Appraisal Report.

The consultant will be answerable to the Project Manager on all matters related to the implementation of the project.

10.0 EVALUATION CRITERIA.

10.1 STAGE 1- PRELIMINARY EXAMINATION

This stage of evaluation shall involve examination of consultants for the following requirements

The **mandatory** conditions shall be the following:

- 1) Registration certificates
- 2) Authorized Consortium Agreement
- 3) Certificate of incorporation for lead consultant.
- 4) Audited accounts (Last 5 years) for lead consultant
- 5) Tax compliance certificates

THE TENDERERS WHO DO NOT SATISFY ANY OF THE ABOVE REQUIREMENTS SHALL BE CONSIDERED NON-RESPONSIVE AND THEIR TENDERS WILL NOT BE EVALUATED FURTHER

10.2 STAGE II - TECHNICAL EVALUATION

10.2.1 Specific Experience of Lead Consultant Relating to Assignment (30 points)

Table 2 – Lead Consultant Score

Qualification criteria	Maximum Score 30
Design Contracts completed in the last five (5) years A project of similar nature, complexity and magnitude (over Kshs 500 million)	30 points
At least 3 Projects	30
2 Projects	20
1 Project	10

10.2.2 Qualifications and Competence of the Key Staff for the Assignment: (70 points)

Table 3 – Key Consultant Staff Score

Qualification criteria	Maximum Score	Score Criteria	No. of Staff	Max Points to Score 30
* Number of Professional staff to be		Lead Consultant	1	5
involved in the project (each Consultant scored once for the highest no. of staff)		Architect	3	5
scored once for the highest no. or starr)			2	4
			1	2
		Physical Planner	1	2
		Quantity Surveyor	2	4
	30		1	3
		Structural Engineer	2	3
			1	2
		Civil Engineer	2	3
			1	2
		Mechanical Engineer	2	2
			1	1
		Electrical Engineer	2	2
			1	1
		Landscape Architect	1	1
		Land Surveyor	1	1

		Interior Design	1	1
		Environmental &	1	1
		Social Impact		
Vocas of aumorianae managed Due foogianal Statt		Expert Lead Consultant	>15	
Years of experience proposed Professional Staff (Relevant to the project)		Lead Consultant		6
(reservant to the project)			10-15	4
			5-10	2
		Architect	>15	6
			10-15	4
			5-10	2
		Physical Planner	>15	6
			10-15	4
			5-10	2
		Quantity Surveyor	>15	6
			10-15	4
			5-10	2
	40	Structural Engineer	>15	3
			10-15	2
			5-10	1
		Civil Engineer	>15	3
			10-15	2
	Mechanical Engineer		5-10	1
		Mechanical Engineer	>15	3
			10-15	2
		5-10	1	
		Electrical Engineer	>15	3
			10-15	2
			5-10	1
		Landscape Architect	>5	1
		Land Surveyor	>10	1
		Interior Design	>3	1
		Environmental & Social Impact Expert	>5	1
Total Score	70			

st Bidders are required to provide CV's for the Key staff for the Developer and Consultant teams

10.2.3 SUMMARY OF TECHNICAL EVALUATION OF BIDDER'S CONSULTANTS SCORES

Table 4 – Criteria for Consultant Score

	Criteria	Points
I.	Specific experience of the Consultant related to the assignment.	30
II.	Qualifications and competence of the key staff for the	70
	assignment	
	TOTAL	100