REQUEST FOR PROPOSAL: QUANTUM LEAP AFRICA WEBSITE
October 9th, 2017

Dear Contractor/Vendor,

The African Institute for Mathematical Sciences, Next Einstein Initiative (AIMS-NEI), is seeking proposals from ICT Consultant firms to design, develop and deploy a customized Website for the Quantum Leap Africa project. The contractor will be expected to be flexible and responsive to the website support services requested as well as provide innovative ideas and recommendations to ensure that the website are considered to be cutting edge by their users.

Please submit your proposal via email by 5:00 p.m. Local Time Kigali, October 27th, 2017 to:

The Procurement Panel

African Institute for Mathematical Sciences - Next Einstein Initiative (AIMS-NEI),

Email ID: procurementpanel@nexteinstein.org

For any questions regarding how to submit your proposal, kindly send an email to the Project Manager: procurementpanel@nexteinstein.org.

Kindly note that costs incurred by you in preparing and submitting the proposal will not be reimbursed.

We look forward to your response. Yours sincerely,

Rana Auditto,
Vice President Operation & CFO
The QLA Project is seeking a consultant or a firm with relevant expertise to design and build a comprehensive and innovative website that offers a visible web presence for the project, and offers functionality to its partner and stakeholder.

I. ORGANIZATIONAL CONTEXT

The African Institute for Mathematical Sciences (AIMS, www.nexteinstein.org) is a pan-African network of centres of excellence for postgraduate training, research and outreach in mathematical sciences. Its mission is to enable Africa’s brightest students to flourish as independent thinkers, problem solvers and innovators capable of propelling Africa’s future scientific, educational and economic self-sufficiency. The first AIMS centre opened in Cape Town, South Africa in 2003; since 2011, AIMS has opened additional centres in Senegal, Ghana, Cameroon and Tanzania. AIMS is preparing to open its 6th Centre in Kigali, Rwanda. The goal of the AIMS Next Einstein Initiative (AIMS-NEI) is to build a pan-African network of 15 centres of excellence across the continent by 2023.

The Quantum Leap Africa (QLA) project is an integral component of the AIMS in Rwanda Ecosystem launched in Kigali April 3rd! QLA is a world-class centre of scientific research excellence for Africa at the leading edge of information science and technology with a mandate to position Rwanda as a global information leader.

This assignment is for a contractor to provide expert technical in development and maintenance of website and to a limited extent for implement new features during the maintenance period. The services sought are indicated in these terms of reference. The contractor will be expected to be flexible and responsive to the website support services requested as well as provide innovative ideas and recommendations to ensure that the website are considered to be cutting edge by their users.

II. SCOPE OF WORK

The scope of work includes the development and the maintenance of the Quantum Leap Africa (QLA) Website using the similar website in the section XI as reference for the standard wireframe to achieve to following goal:

- Goal 1: Build Website wireframe.
- Goal 2: Improve the Website Accessibility. These Website shall be build responsive design so that its display is optimized for the screen size or the particular it is viewed on.
- Goal 3: Enhanced Website Functionality. Additional functionality that should be incorporated into the new Website:
  - Shared New feed among Centre Website;
  - Academic(Student, tutor and lecture) profile;
  - Video streaming via Youtube channel
  - Membership and user profile;
  - Survey and Pool;
  - Interactive PDF;
  - Online form;
  - Interactive animation;
Interactive Centre Map;
Donate;
Online event and Web conferencing;
All the existing feature in the main wireframe;

- Goal 4: Train technical and content Staff.
- Goal 5: implement and optimize Search Engine and optimization
- Goal 6: Maintain Website.

III. **GENERALS REQUIREMENTS**

Overall, the contractor is required to:

- Ensure development, troubleshooting, and maintenance support for the QLA website; and to collaborate with the AIMS Network IT team, serve as a resource for problem analysis and solution;
- Provide more effective development and design for the functionality of the websites;
- Provide technical and creative expertise to create, manage, and update;
- Ensure the search engine optimization and site analysis;

IV. **TECHNICAL SPECIFICATIONS**

The hired company / Vendor / Agency will be required to create (design, develop, test and implement) a web platform within the designated timeline which meets the following criteria:

1. Interactive, appealing, highly usable and responsive web design: Web Designs are very subjective, we expect the hired company to show-case their best elements in delivering suitable intranet design options. The design and solution must be easy to use
2. Average site load-time should be reasonable
3. Search engine friendly
4. Able to render appropriately on a wide variety of different web browsers
5. Be Secure: The design of the solution should adhere to security best practices, for example: passwords should not be stored in plain-text, all form data should be validated, all user input should be sanitized, user interactions and activities should be logged, etc.
6. Design and final solution should adhere to accessibility and compliance requirements (as defined by the DLA project team): The Web solution should be designed to ensure that everyone, including users who have difficulty seeing, hearing, and making precise movements, can use them.
7. Public and Registered Users (Member's) only Areas
8. Site news/Trending now content blocks: The web solution will provide content/screen areas containing:
9. Calendar
10. Upcoming events
11. Latest news/Site news
12. Trending topics
13. Secured & Authenticated Web Access Web solution should be secured in accordance with current best practices, for example through the use of an SSL Certificate and appropriate access control methods.

14. User Registration and Administration: The solution should allow users to complete an appropriate user registration process. User registration data and credentials are to be persisted by the solution in an appropriate form. The user registration process should adhere to best practices including the use of CAPTCHA and email verification and should be able to scale as needed i.e. No limit on the number of users that can register.

15. Administrators should be able to review user registration/profile details, change user roles/access rights, terminate / close user accounts.

16. User Profile and Account Administration: Users should be able to view and update user generated information on self, for example personal details, password and account details, posts, preferences and interests.

17. Privacy Settings Administration: Members should be able to configure how much of their profile information is shared with different users/user groups.

18. Content Management: The solution should allow authorized QLA staff (or appointed personnel) to edit and update the website including the ability to create, remove, edit and publish content.

19. Site Statistics/Management Reports: The solution should provide authorised users with a number of relevant reports, for example user registration, site usage, key interests/topics being discussed within the collaborative spaces and other relevant statistical data, for example by using google analytics or other relevant technology.

20. Tagging/folksonomy: Users should be able to provide user-generated tags and descriptions of content being added.

21. Calendar, Events, Reminders, calendar integration: Specific authorised users should have the ability to create and administer events and event details. Other users should be able to search for and find events based on specific criteria. Members should be able to receive notifications that an event has been scheduled and reminders of upcoming events.

22. Social Network Integration.

23. Mass Email/Messaging: The system should provide a feature to allow authorized content administrators (or other authorized administrators) to contact all or group/community members. This feature may be used to facilitate the dissemination of newsletters.

24. Email Notifications:

25. Document Management System (DMS): Document upload (any file format) with Description - Who uploaded - Date of upload - File Format etc., creation of new relevant page (if required), Mouse Over description on File Name (compatible to major OS and Browser) image uploaded should be uploaded with the appropriate meta-data including mandatory keywords / tags / fields (will be decided later) – for internal Search Indexing.

26. Spam Control: The solution should provide an automated challenge system that reduces the number of spam comments/posts that either need moderation or slip through filtering mechanisms.

27. Search: The solution should provide users with the ability to search for and locate content based on keywords and key phrases. Search should not be limited to articles, pages or other forms of content-administrator created posts but should also include user-generated content found within the community areas.
28. Find a Member feature and Community/Group Member listing Views: The solution should allow users to find the member of a particular community or group based on some relevant criteria.
29. The solution must be able to accommodate the inclusion of transcripts/narrations for video content. Transcripts/Narration may be available in multiple languages. (Video could be uploaded on other websites, with streaming option on Intranet)
30. Blog: Intranet should be capable of having Blogs, with different themes / designs (at least 3 themes / designs to choose from).
31. Content Moderation Mechanism: Users/Members who have been granted relevant access rights should be allowed to flag, and moderate other members' comments/posts.
32. Discussion Forum: Intranet should be capable of hosting a quick and basic level of discussion with moderation of comments. Members should be able to view and create posts, edit their own posts etc.
33. Survey & Poll: Intranet should be able to conduct a survey of around 10 to 50 questions and Polling / voting system should also be available.
34. Public Users and Members Electronic Document Catalogue: Users should be allowed to search for, view and/or download articles and documents.
35. Users should also be able to assign star ratings on articles, videos and other informational content.

V. **USER GROUPS/AUDIENCES**

The intended users of the website include, but are not limited to, the following

- The General Public
- Science and technology researchers
- World wide Policy Makers
- Academia - University Representatives, Professors, Lecturers and other Academic Staff, Students, Student Groups
- Other research centres in mathematical sciences.
- World wide business men.

VI. **PROJECT RECOMMENDATION**

The website will be developed using WordPress CMS.

VII. **IT ACCEPTANCE CRITERIA**

The Contractor is expected to fulfil the below IT acceptance criteria:

- All the web design, development and deployment will be done by Contractcr in consultation with AIMS Team. The deployment includes the setting up of environment and installation of the software to be done by the Contractor on the AIMS provided server (including configure SSL).
- The Contractor will provide Configuration Documentation and Installation Guide/Standard Operating Procedures (SOP) which should clearly state how to manage the website, details of the database, environment and its configuration.
The services would be considered to have been delivered when:

- The application Source code is given by the Contractor to the AIMS Project Management in any electronic form, as advised by the AIMS.
- The Website is installed and all requirements and conditions are met as stated in the IT acceptance criteria and TOR.
- The Website with all its features listed as per this TOR is up and running and available on the web.

The website design has to follow an iterative development process with the involvement of AIMS Team and changes have to be accommodated as the website concept and design evolves.

VIII. SEARCH ENGINE OPTIMIZATION AND SITE ANALYSIS

The Contractor will ensure the search engine optimization. The SEO work will include:

- Keyword research & analysis
- Site analysis
- Competitive analysis
- Site content optimization
- HTML code optimization
- Search Engine submission (free search engines)
- Link exchange
- Web ranking report

IX. QUALIFICATIONS

The contractor is required to have:

- Extensive knowledge and experience of website development and management by making use of innovative technologies and applications;
- Specific and in-depth expertise in the WordPress content management system.
- Excellent communication skills and the capacity to be responsive to changing needs and requirements as communicated by the AIMS Project Network team.

X. FORMAT OF PROPOSALS

The Contractor is expected to describe its understanding of the objectives of the project and the Scope of Work. Contractors are requested to structure proposals as follows and provide complete details as indicated:

1. Company Profile (Turnover, Board of Directors, Office location(s); staffing, etc.);
2. Understanding of the Scope of Work;
3. Proposed Methodology / Approach and detailed Timeline with Deliverables;
4. Proposed Technology (with justification); (please highlight the pros & cons of the technology proposed;)
5. Team Strength (who will work on this project);
6. Detailed Cost Break-up (Design, Programming, AMC*, SSL Certificate, Security Audit, Hosting* (*with recurring charges. Example: 1st Year and for next 2 to 5));
7. Detailed description of work experience with traceable references (please list active web address);
8. Sample(s) of similar work-done (please list active web address);

XI. SUPERVISION & CONTACT

The AIMS Project Manager and the AIMS Project Sponsor will primarily carry out supervision and contact for
the consultant. The final product will be approved by the QLA Project board Team.

XII. EVALUATION

The following evaluation method will be used:

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<thead>
<tr>
<th>No</th>
<th>Category</th>
<th>Score</th>
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<tbody>
<tr>
<td></td>
<td>Overall Response to the RFQ 10</td>
<td>10</td>
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<tr>
<td></td>
<td>• Quality of Proposal</td>
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<td></td>
<td>• Understanding of, and responsiveness to, QLA requirements;</td>
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<td></td>
<td>• Understanding of scope, objectives and completeness of response;</td>
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<td>• Overall concord between QLA requirements and the proposal.</td>
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<td>Methodology 20</td>
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<td></td>
<td>• Quality of the proposed approach and methodology;</td>
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<td>• Quality of proposed implementation plan, i.e how the bidder will undertake each task, and time-schedules;</td>
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<td>• Risk assessment - recognition of the risks/ peripheral problems and methods to prevent and manage risks/ peripheral problems.</td>
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<td>Proposed Team / organizational capacity 20</td>
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<td></td>
<td>• Team leader: Relevant experience, qualifications, and position with firm;</td>
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<td>• Team members - Relevant experience, skills &amp; competencies;</td>
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<td>• Organization of the team and roles &amp; responsibilities;</td>
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<td>• Professional expertise, knowledge and experience with similar projects, contracts, clients and consulting assignments;</td>
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<td>• Company Financial status.</td>
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<td>Reference 20</td>
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<td>• Quality of the proposed approach and methodology;</td>
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<td>Please note- scores less than 50, will not be technically qualified to go to the next level of financial evaluation.</td>
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<td>Financial Proposal 30</td>
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<td>• Financial Scoring based on AIMS Procurement Formula (Lowest Bidder / Price Quoted * 30)</td>
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<td>Grand Total (Technical + Financial)</td>
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XIII. DELIVERABLES

The Assignment will be considered complete on:
- Complete Website code source and published online;
- Training of AIMS staff on CMS and maintenance of Website;
- Installation of the final Website which fulfills the IT acceptance criteria;
- complete handover of installation to AIMS;
- Operational and Maintenance plan
- Document for Maintenance Commitment
- All WordPress Theme and plugin license installed;
- Search Engine and optimization
- Transfer of all user rights to AIMS;
- Minimum specification for the Hosting environment
- Submission of required documentation is complete, approved and signed along with the complete Source Code Successful functioning of the application for 90 days (3 months warranty) with no functionality and data issues reported;
- Contractor to run the completed website through a Website Security Auditor Company for security check;

XIV. **PROJECT TIMELINE AND WARRANTY**

**Proposed timeline:** The Contractor should provide complete detailed timesheet of individuals involved and time of task delivery. Expected timeline is tree months from signing of contract.

**Warranty:** Expect hired Contractor to provide 6 months as warranty / handholding support, after development of Website and before start of one year of Annual Maintenance.

XV. **TRAINING, MAINTENANCE / SUPPORT PERIOD**

- Contractor will host the website during the development process and for 3 months after the completion. Weekly backup will be provided to AIMS during this period.
- Vendor will transfer the website to specified web server after completion of development.
- Vendor will provide **one year maintenance (after 6 months warranty)** and technical support for the website;
- **Technical Assistance:** In case Website needs to be moved from one server to another, any patch upgradation on Open Source CMS and server etc.

XVI. **REFERENT OF SIMILAR WEBSITE**

1) [http://www.is.mpg.de/de](http://www.is.mpg.de/de)
2) [https://www.fraunhofer.de/en.html](https://www.fraunhofer.de/en.html)
3) [https://idss.mit.edu/](https://idss.mit.edu/)
4) [https://tech.cornell.edu/](https://tech.cornell.edu/)
5) [http://www.xrce.xerox.com/](http://www.xrce.xerox.com/)
6) [http://www.utrc.utc.com/](http://www.utrc.utc.com/)
7) [http://www.getty.edu/research/](http://www.getty.edu/research/)
8) [https://www.media.mit.edu/research/?filter=projects](https://www.media.mit.edu/research/?filter=projects)
9) [https://www.weizmann-usa.org/](https://www.weizmann-usa.org/)
10) [https://www.nasa.gov/centers/ames/home/index.html](https://www.nasa.gov/centers/ames/home/index.html)
XVII. **Website Hosting**

The Hosting server will be provide by the AIMS IT Team. Proposals should not exceed 20-30 pages. Incomplete proposals will be disqualified and not considered for evaluation.

Please send your proposals latest by 5:00 p.m. Local Time Kigali, 27th October 2017 at: procurement@nexteinstein.org