REQUEST FOR PROPOSAL TO DEVELOP E-LEARNING PLATFORM
Reference No: NAG/SR – VA – 068/2021
Date: 18 August 2021

<table>
<thead>
<tr>
<th>Organization</th>
<th>Network Activities Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Country</td>
<td>Myanmar</td>
</tr>
<tr>
<td>Services/Work Description:</td>
<td>E-Learning Platform development and maintenance by Consulting Firm</td>
</tr>
<tr>
<td>Duration</td>
<td>24 months (4 months development and 20 months maintenance)</td>
</tr>
<tr>
<td>Location</td>
<td>Home-based, but may require frequent consultations with key stakeholders</td>
</tr>
<tr>
<td>Applications closing date</td>
<td>31st August 2021</td>
</tr>
</tbody>
</table>

**How to apply**
Submit application together with (1) cover letter explaining why you would be a good fit for this role, (2) CV detailing relevant experience and qualifications, (3) Propose budget amount, (4) Contact details for two relevant references to apply that procurement@nagmyanmar.org, recruitment@nagmyanmar.org, or “Recruitment Unit, Network Activities Group (NAG) Address, No.51, Shukhinthar Street, Rose Garden, Ward- 27, North Dagon Township, Yangon, Myanmar. Phone: 09 891580840, 09 450694361.”

**Note**
Only short-listed firms will be invited for interview. Telephone inquiries will not be responded. We are not obliged to return all received application. (Please do not send original documents as they will not be returned)

I. Background of the Project
The Improving Inland and Marine Fishery Governance (IIMFG) (Jan 2020 –Dec 2023) Project is funded by LIFT. It aims to improve Fisheries Governance, Policy Research & Education in Rakhine State & Ayeyarwaddy, Yangon, and Thanintharyi Regions. It is the extended program of the 1st Strategic Partnership Agreement (SPA-1) between LIFT and NAG, from 1st April 2017 to 31st December 2019, focused on improving co-management of Ayeyarwaddy’s Wetland Resources.

There are two goals of the project:

Goal 1: Capable, sustainable and influential national CSOs working at scale on all facets of small-scale fisher livelihoods and decent work in Myanmar’s fishery sector.

Goal 2: An informed LIFT Board and management engaging proactively with civil society for strengthened resilience and sustainable livelihoods in fisher and riparian communities.

There are six objectives of the project:

1) Improved Community Fisheries Co-management
2) SSF Livelihood, Value chains and SMEs
3) Effective Fisheries Partnerships and Networks  
4) Improved Legal Frameworks  
5) Improved Collaboration with DoF  
6) Improved Research into Political, Social, Economic and Environmental Issues

II. Objectives
The overall objectives of the assignment will be the following:

- To build the C4RD e-learning platform making its architecture robust, secured and flexible to integrate different e-learning features.
- Develop native mobile applications (Android and iOS) of C4RD e-learning platform.

III. Scope of Work
The scope of work can be categorized with the following tasks:

A. Conduct a needs assessment to prepare the precise System Requirement Specification (SRS), provide concrete development plan including context diagram of the proposed system, Sequence Diagram, Use case Diagram, and Process Flow Diagram.

B. Design the solution architecture of the C4RD e-learning platform in a manner for better performance, flexibility, scalability, extendibility and multitenancy of the system for future expansion.

C. Ensure access control, application-level security and on-demand support to Helpdesk (layer-2) for uninterrupted LIVE service.

D. Design and develop Role-wise credential system incorporation for better user role management. System should support user registration in multiple ways including mobile number, Google ID, email, Facebook, etc. User information can be imported from the NID system.

E. System shall provide the ability to encrypt user IDs and passwords and impose minimum password lengths along with ability to reset passwords following a standard password strategy. User log management shall be recorded.

F. The system will have an e-communication module, which will be used for sending email and SMS the categorized users and relevant reports of e-communication should be produced.

G. There will be a Dashboard presenting dynamic data in reports in tabular and graphic presentations.

H. Develop a native android application of C4RD e-learning platform with features as required.

I. The proposed C4RD e-learning platform should have a robust multimedia content management system with support of video, audio, pdf, word, ppt etc. It should have an on-demand video streaming capability for conducting live sessions. It should have provision for Two-way real-time audio and video chat support. Third party tools can be integrated for this.

J. The system should have provision for periodical & instant Data Backup & Auto Archiving System.

K. The system should migrate all data from previous version of C4RD with appropriate data validation; a report should be presented of data migration.

L. It should have a dynamic content management system (CMS) with support of contents upload, tagging, searching and download features. Content hit/view/download count will be recorded and presented in dashboard and printable reports. A user level permission will be set to control
who can upload, publish and download contents.
M. There should be provision to integrate payment gateway integration in the system for the paid courses of C4RD, if there will be paid courses.
N. C4RD e-learning platform should be SCORM compliant: it should have open ended API to share or exchange data with 3rd party e-learning system.
O. C4RD e-learning platform should be cross browser compatible, responsive and graphically attractive.
P. The developed system must support ZAWGYI and UNICODE enable font so that Myanmar content can be viewed properly from any device. The proposed system must facilitate for showing the content both in English and Myanmar Language.
Q. Vendor Company will ensure system to be tested at module integration and load level. All necessary security test at application-level architecture needs to be followed and conducted by the vendor.

IV. Support & Maintenance Requirement
The following are the support and maintenance requirements:
A. Provide 2 Years support & maintenance service of the C4RD e-learning platform from the date of contract signing. Support & Maintenance will cover fixing all bugs and system errors as and when identified by the system users.
B. Vendor shall take or advice server maintenance engineer to take timely backup of the entire database to meet up the challenge of system recovery, in case of any disaster or missing data.
C. The vendor’s team will work at their office premises, but in case of special requirement, they may work at the client’s premises or any client designated location.
D. Assign a Project Manager who will work closely with the clients designated official to ensure proper delivery of any assignment during the support and maintenance phase.

V. Technological Specification
The technical specifications are as follow:
A. Need to use Open-Source Development Platform
B. PHP based platform with tool architecture like Bootstrap, framework like CakePhp/Laravel/CodeIgniter can be used
C. Android and iOS apps should be developed in native android app development language
D. Future technology Change, iterative prototyping and agility in product design are the generic expectation
E. Technology and all related design/data will be open to Client
F. The vendor should follow any of the industry standard secure development methodology such as (but not limited to) Comprehensive Lightweight Application Security Process (CLASP) by OWASP etc. The vendor should consider (but not limited to) common vulnerabilities such as SQL Injection, Cross Site Scripting (XSS) etc. Vendor will undertake responsibility for Input Validation Controls, Authorization/Authentication Control and other security controls in place in both test and production environment of application.

VI. Supervision and Performance Evaluation
Awarded vendor will be working with Program Officer and NAG IT team.

VII. Project Management
The bidders are expected to provide a detailed project plan and an implementation strategy of the project. This plan is expected to include:
   A. Information regarding the development process (the bidder will comply with all standards)
   B. Application development tools, language, and database requirements
   C. Maximum lead time for delivery of services
   D. A development method and schedule with indicative timeline (Gantt chart)
   E. Risk management strategy and quality control mechanism
   F. Any development tasks or assumptions that may be required to render the solution fit-for-purpose
   G. Any anticipated integration tasks
   H. Comprehensive contingency plan

VIII. Deliverables
The following are the main deliverables of the project:
   A. Inception Report
   B. Software Requirement Specification SRS
   C. Development of C4RD e-learning platform
   D. Development of C4RD e-learning platform Android Mobile App
   E. Data Migration Document
   F. API Specification of the C4RD e-learning platform
   G. Software Deployment on Live Server
   H. User Manual
   I. Knowledge transfer through workshop/Training
   J. Source code & database
   K. Project Completion report including upcoming challenges if any
   L. Provide 18 months Support & Maintenance Service

IX. Requirements
This contract is open to consultant firm with the following requirements:
   A. Must submit valid Company License
   B. Minimum 5 years’ experience in Software development business
   C. Firm should have experience in e-learning/similar type of work
   D. The firm must have experience of managing web-based applications
   E. Firm must demonstrate its management capacity (website link/brochures and other documents describing similar assignments, experience, availability of appropriate professional staff and experience among applicant’s staff, resources to carry out the assignment)
   F. Firm should demonstrate its logistical capability
   G. IT Solution/Portal Development & deployment that works on public cloud
H. List (Name, designation, years of experience, number of projects, expertise) of IT personals who can be engaged to perform the assigned task
X. Expected Timeframe
Duration of this contract is 24 calendar months. To be effective from the date of signing the contract.

<table>
<thead>
<tr>
<th>SN</th>
<th>Activity</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Conduct background scoping and research work and finalizing the system Requirements</td>
<td>10 days</td>
</tr>
<tr>
<td>2</td>
<td>Development of C4RD e-learning platform including LMS, interactive features, mobile app, dashboard, communication, payment supports etc. to incorporate client requirement as per approved SRS</td>
<td>70 days</td>
</tr>
<tr>
<td>3</td>
<td>1st level feedback collection and incorporation</td>
<td>10 days</td>
</tr>
<tr>
<td>4</td>
<td>Testing, debugging, update</td>
<td>10 days</td>
</tr>
<tr>
<td>5</td>
<td>Delivery of UAT and 2nd level feedback collection</td>
<td>5 days</td>
</tr>
<tr>
<td>6</td>
<td>Knowledge transfer through workshop/training</td>
<td>5 days</td>
</tr>
<tr>
<td>7</td>
<td>Delivery of the final version of the system along with all required documentation including source code, user manual and technical documentation (SRS Final Version)</td>
<td>10 days</td>
</tr>
<tr>
<td></td>
<td>Sub-Total</td>
<td>4 Months</td>
</tr>
<tr>
<td></td>
<td><strong>Phase 2: Support</strong></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Provide required and necessary support &amp; maintenance</td>
<td>20 Months</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>24 Months</td>
</tr>
</tbody>
</table>

XI. Background of Network Activities Group
Network Activities Group (NAG) is a national registered non-profit organization in Myanmar. In fostering our vision “Emergence of a peaceful, prosperous and dignified society that values equity and diversity”, NAG focuses on the Governance Approach, intending to necessary changes of various stakeholders and existing practices towards good governance which is essential and core for the sustainable development and win-win solutions for all stakeholders. Accordingly, NAG has engaged stakeholders of all levels and different areas including local, regional and national government departments, trying to promote interaction, good relations, and eventually coordination and collaboration among them. Given that nature of facilitating and coordinating activities, and creating networks of development efforts with partners, and promoting governance among relevant stakeholders, NAG implements livelihood, natural resources management and rural development programs and projects in Central Dry Zone, Coastal and Delta, Hilly Region and South Eastern Part of Myanmar.