The Institution of Engineers Sri Lanka

Request for Proposal

Membership Management System (MMS)

Proposal Due Date: 24th May 2017

1.0 Introduction - The Institution of Engineers Sri Lanka

The institution of Engineers Sri Lanka (IESL) is the Apex National Body for Engineers in Sri Lanka.

The Institute of Engineers, Ceylon was incorporated by an Act No. 17 of 1968 on the 31 May 1968. By subsequent amendment of 8 February 1996, the name was amended to read as the Institution of Engineers, Sri Lanka

It represents the interests of the engineering profession and the general public its members serve. IESL ensures internationally recognized and locally relevant standards in the professional practice and education in engineering while actively supporting national development and diligently serving its members and the society.

The activities of IESL has become broader and diversified with time, and at present it has a membership of about 18,000 engineering professionals of all branches of engineering serving in all parts of Sri Lanka and abroad.

The Institution of Engineers, Sri Lanka (IESL) is a signatory to the Washington Accord (WA) and is a member of the International Professional Engineers Agreement, (IPEA)

IESL Vision

"Be amongst the leading professional institutions in engineering and technology in the world"

2.0 Objectives of the IESL

The original Act of 1968 sets out the General Objects of the Corporation (Institute) as below.

- To promote and advance the science and practice of engineering in all its branches in Sri Lanka;
- To help in the acquisition and interchange of technical knowledge by reading of original communications and discussions thereon, by establishing and maintaining technical libraries, publications on matters of professional interests and any such other means;
- To promote the study of engineering and to encourage original research with a view to facilitate the scientific and economic development and the conservation of the resources of Sri Lanka;
- To conduct examinations qualifying for membership of the Institute, to test the competence of persons engaged in engineering and to grant certificates of competence;
- To assess the eligibility of candidates for admission to the various grades of membership;

- To regulate the professional activities and to assist in maintaining high standards in the general conduct of its members;
- To give the Government and other public bodies and others the facilities for conference with and ascertaining the views of engineers as regards matters directly or indirectly affecting engineering;
- To encourage and assist in the settlement of disputes by arbitration and to nominate arbitrators and umpires;
- To foster co-ordination with similar institutes in Sri Lanka and other countries in furthering the objects of the Institute;

It also sets out the composition and functions of the Council and also the Power to make by-laws.

In fulfilling above broad objectives the IESL conducts Professional Review by suitably qualified members for conferring the status of 'Chartered Engineer' and 'International Professional Engineer'.

The IESL conducts long and short term Continuing Professional Development programs, seminars, learned lectures and orations and also recognizes after a rigorous evaluation process organizations that provide training for the charter candidates.

It also recognizes academic institutions that provide engineering education for the different levels of membership of the IESL, and is the accreditation body for engineering degrees in Sri Lanka. Qualifications of graduates of institutions that are not accredited or recognized by the IESL are evaluated on case by case basis, for acceptance for membership.

The IESL, being the premier Engineering body in Sri Lanka is called upon to represent the profession at many national forums and contribute to national development.

3.0 Functional overview of the Institution

The governing body of IESL is the Council, elected by the Corporate Membership annually, led by the President. The headquarters of the IESL is located in Colombo 07, Western Province, where the secretariat is established to serve the membership, and there are Provincial Centers established in all other Provinces of the country. IESL carries out business through the Standing Committees, Sectional Committees, Forums, Boards and Ad hoc Committees, supported by the secretariat.

IESL has three (03) overseas chapters established.

4.0 Membership

IESL has membership over 17800 in Sri Lanka and overseas. IESL has two main categories of membership: Corporate Members and Non-Corporate Members.

Corporate Members are also commonly identified as Chartered Engineers. The Corporate Membership of the Institution is awarded through a stringent Professional Review Process to those who are academically qualified in engineering. The aspirants for Corporate Membership need to fulfill certain requirements regarding their training and the practical experience.

Corporate Member grades
- Fellow - FIE (Sri Lanka)
- Member - MIE (Sri Lanka)

Non-corporate Member grades
- Associate - AIE (Sri Lanka)
- Associate Member - AMIE (Sri Lanka)
- Companion
- Affiliate Member - AflMIE (Sri Lanka)
- Student Member

Post nominals used by members
- *CEng (Sri Lanka) is used in Sri Lanka as a post-nominal abbreviation by Corporate Members of the Institution of Engineers, Sri Lanka (IESL).*
- *PEng (Sri Lanka) is used in Sri Lanka as a post-nominal abbreviation by Members who are registered as Professional Engineers with the Institution of Engineers, Sri Lanka (IESL).*
- *IntPE (Sri Lanka) is used in Sri Lanka as a post-nominal abbreviation by Members whose names have been entered in the International Register of Professional Engineers for Sri Lanka maintained by the Institution of Engineers, Sri Lanka (IESL).*

5.0 Sources of Revenue and Financials

IESL gains revenue from membership dues, CPD and other activities, from Its subsidiaries and through sponsorships and grants.

6.0 Existing Management Information Systems at IESL

IESL uses cloud based membership management system called "Wild Apricot". This system provides member profile database, communications to members about events and activities and enables members to register for events. Further the system provides facility to refer to documents and access other media content. The IESL website is integrated with social media.

Additionally, the institution uses standalone financial system – QuickBooks. IESL has separate library management system named as *Koha*.
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"Basecamp" is used as a collaborative platform by council members and the secretariat.

Some serious shortcomings of the existing membership management system are

1. The number of members it can accommodate is limited to less than 15,000
2. The Institution's finances cannot be integrated into the system. The finances need to be manually entered into the system resulting in errors.
3. There is no audit trail to keep track of changes made to the system

7.0 Requirement Overview

IESL is seeking a Membership Management System (MMS) recognizing that its current membership management system and infrastructure are inadequate to serve the current and future needs of the organization.
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The high-level goal of the resulting project is to improve the management of its member relationships, and automate existing processes related to membership management, conference and event management, as well as link it to financial systems while enabling web site content management and organizational communications.

8.0 The Approach

IESL is looking to purchase a Membership Management System and partner with a qualified supplier to integrate and customize the solution to meet its need as per the organization's requirements. IESL will select a solution that meets the most needs of the organization, and a supplier that demonstrates a best practices approach. The selected supplier shall effectively deliver a mix of strategic, technical and creative services to the organization and its members to succeed online.

The solution could be an "installed and owned system" or a "hosted system".

9.0 System Requirements & Supplier responsibilities

The Supplier's responsibilities in performance of this requirement include:

1. Provide a Membership Management System (MMS) to IESL to **manage the membership activities** while automating existing business processes, and reducing the workload associated with the operation;

2. System requirements:
   a) **Maintaining the Roll** of the Institution as specified IESL Act of 1968 and prevailing by laws

   As per the by-laws –
   "

   i. The Institution shall consist of Fellows and Members all of whom are collectively, referred to, as Corporate Members the Institution may also have attached to it Honorary Fellows, Companions, Associate Members, Affiliate Members, Associates titled Technician Engineers, and Student Members all of whom are collectively referred to as Non-Corporate Members.

      a. The names of all Corporate and Non-Corporate Members shall be, entered in the Roll of the Institution (hereinafter referred to as 'the Roll'). The Roll shall be in electronic form and shall contain details pertaining to each Corporate and Non-Corporate member in the form specified by the Council from time to time.

      b. The design and the structure of the Roll shall be in conformity with best industry (IT) standards and practices, and they shall ensure its security with provisions, for necessary backups that will ensure security and prevention of data loss.

      c. The management of the Roll shall be as directed and specified by the Council from time to time. "

   b) **Membership management:** allowing the IESL secretariat to update information, and allowing membership self-management of their own information in the MMS in secure manner. The secretariat may restrict some of the fields to be edited. MMS shall publish any changes to membership profiles with secretariat approval.

   c) The National Identity Number shall be made the primary source of identification of a member within the system. The nationality of the member shall be made mandatory information. If the member is a foreign national his or her passport number shall be recorded instead of national Identity number. It should be possible to update the new passport number if the passport is renewed. Previous details shall be retained in the system securely and if required

should be able to retrieve.

d) **Database** flexible enough to handle all typical Membership Management functions. It should enable IESL to maintain all relevant information related to members, prospective members, and member categories

e) **Automation of dues management:** manage the issuing of invoices, matching those against inbound payments to ensure membership is up-to-date

f) **Registration management for events, Conference, Technical Colloquia, Induction and graduation ceremony and Symposia registration and relevant payment handling.**
Ensuring that members and non-members can register for events organized by the Institution.
Payment checks shall be enabled before registering to events.

g) **Records management by event attendee, organization and individual independently:** Maintain and track history of individual or team member participation across events.

h) **Facilitation of IESL Corporate Website**: The MMS shall replace the current IESL corporate website www.iesl.lk with a state of art site to carry out all intended membership management functions and other requirements specified under section 9 of this RFP through a secured access mechanism. In addition, the new site shall incorporate all other features and content of the current site. It shall also provide excellent mobile support.
A user-friendly Content Management System (CMS) shall be provided to maintain the site with frequent updates by the secretariat staff.

i) **Integration with accounting software or built-in accounting functionality:** ease of pulling financial information related to dues into associated systems, such as accounting software. Alternatively, the MMS must provide accounting software that is able to automate all accounting and tax reporting functions, facilitate financial analysis, and allowing regular benchmarking of budgets.

j) **Role and user management:** System shall have an extensive role based security mechanism where it allows for different user roles to be configured in the system, such as the president, Executive Secretary, Finance manager, Manager membership, Manager Education, Registration officer etc..., each having specific access in the system. All changes made by each user must be trackable up to

data field level and shall be available in an easily accessible audit log.

k) **Role based access control for members:** Members should be able to access the systems either as "members" or "committee /team representatives" with different access requirements and controls. Team representatives must be able to update member information for their team independently. Each user who does changes in the system shall be identified individually and system shall maintain the track of all such changes.

l) **Membership committees and working groups:** IESL members regularly convene in committees and working groups. Members should be able to apply for participation in groups through the MMS.

m) **Membership application, onboarding, professional progression and de-provisioning.** Members should be able for different grades of membership, maintain their individual records, log books and training records. Their different membership status shall be maintained in the system.

For the purpose of clarity, the process and requirements under this section is detailed out as below.

1. Member registration including different grades of members including students, affiliates, associates.

   They should be allowed to do online registration. MMS shall provide facility to apply online and payment to be updated in mms system. Status of the application shall be available. Status could be Processing, approved etc.…The secretariat shall be able to view applicant's uploaded documents and approve once they verify the authenticity of the documentation.

2. Be able to handle process of transferring a member as a corporate member from non-corporate status. Once an applicant is eligible with educational requirements and relevant experience he or she can request to register as a corporate member. This process is called "professional Review "and commonly referred as PR. The PR has two main components. Getting through an examination paper referred as "B "paper and completion of design or a project and facing the professional review interview with panel of reviewers.

"B" paper is held several times a year. Examination is held provincially and at IESL international chapters. The candidates should be able to register to exam via MMS. The secretariat shall be able to get province wise admission number. They shall be able to see whether candidate is a repeat one. (for management purposes only), candidate should be able to get his admission letter printed by himself.

The candidate shall be able to submit the design/project report, log book,

training and experience report, CPD record sheet, confidential report and any other requested document via MMS. The secretariat shall verify the documents and may request physical documents as required.

The system shall provide the facility to reviewers to do eligibility checking before authorizing candidate for PR interview.

MMS shall provide the facility to schedule the PR interview with candidate based on the availability of PR review panel.

Direct Route and 20-year rule are two other methods for an engineers to register as a corporate member of IESL. These two routes exclude some of the general requirements of PR process. MMS shall facilitate corporate member registration via "Direct Route" and "20 year Rule" from application up to registration.

3. MMS shall facilitate transfer of corporate member to fellow member
4. MMS shall facilitate the member registration as an International Professional Engineer
5. The member number of different grades shall be generated by system automatically in an ascending sequence chronologically. Different grades of members shall have member number preceded by letters indicating the category of membership and then the sequence number. As example for corporate members M- 1234 and for Fellows F- 1234

   n) **Maintenance of a membership directory** (members' information, Good Privacy (encryption) keys, …); and if required permit bi-directional syncing against an external membership directory. Members could be belonging to different categorizations, not only by their field of specialization. They may belong to different registries. e.g. List of Arbitrators, List of Structural Engineers, List of Professional Reviewers (PR reviewers) etc. The MMS shall facilitate keeping such registries and handle the applications related to these registrations on line.

   o) **Regular reminders** on the accuracy of their membership data

   p) **Organization Evaluations for Recognized Training** shall be processed online via MMS. The MMS shall facilitate
      1. Online organizational registration application with the payment
      2. Scheduling of the visit with Professional Standard Management Committee (PSMC) approval
      3. Grant the "recognition 'with validity duration
      4. Reminders before the lapse of validity

   q) Facilitation of **delivery of Continuing Professional Development (CPD)** programs.
      These include,

1. CPD registration for all classes of members and non- members.
2. Event registration confirmation based on part payment of full amount.
3. Event confirmation with organizational commitment.
4. Keeping attendance records, assignments and results.
5. System wise finger print based attendance. Link with current IESL scanning system.
6. Generation of course certificate.
7. CPD page. CPD calendar via web
8. CPD feedback forms to be on line.
9. Course material to be online, available only for the registered members.
10. Potential organization list to be updated and extracted via system and automated communications to organizations and registrants.

r) Memorial Lectures, B – paper lectures and post retrieval of the program content. User level access control shall be available for this content.

s) MMS shall facilitate handling   degree evaluation process and exams through
1. On line application (original documentation to be produced to secretariat)
2. On line payment
3. Ability to select evaluator based on discipline.
4. Qualifying exam syllabus and past papers to be available to candidate.
5. Recommendation of panel
6. Printing the letters to candidate.
7. Exam registration
8. Publish exam schedule,
9. Carry out the project.
10. Results and academic transcript printing.
11. Status change through system

t) Facilitation of **Blogs, Forums, FAQs**

u) Social Media Integration (Twitter, Facebook, YouTube, Google+. LinkedIn, WhatsApp etc.)

v) Availability of **Mobile app** (android, IOS, Windows) to support all membership functions

w) Interactive **Job bank** section. With latest job vacancies.

x) Integrate with **tools** (Google Webmaster Tools, Google Analytics)

y) Allow members to **find their PR reviewer, CPD tutor** to follow programs, assignments by their own through searching in our web

z) Online Training

aa) eLearning facility

bb) Integration with Library management system.

cc) Payment of dues, generating delinquent dues reports and automatically reminds members who did not yet pay dues. The MMS should allow for incremental late fees to be added to late invoices;

dd) The proposed system **must** support **integration** with the following services:
   i. Integration with **card payment services**; IESL will specify the preferred payment gateway, that need to be integrated with.
   ii. Integration with common accounting software such as **QuickBooks**
   iii. Updating relevant legers in accounting system
   iv. The MMS shall facilitate to generate payment records using different filters. E.g. from start date to end date, an event based, member category based or combinations of these.

ee) Access to the membership database via a **API**

ff) integration with third party solutions;

gg) Web site content management;

hh) Facility to do **product marketing**

ii) Statistics on memberships and activities, finances

jj) Ability to **conduct Opinion Polls, surveys**

kk) Ability to do **Publications including Digital SLEN, Engineer, Transactions and Other IESL reports**

ll) Able to support 200,000 members in different categories. System should be expandable.

mm) The Membership Management System must support the **easy export of data** to a non- proprietary file format.

nn) Ability to **automate and change workflows** related to membership management

oo) Multi lingual support

pp)   Ability to deal with payments in **multiple currencies**

qq)   Provide the system capability to get **system and data backups**

rr) MMS **software shall be certified** for security through reputed parties

3. **Provide consulting & support** in integration of the Membership Management System;
4. Provide **support and helpdesk services** to users of the Membership Management System.

10. High-level Success Criteria

The success of the supplier will ultimately be based on the following criteria.

- The platform needs to be scalable to meet the current and future needs of the organization
- The web infrastructure can be easily maintained by internal staff
- The website has measurement and analytics built into all key modules
- The interfaces provide a professional and usable design that accurately represents the international organization
- The site provides a consistent user experience across all the underlying functional areas and modules
- The infrastructure is reliable and can adequately handle the current and future metrics
- An installed and owned system or a hosted system
- Allows for configuration and customizations to be done by IESL or other suppliers

11. Key Supplier Qualifications

IESL is looking for suppliers with the following core qualifications:

- Experience with member organizations and non- profits
- Experience with user experience and software design
- Experience in implementation
- Experience in data migration
- Experience in understanding and developing in a service oriented architecture
- Experience integrating multiple systems and solutions into a unified solution
- Experience in secure E-commerce integration
- Certification for software development and security

12. Technical Requirements & Approach

The System requirements & supplier responsibilities with other performance aspects (section 9 to section 11 of this document) outline all the technical considerations for this project. This includes consideration of both open source and commercially supported solutions. IESL is looking for best of breed products that could potentially bundle several core features into a single solution. The overall technical recommendations will be evaluated based on:

- Alignment with specified requirements
- Total cost of ownership
- Scalability and modularity
- Ongoing maintenance requirements
- Usability

13. Cost Guidelines

While this project includes many desired features, cost will be a factor in selecting the supplier and recommended solution.

14. RFP Response

Interested suppliers should respond within the following requirements:

15. Proposal Format

IESL recommends suppliers respond as succinctly as possible while still communicating everything they feel is important for decision making. The overall clarity of the response will be a key factor in our evaluation. Supplementary product information on recommended solutions can be provided, but should be in an appendix format outside of the core response.

16. Required Elements

The response should include the following sections.

- Executive Summary: An overview summarizing top-level items contained within the RFP Response (such as project approach, cost, timeline, etc.).
- Company Overview: An overview on your company, key qualifications and staff assigned to this project as specified in the Supplier Information section.
- Recommended system software and features: Clearly mention the compliance to all sub items from section 9 to section 11 as "fully complied", Partially complied", or "not complied" and giving details as required to qualify if not "fully complied". Briefly outline

all recommended software and any involvement from additional partners, suppliers or contractors needed in your response.

- Budget: Provide an estimated cost breakdown for all work specified in the Cost Summary section. Add any additional anticipated fees for products and services including any third-party software not outlined in this RFP, but regarded as necessary.
- Timeline: Outline key project milestones based on approach.

17. Confidentiality

IESL reserves the right to use any ideas, concepts or proposed technical solutions contained in the supplier's proposal unless specifically restricted by the supplier. The information contained in the proposal will be treated as confidential. Selected suppliers' names will be revealed upon selection for the demonstration phase.

18. Evaluation Criteria

The responses will be evaluated on the following criteria:

- **Functionality** - The degree to which the proposed software solutions satisfies IESL's requirements and processes.
- **Supplier Qualifications** – Experience, infrastructure and resources of supplier (including partners & subcontractors).
- **Supplier Reputation** - The number of customers the supplier has provided software solutions similar to that proposed, and the customer support record of the potential supplier. Supplier's demonstrated ability to implement the project within the contracted time and cost.
- **Understanding** - The degree to which the supplier demonstrates an understanding of IESL's business needs.
- **Flexibility/Scalability** - The ability of the proposed software solutions to adapt to changing functional and business requirements.
- **Usability** - The ease of use of the web components for all categories of users including staff, members and nonmembers. The ease of operation of the proposed solutions to ensure user acceptance and minimize training.
- **Price -** The solution is competitively priced with solutions using similar technology and cost-effectively meets all of IESL's needs. Total cost of ownership (up-front and over 5 years).
- **Training and Support -** The quality and depth of training provided, and support available after implementation.

- **Technology Platform** – The fit for the technology within the existing IESL infrastructure both in the compatibility sense and the ability for IESL to maintain, configure, and upgrade the system.
- **Product History** - the number of versions of the software and the length of time it has been on the market.
- **Integration and Customization** - The ability of the proposed software to integrate with the current systems, and IESL's ability to customize and interface with the proposed solution.
- **Presentation** – If selected for the demonstration phase, the ability of the supplier to effectively demonstrate the proposed software solutions and how they will be used to satisfy the needs of IESL.

19. Supplier Services

The supplier's proposal must address the following services as part of its overall software solution. Please consider each of the following services when completing the Cost Summary section of the proposal. Suppliers will be required to itemize these sections if they're chosen to participate in the Demonstration Phase.

a. **Data Conversion**
The supplier is responsible for conversion of IESL's data files into the new MMS.

b. **Infrastructure**
The supplier should describe the hardware requirements for the proposed solution and any additional software that may be needed.

c. **Configuration/Customization**
Estimates should include the cost of modifying or developing the software as needed. The supplier shall be able to map these requirements into High Level Design (HLD) and into Low Level Design (LLD) during the project once selected, the supplier will be required to determine a fixed price for any proposed modifications based on the exact requirements of IESL. The supplier should consider the methodology they normally employ in this analysis, and if there is a cost, it should be included in the cost estimate.

d. **Training**
Estimates should include training for users.

e. **Documentation**
Estimates should include user and technical documentation for each application.

f. **Software Maintenance**
Estimates should include any annual maintenance costs.

20. Supplier Information

Please provide the following information about your company and product in your proposal:

a) Company Information
- Please include a brief company history including number of years in business
- How many full time, in-house staff members does the company employ?

b) Experience
- Experience working with Institutions, non-profits, and especially standards organizations
- Number of years providing Membership Management systems
- Total number of installation sites
- Total number of installation sites running proposed version of the software
- Largest customer site (by # of staff) and smallest customer site (by # of staff)
- Number of installations currently in process and number of installations anticipated in the next year

21. Software

Please describe your software's:
- Database engine
- Reporting system
- Development framework/tools

22. Cost Summary

The supplier's proposal must address the cost of ALL products and services as part of its overall software solution. Add any additional anticipated fees for products and services not outlined in this worksheet. The following cost summary worksheet is only provided as a framework for summarizing the overall cost of the proposed solution. Please modify as necessary.

Software
Cost for base system   Rs

Cost for the Other modules (mention each)   Rs

Annual maintenance costs   Rs

Total Cost of Software | Rs |

Hardware
Total Cost of Hardware | Rs |

Implementation
Configuration/Customization/Setup   to   meet   Rs
IESL's
    requirements
Training   Rs

Total Cost for Implementation | Rs |

Additional Costs
Any additional costs   Rs
    (please describe)
Overall Project Cost | Rs |

If the provided system is a "hosted "solution, provide the detailed cost summary accordingly.

23. Response Timeline & Milestones

Issuance of RFP	03rd May 2017
RFP Responses Due	24th May 2017
IESL selects 2-5 suppliers for second selection round	
Supplier Demonstrations	
Evaluate and select supplier	
Contract signed	
Kick off meeting for project	
User acceptance tests	
New MMS launch	

Please note that the cost of proposal preparation, submission, and demonstration is non-reimbursable.

24. Payment Terms

1. Upon purchase order and contract signing   – 5% of contract value
2. After successful completion of high level design, low level design documents and sign off by IESL   – next 15 %
1. After success completion of user acceptance test and cut over to new MMS   – next 50%
2. After 3 months of post observation of cutover to new MMS   –next 20 %
5. After one year from successful cutover   –remaining 10%

25. Correspondence

Any queries regarding the RFP shall be referred to

The CEO/Executive Secretary
The Institution of Engineers Sri Lanka
120, Wijerama Mawatha
Colombo 07.