



**REQUEST FOR EXPRESSION OF INTEREST FOR PROVISION OF
CONSULTANCY SERVICES
FOR DEVELOPMENT OF A WEB-BASED MEMBERSHIP MANAGEMENT
SYSTEM FOR INSTITUTION OF ENGINEERS OF KENYA (IEK/MMS-2021/1)**

Title:	WEB-BASED MEMBERSHIP MANAGEMENT SYSTEM
Type of Contract	Consultancy
Language of Notice	English
Deadline	14 th June 2021

TERMS OF REFERENCE (TOR)

DEVELOPMENT OF A WEB-BASED MEMBERSHIP MANAGEMENT SYSTEM FOR INSTITUTION OF ENGINEERS OF KENYA (IEK)

BACKGROUND

IEK is the learned society of the engineering profession and co-operates with national and other international institutions in developing and applying engineering to the benefit of humanity. IEK has over 9,000 members drawn from engineers working in various government institutions (both national and county), consultancies, contractors, educators, designers, manufacturers and other persons interested in engineering.

IEK wishes to engage a qualified software firm to develop a web based online membership management services system which will offer IEK members with access to online resources, self-service capabilities, real-time communication as well as aiding the association to be organized and focused while allowing the running of the association with ease and from one central platform.

OBJECTIVES

The key objective of this assignment is to develop and implement a membership management system (MMS) towards supporting IEK's strategic goals namely; growing IEK Membership to 20,000 by 2023, Relevance, Expertise and Revenue Growth.

A key strategy necessary to achieve the said strategic goals is adoption of digitization and technology in service delivery. Through the project, IEK is keen to improve on the delivery of services to members and to empower them with Do it yourself (DIY) features to enhance service turnaround time. The system design is expected to broadly suffice the following core aspects: -

- a. **Base Modules** - The base module provides an interface for capturing the master data, user authentication and relevant modules for IEK Membership management, planning, monitoring and Adhoc reporting operations.
- b. **Integration Services** - The integration service for Online Membership Management platform provides an interface for acquiring or exchange information with other associated systems including but limited to finance management, payment gateway among others
- c. **Notification Services** - The notification services that works seamlessly with the membership management module and service layer to notify the IEK person in charge, on news, events, alerts and notices to

members

- d. **Reporting Services** - The reporting services provide generation of relevant operational and analysis reports for IEK Secretariat Officers and management for further analysis and action.

SCOPE OF THE ASSIGNMENT

IEK is soliciting proposals from competent software, data science and communications firms to develop a web based online Member management system and communication portal. The Consultant shall perform the following tasks to realize the proposed system;

- Review all project documentation shared by IEK and produce a comprehensive inception report. The report should indicate the firm's understanding of the assignment, and resources to be deployed for assignment.
- Deliver an IEK Membership Management System with the functionalities as defined in the requirements. This objective area ensures that the desired solution with the enhancements comes to existence. The system must be developed using web-based technologies, emerging technologies such as Block-Chain, Artificial Intelligence etc. and non-proprietary software platforms (open source) and compatible with mobile/portable miniature gadgets.
- Subject the system to various kinds of system tests after development various stages of the development when most/critical enhancements are delivered for each stage.
- Engage all critical stakeholders at various points of the assignment and conduct various types of trainings (ordinary users, advanced users, training of trainers etc.) for all users who will be using the new system using innovative and current techniques.
- Expose the system to the real environment on trial (piloting) and eventually moved to the production environment with the required data to effectively and optimally operate.
- Document all the aspects of the assignment at all stages of the assignment.
- Provide full support and maintenance services during the guarantee/warranty period for the system based on the signed-off SLA.

DELIVERABLES

EXPECTED SYSTEM FEATURES AND REQUIREMENTS

A. Base Module: Membership Management

- Make IEK services easily available to members-User friendly interface

- Member portal
- Support for multi-user, multi-site computing environment
- New Membership Application management including ability to submit registration reports online and get status updates and feedback on the registration process and interview results
- Share online resources for members e.g. Conference papers, Publications, research papers, economic indicators, e-shots & changes in law.
- Facilitate members to know status update on service offered to them
- Update on membership payment information & print invoice and statement
- Self-update member information through the portal on the MMS
- Members section where they can submit news, events, publications and content
- Receive communication- Integration with email updates & communication platforms
- Provide online Templates that members need in various services they require from IEK e.g. the registration report templates to assist members.
- Online registration & payment for IEK events for both members and non- members-Integration with events platforms e.g. Eventbrite and payment platforms e.g. Mpesa, Online banking
- Online registration & payment for IEK training programs for both members and non-members - Integration with payment platforms e.g. Mpesa, Online Banking
- Online request/scheduling of appointments with IEK officers for members
- Online request for services for both members and non-members e.g. external non-members to check registration status of any IEK member
- Association elections and voting management.
- A directory for consultants, contractors and other members firms. A one stop shop where members and non-members can source for services of Engineers
- Have an easy and friendly user interface;
- Simple to upload contents;

B. Base Module: Back office IEK Secretariat

- Centralized management of member contacts and communications-Integration with email correspondence & communication platforms
- Process membership payments for subscriptions-Integration with payment platforms e.g. Mpesa, Online Banking
- Online membership invoicing & reminders generation
- Accuracy of member information database
- Increase in uptake of IEK services.

- Increase in attendance of events.
- Increase in membership base -Online member recruitment
- Elections and voting management
- Collect data from members for sector intelligence through online surveys-Integration with online survey tools
- Serving more members with less staff – more efficient and effective through adaptation of technology in service delivery
- Website and social media platforms integration
- Service delivery analysis and reports

To ensure the system requirements, functionality and capabilities are optimally refined, the consultant will be expected to engage with some IEK members as part of stakeholder participation and test runs before full implementation

C. Base Module: Content development

Through the portal, the following contents and not only limited to this list shall be availed to the members as part of the services online:

- Frequently asked questions
- Standard guidelines
 - Membership application process
 - Engineers code of conduct
 - IEK constitution
 - Association policies
 - IEK calendar of activities
- Templates:
 - Membership application forms
 - Registration reports templates
- Informative content
 - Research papers
 - Publications
 - Technical information

D. Base Modules: The database requirements

The proposed databased for the system shall include but not limited to:

1. Must support to high volume on-line transactions processing (OLTP)
2. High availability with database mirroring, online back-up and recovery
3. High scalability, and performance
4. Highly relational with object-relational capabilities
5. Integration with other databases and legacy systems

E. Integration Module Other requirements

- a) Ability to be fully integrated with existing systems- xero financial system, QuickBooks
- b) Have an Open Application programming interface for integration with

- other stakeholders for Membership Authentications and verifications
- c) Provide an easy to deploy Application Programming Interface (API) environment for any future integration requirements by IEK without additional expansions
 - d) Provide security features for any integration to avoid any abuse of the APIs
 - e) Provide API reporting features on all connections and data exchanges to third party systems.

F. Reporting and Business Intelligence Module

- f) Able to provide analytical tools and indicators - Dashboard
- g) Must support ad-hoc query and have pre-defined reports
- h) Optimized for search engines;
- i) Must have easy to use report writing and query tools
- j) Facility for data import and export from and to other systems
- k) Training modules and support
- l) Cloud storage for data
- m) All reports should be exportable to Excel, PDF and CSV formats
- n) Highly scalable reporting capability
- o) The encryption should be end to end user

For purposes of data security, the system should have but not limited to the following features:

- a. Ensure proper user authentication
- b. Manage the assignment of database access privileges using identity of the user
- c. Database Integrity - users must be able to define multi-level referential integrity, entity integrity and value constraints without programming.
- d. User audits
- e. Guarantee privacy and integrity of data through encryption

DURATION OF THE ASSIGNMENT

The duration of this assignment is estimated to be 5 Months.

MANAGEMENT AND INSTITUTIONAL ARRANGEMENT

The consultant will be directly supervised by IEK Secretariat i.e. Hon. Secretary and CEO, with relevant technical advice, inputs and support provided by the project steering committee. Project plan with clear deliverables shall be prepared and presented by the consultant and the project to commence upon adoption of the plan by the steering committee.

The IEK shall supervise the development and implementation of the MIMS through the use of a deliverables checklist to ensure that all modules and systems have been included.

A testing phase shall be included to provide a dry run of the MIMS before full roll out

Provision of updates on the MIMS owing to change in membership registration process, change in requirements or change in technology

PREPARATION OF THE EOI

The Expression of Interest shall not contain any financial proposals and shall be written in English language.

In preparing the EOI, consultants are expected to examine the documents constituting the TOR in detail. While preparing the document, consultants must give particular attention to the following:

- (i) It is desirable that the majority of the key professional staff proposed be permanent employees of the firm or have an extended and stable working relationship with it.
- (ii) Proposed professional staff must as a minimum, have the experience indicated in the TOR preferably working under conditions similar to those prevailing in Kenya.

The EOI shall provide the following information:

- (i) A brief description of the firm's understanding of the exercise;
- (ii) A brief description of the firm's organization and an outline of experience on assignments of a similar nature.
- (iii) A list of the proposed staff team by specialty, the tasks that would be assigned to each staff team member and their timing.

EVALUATION CRITERIA

Part 1- Preliminary Evaluation Criteria.

These are mandatory requirements.

- a) Copy of Company's or Firm's Registration Certificate
- b) Copy of Valid Tax Compliance Certificate
- c) Duly filled, signed and stamped Confidential Business Questionnaire (attached)

- d) Duly filled, signed and stamped Anti-Corruption Declaration
- e) Valid Business Permit

NB: Only tenderers who satisfy ALL mandatory requirements will be proceed to Technical Evaluation Stage

Part II-Technical

Items	Points
(i) Understanding of the TOR and the exercise at hand and value addition comments	30
(ii) Specific similar experience of the consultant related to the assignment (provide evidence)	45
(iii) Qualifications and competence of the key staff for the assignment (provide evidence)	25
Total Points	100

Only firms with scores above 70%, shall be invited to make Technical and Financial proposals.

APPENDICES

**APPENDIX 1:
CONFIDENTIAL BUSINESS
QUESTIONNAIRE**

AND

ANTI CORRUPTION DECLARATION

SECTION G: CONFIDENTIAL BUSINESS QUESTIONARE

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

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

Part 1 - General

Business Name.....

Location of business premises.....

Plot No.....

Postal Address.....Tel No.....

Nature of business.....

Current Trade License No.....Expiring date.....

Maximum value of business which you can handle at any one time: Kshs.....

Name of your bankers.....Branch.....

Part 2 (a) - Sole Proprietors

Your name in full.....Age.....

Nationality.....Country of origin.....

*Citizenship details.....

Part 2 (b) - Partnership

Give details of partners as follows:

Name	Nationality	Citizenship details	Shares
1.....
2.....
3.....
4.....
5.....

Part 2 (c) - Registered Company

Private or Public.....

State the nominal and issued capital of the company:

Nominal Kshs.....

Issued Kshs.....

Give details of all Directors as follows:

Name	Nationality	Citizenship details	Shares
1.....
2.....
3.....
4.....
5.....

Date.....Signature of Tenderer.....

* If Kenyan Citizen, indicate under "Citizenship Details" whether by Birth, Naturalization or Registration.

ANTI CORRUPTION DECLARATION PLEDGE

I/We (Name of Firm and Address) declare that I/We recognize that Public Procurement is based on a free and fair competitive tendering process which should not be open to abuse.

I/We..... declare that I/We will not offer or facilitate, directly or indirectly, any inducement or reward to any Officer , their relations or business associates, in connection with tender No.....for or in the subsequent performance of the contract if I/We are successful.

Signed by.....Authorized Representative(s)

Name.....

Designation.....

Signature.....

Date.....