REQUEST FOR PROPOSALS: CARILEC RESILIENT ENERGY COMMUNITY (CAREC) KNOWLEDGE PORTAL - WEB DESIGN SERVICES

March 2024

1 CONTENTS

1. GLOSSARY

Accelerated Sustainable Energy and Resilience Transition 2030   ASERT-2030

Artificial Intelligence	AI
Business to Business	B2B
Business to Customer	B2C
Caribbean Development Bank	CDB
Caribbean Electric Utilities Services Corporation	CARILEC
CARILEC Resilient Energy Community	CAREC
Community of Practice	CoP
Customer Relationship Management Software	CRM
Environmental Social Governance	ESG
Governance, Risk, Compliance	GRC
Human-Computer Interaction	HCI
Infrastructure-as-a-Service	IaaS
Internet of Things	IoT
iPhone Operating System	iOS
Machine Learning	ML
Monitoring, Reporting, and Verification	MRV
Platform-as-a-Service)	PaaS
Rich Site Summary	RSS
Software-as-a-Service	SaaS
Sustainable Development Goals	SDG
User Experience Design	UX
User Interface Design	UI

2. INTRODUCTION + PROJECT BACKGROUND:

The Caribbean Electric Utilities Services Corporation (CARILEC) is an association of electric energy solutions providers operating in the Caribbean, Central America, and South America. CARILEC is a member-driven organization whose mission is to enhance the effectiveness of members by providing industry-related services, networking opportunities, workforce development and knowledge-sharing opportunities, mutual assistance programs, and strategic direction to accelerate the Caribbean Region's energy sector transition through innovation and advocacy. Since 2016, CARILEC has developed and operated the CARILEC Resilient Energy Community (CAREC) as an online platform to support the various workforce development initiatives of the membership and to serve as a tool for driving Communities of Practices to support the CARILEC membership. The platform now stands with over 1500 plus members from 75+ countries and has delivered a combination of in-person training events and digital learning experiences. CAREC is currently an extension of CARILEC. However, it has its own separate membership base of energy professionals and utility personnel dedicated to the sustainable development of the electricity sector in the Caribbean region, with a particular focus on renewable energy and energy efficiency. CAREC facilitates targeted knowledge exchange, capacity sharing and professional development activities under these themes. This is achieved through a combination of online learning activities, forums, connections to regional and international experts, curation of technical documents, and in-person training opportunities and workshops.

CARILEC envisages the transformation of the CAREC platform into a brand community and umbrella knowledge portal ecosystem for all CARILEC Learning and Development activities related to building resilience in the Caribbean power sector. As such, the new umbrella platform will focus on three key learning pillars: 1) Organizational & Leadership Development, 2) Resilient Infrastructure and Disaster Response, and 3) the transition towards low-carbon technologies. CARILEC is incrementally transitioning the CAREC ecosystem to serve as a dedicated knowledge portal and critical channel for delivering all workforce training resources, case studies, technical documentation, organizational best practices, and advocacy. CAREC is a searchable repository of the CARILEC brand's events, outputs, resources, experts, and insights. The current CAREC platform is utilizing Discourse forum software. In addition, CARILEC utilizes a Moodle Learning Management System (LMS) for coursework delivery under a separate initiative, the CARILEC Resiliency and Energy Efficiency Program (CAREEP). The system redesign is intended to make the solutions found on the website more modern and user-friendly, improve the ability to better inform the CARILEC Secretariat on the requests and needs of the users, and provide an infrastructure to support user business goals. The new design is to build the CARILEC brand; as such, all designs will reflect the institutional image/brand identity. Ultimately, CARILEC aims to foster continuous measurable knowledge exchange over the next five years between Caribbean energy practitioners active in the electric power industry by implementing digital tools and services to support the development of utility-driven best practices.

3. SCOPE OF WORK

The selected web developer/design service provider (Consultant) must update the existing community by enhancing key features. The priority is to create the user interface for the new CAREC knowledge portal to align it with industry best practices. The Consultant will establish a content management system (CMS) such as WordPress and assist in the integration of a CAREC-branded instance of CARILEC's current Learning Management Software (LMS) and connect this with the existing CAREC Discourse forum software, thus establishing a unified interface for members to explore CAREC's services. CARILEC envisions the process will require the creation of single-sign-on (SSO) capabilities

and the included database to manage member relationships and data. The User Experience (UX) and User Interface (UI) design are expected to be discussed in collaboration with the CAREC Management Team.

The CAREC knowledge portal should be developed as a responsive web application on all devices (i.e., laptop, desktop, mobile). CARILEC also seeks to understand how the current system can be transitioned to a customized mobile solution.

The web developer will also advise the CAREC Management Team on potential avenues for adding strategic components to the CAREC Knowledge portal ecosystem. In the future, CARILEC aims to add details with different repositories of tools and resources. Some of these component features include 1) new features for the CARILEC Disaster Assistance Program (CDAP), 2) a product marketplace and procurement portal for vendors and buyers, 3) an Environmental Social Governance toolkit with resources such as Diversity Equity and Inclusion tools, 4) fundraising and e-commerce infrastructure, and 5) an innovation sandbox where members can share case studies, seek and track mentoring opportunities by skill, access dashboards to see energy project data visualization and project/policy trackers. Inputs from the selected candidate will help inform the direction of CAREC's software infrastructure evolution.

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3.1. OBJECTIVES:

The overall objectives of the CAREC knowledge portal activity are :

i)   To contribute to the acceleration of energy transition and the strengthening of power sector resilience in the Caribbean through the facilitation of access to opportunities for collaboration, learning and exchange of best-practices.

ii)   To enhance the resources available to all of the CARILEC membership and build the CAREC Brand and its market capture across the Caribbean and beyond. CARILEC aims to establish critical tools and services for energy project and workforce development

3.2. SPECIFIC OBJECTIVES:

The specific priority objectives for this scope of work are as follows:

i)   To enhance the access to opportunities for collaboration, learning and exchange of best-practices by combining/connecting two existing CARILEC digital platforms into a seamless interface for members to engage with the CAREC brand and resources (CAREC and CAREEP LMS). This will be done by:
   a. Creation of single-sign-on (SSO) feature and customer-relationship management database to allow members and new registrants to be documented and CAREC portal activity and data to be analyzed.
   b. To enhance the user-experience and user-interface of the CAREC Knowledge Portal utilizing searchable and responsive Content Management System (CMS) and resource and media features.

The new features should seamlessly link all of CARILEC's infrastructure and offer improved avenues for business to business (B2B) engagement.

4. Tasks and Responsibilities

The selected web development service provider (Consultant) will work to develop a working prototype of the CAREC knowledge portal. The new interface, backend infrastructure, hosting, portal layout, and critical features were agreed upon with the CARILEC Secretariat. The easy-to-use, low-cost solution may have elements or features highlighted in Appendix 1. It is envisioned that CAREC will serve as a Platform-as-a-Service (PaaS) for membership and CARILEC partners. This section identifies key tasks that we believe can support the outcomes desired by CARILEC for the CAREC Knowledge portal. CARILEC is also open to suggested alternative proposals of key executable tasks to achieve the objectives:

4.1   KEY TASKS

4.1.1   CAREEP + CAREC INTEGRATION

- Analyze the current CAREEP LMS platform and Discourse forum software and identify potential integration challenges and opportunities.
- b) Develop a comprehensive integration plan, specifying the timeline, deliverables, and technical requirements for integration of the CAREEP LMS and Discourse Forum. Provide a design charrette meeting to assist CARILEC in exploring features and approaches to evolve the CAREC Community Feature. Discuss with the CAREC team the capabilities and considerations for provision of a robust set of features to support better data analytics, referrals, documentation, procurement, marketing, storytelling, peer-to-peer collaboration, gamification, customer relationship management, AI + machine learning, content scheduling, group work, and data visualization.

- Set up the front end : Identify a content management system (CMS), e.g., WordPress, and design and develop a unified web application interface that integrates the CAREEP LMS (Moodle) and CAREC forum software (Discourse). The consultant should secure the existing site while transitioning to the new platform and preserve existing website content and functionality. If possible, the CMS should utilize a single sign on (SSO) feature and integrate the membership database with Customer Relationship Management (CRM) software. The member data should link the membership to groups, and include demographic data fields to gauge their expertise, organization, position/seniority, gender. The consultant should explore plugin features for Discourse update[1] based on the discussion with the CAREC management team.

- To establish better Human-Computer-Interaction (HCI) by implementing industry best practices for User Experience (UX) and User Interface (UI) Design, e.g., color and language selection). The design will also integrate other CARILEC initiatives and provide navigational links to spaces for engagement (e.g., benchmarking program, CDAP, CAREEP). The CAREC knowledge portal will be a responsive web

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[1] https://www.discourse.org/plugins

application environment easily accessible from various devices, including desktops, laptops, and mobile devices.

- On the new interface (CMS), establish pages for topical CAREC working groups that link to the forum and CAREEP LMS service. Working groups should have a level of privacy and security to allow for confidentiality management. Visitors to the working group page will receive a description of the working group and can request to join, [2]

- Integrate APIs that can assist in structuring knowledge management across the portal, e.g., ClimateTagger ot Discourse AI integration. Explore integration of Discourse AI features to assist in searchability within the community forum[3].
  Add a new Resource and Media library page for the CMS . The Resource and Media Library feature will allow members access to a searchable repository of documents, files, find templates, watch streamed videos, past webinars, access event photos, read CAREC blogs, access industry data and thought leadership reports, and listen to CAREC podcasts placed by CAREC Management team. All the media and resources should link to the forum where members can discuss or ask questions of each other and the experts involved in the post e.g. panelist, authors. The Consultant/Service provider will help establish site taxonomy, search functionality, document tagging, document rating, and linking of the repository to relevant discussions. The library will include searchable access to videos, webinars, podcasts, blogs, documents, and reports that link to the forum. The audiovisual interface will assist in digital storytelling and marketing. Working groups link to media library document repository content with different access levels for CARILEC members or staff. The repository should have the ability to assign different levels of access to some resource, e.g., for private working group documents or member-only documents. The Resource and Media library will also house documents used in the CAREEP LMS program. As training tools. There should be a level of access to separate private/public documents, i.e., administrative control of visibility.
  Develop user registration and authentication via single sign-on (SSO) functionality and framework across the CARILEC ecosystem (i.e. CARILEC-CAREC-CAREEP). The consultant will support the development of an expert database to populate registered user information. The database will indicate demographic information for metrics reporting (e.g., country, gender, age), employment information, expertise, groups, publications, and mentorship status. This information will be searchable in the expert catalog. Users can access, modify, and upload resumes or provide links to social media. Admins should be able to deliver personalization based on unique user needs. The CMS should have an ask-an-expert feature or link to allow navigation through the database members. The Consultant/Service Provider will support the integration of Customer Relationship Management (CRM) software (preferably open source e.g. Civi-CRM) to allow for the building of databases for the CAREC working groups and ask for an expert service. The CRM should link to the Single-Sign-On functionality. The consultant will advise and assist CARILEC in transitioning the existing members into the new membership database and CAREC knowledge portal. The site should enable social login functionality as well, depending on the user type.
- Ensure new site cybersecurity protocols are implemented to protect integrated components.

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[2] Working groups are specialized groups of members with key expertise for CARILEC mission e.g. Battery Storage or Cybersecurity.
[3] Discourse AI integration: https://discourse.org/ai.

- Implement website analytic. Ensure indexing and SEO (includes keyword plan and metatags for Google Analytics). Support the CARILEC staff in utilizing the site, uploading content, and monitoring analytics.

- Ensure that all pages of the platform have been tested for complete compatibility and functionality (for desktop and mobile)

- Integrate a Customer Relationship Management (CRM) feature to connect to the fundraising page and track campaigns and relationships aligned with the member database.

- Establish a live-chat bot feature on CMS to automate tasks for requests of the CARILEC Secretariat, e.g., chat can onboard new users, direct members towards information, and allow members to make special requests.(e.g. for training, to engage an expert, to request project assistance from membership, or organize working tours). This feature is to assist CARILEC Secretariat in managing incoming requests.

- Establish pages to other resources via CMS, e.g., events page, that will link content to the Discourse or LMS as necessary. The events advertisement page should link to member database and allow CARILEC to track registration. The events page should link to social media sharing capabilities.

- Support CARILEC in identifying the approach to implement dashboards, e.g., project tracker, fundraising, and mentoring

- Support CARILEC with insights on future approaches to establishing an e-commerce/product listing or procurement and marketplace feature. Explain how tools like Discourse Advertising (plugin) can support such activities.

- Conduct thorough testing to ensure functionality, usability, and compatibility across browsers and devices. Ensure the backend and front-end functionality are working effectively. Lead the beta test of the CAREC portal with select members and staff while implementing any additional changes based on the beta test result. Refine and test the prototype and support the launch.

4.1.2 WORKSHOPS

- Provide a workshop to CAREC Management to demonstrate onboarding and how to operate the new platform and populate the site with content. Showcase how to access data analytics from the new knowledge portal and database. Showcase to the IT Team how to update, operate, and manage the backend infrastructure and hosting.

4.2 OPTIONAL TASKS:

- CARILEC aims to evaluate the options for the evolution of the CAREC Brand. The Consultant is required to provide CARILEC with an estimation of the costs of developing a CAREC Knowledge Portal app as a delivery channel for member engagement and content. As mentioned, CAREC serves as a Platform-as-a-Service to members of the CARILEC Community. The team aims to understand the critical considerations for investing in a custom app for Android and I-OS systems.

- Run a design charrette with the CARILEC team to explore mobile software design and development approach given the current CAREC infrastructure. Provide short technical insights and notes on the requirements for developing a custom app versus using Moodle and Discourse mobile product applications. i.e., off-the-shelf vs custom-built cost considerations.

5   DELIVERABLES/OUTPUTS

The project will result in the following deliverables based on the tasks and efforts outlined in sections 4 and 5 above (or any supplementary suggestions from service provider):

CAREEP LMS + CAREC Integration:

i.   Inception meeting with the CARILEC Team and brief (1-3 pages) memo/report in PowerPoint or Word format outlining the work and timeline.

ii.   A Front-End user-interface (CMS) linking the CAREC Discourse, CAREEP LMS - Moodle software infrastructure, and the Media Library. The LMS and Discourse software will include API's and integrations agreed upon during the design phase of the project.

iii. -A searchable and responsive expert database linked to the single-sign-on feature, CAREC portal integration features, and the CAREC Customer Relationship Management (CRM) software.

iv.   A fully branded, functioning, secure, and responsive version of the CAREC knowledge portal

Technical Documentation + Workshops

v.   Technical documentation and short memo on approach to add future recommended features to CAREC e.g. product marketplace, e-commerce etc.

vi.   1-2 workshops inclusive of initial design charrette. The workshop meetings should assist in establishing potential future evolution of the development of the CAREC Community. The final handover workshop should showcase the CAREC knowledge portal project progress and final operation of the CAREC knowledge portal.

Optional deliverables:

vii. Initial design memo on mobile application development for CAREC Knowledge portal.
viii. Provide the indicative costing for developing a customized CAREC phone application to deliver E-services.

6   PROJECT SCHEDULE

The consultant will submit an invoice after each deliverable or after the completion of the consultation based on preference. CARILEC request that the bidder put forward the indicative workdays for completion of the following deliverables. CARILEC intends to complete the project in time for the CEO and Leadership Conference 2024 beginning May 19th. The platform is seen as integral to the conference programming and consultant should have platform tests completed by May 10th in order to facilitate on-boarding. The proposed number of days is allocated

below. This schedule will be discussed with selected candidates based on inception and work plan. The priority task is the creation of the CAREC branded user interface linking the forum and the LMS. Tasks or features will be prioritized based on engagement with the consultant/service provider and budget.

Deliverables/Milestones	Indicative Workdays	Time Frame
Proposal Submission Deadline		
Kick-Off Fee + Workplan		
CAREC Ecosystem Interface Design + Database Development		
Development of CAREC portal prototype and testing		
Final Product Launch		
Technical Documentation and Completion of 1-2 workshops (webinars)		
Mobile Design for CAREC (optional deliverable)		
Annual Maintenance (Retainer over one year)		

Proposals will be evaluated between April 7th and April 14th, 2024. The project activities will be completed over two months from the awarding of the contract (estimated as of April 14th). The maintenance retainer is for one year of ad-hoc support. , Please note that the timeline is subject to change based on the evaluation process and negotiations with the selected Consultant.

7   TECHNICAL SPECIFICATIONS & RESPONSIBILITIES:

Throughout the project, the selected service provider/consultant will be expected to provide the following:

- A work plan/methodology broken down by components. Initial questions for the CARILEC Team should be submitted along with the work plan.
- Draft web designs or models for review by the CAREC management team
- Full technical documentation materials (any code and design/API) to facilitate future deployment, maintenance, or changes.
- Documentation of the root passwords to facilitate hosting or elements of the portal.
- Web development, design, and support during the system building and occasionally for maintenance of portal post-product launch (retainer).
- Break down the infrastructure costs of maintaining the portal components.
- Provide the client with a backup copy of data from the existing community.

The web development service provider (Consultant) will report to the CAREC Management Team and work closely with the IT Team to deliver the project. The Consultant will occasionally liaise with representatives from other Secretariat departments during the project's phases.

Briefing- A first meeting with the development team will be conducted to brief the firm on the plans for the CAREC knowledge portal and to discuss key features and work plan timelines and schedules. The consultant is expected to organize meetings to share feedback, clarify questions, and occasionally test features with the team.

The Consultant will discuss any required background information to assist in developing the CAREC ecosystem. There will be weekly reporting of the project status to the CAREC Management team, and the selected consultant will be responsive to the team within five business days. The Consultant will respond to the questions or feedback of the CARILEC team in writing following the design sessions.

The CARILEC team will assess the project's outputs alongside a selected beta group of users/partners from the CARILEC membership. The Consultant is expected to assist in the workshops to acquire feedback for the product.

CARILEC will provide access to the current ecosystem and content to allow for project development.

Each of the deliverables is to be elaborated by the consultant and will be subject to a minimum of 1 and a maximum of 3-day review processes conducted by CARILEC and its cooperation partners.

7.1   USER EXPERIENCE AND ACCESSIBILITY:

- The CAREC knowledge portal should have a responsive design on all devices, i.e., mobile and tablet systems (Android & iOS), laptops, and desktops (Windows & Mac).
- The system should be attractive and user-friendly, with administrative interfaces for all features.
- There should be user-friendly front-end design and development to optimize public use.
- The system should be accessible on all major browsers (e.g., Microsoft Edge, Mozilla, Firefox, Google Chrome, Safari, etc.).
- The CMS must be user-friendly and easy to understand for members or users with no web management background. As such, the CMS should be a secure framework that allows CARILEC Management functionality and administrative capabilities to update the site using the CMS.
- The infrastructure design should consider open-source technology as much as possible.
- Website should include multilingual language support— ideally to the languages of Latin America and the Caribbean –English, French, Spanish, Dutch, Portuguese.
- The design should align with any of CARILEC's branding guidelines.

7.2   RELIABILITY

The CAREC knowledge portal ecosystem should work reliably around the clock. The system should be responsive, and backups and archiving of the system should be conducted at a frequency considered industry best practice for enterprise-level systems. The system should have data storage executed most optimally for an unlimited time. The system databases should be able to revert to the state before the last update due to having backups.

7.3   SYSTEM SECURITY

System security is a top priority, given that the content of the CAREC knowledge portal consists of data on national electric infrastructure for Caribbean jurisdictions. The system should include software tools to ensure information security, control levels of access or system rights by user type, e.g. (administer, operators, users), provide reliable 24-hour protection, and uphold system and data integrity. There should be the ability to log security events and have incident detection and response across all components of the CAREC Knowledge Portal. The upgraded system should be to the highest and most recent cybersecurity standards.

7.4   DEVELOPMENT + MAINTENANCE

As mentioned, each component will require elements of design for development. The maintenance of the system should be factored into the bid response. The selected Consultant will be held on an annual retainer for at least one year to assist with any troubleshooting or issues experienced as the CARILEC team operates the system. In the proposal, the Consultant is asked to indicate the cost of a retainer for product support.

The system should utilize standard open-source web development to allow the CARILEC team to make future changes independently.

7.5 TRAINING

The selected Consultant is required at each project stage to provide system onboarding and training for the CARILEC Staff. In addition, the vendor will support onboarding beta users and technical memos to assist the CAREC system managers. All documentation must be issued in English.

7.6 INTELLECTUAL PROPERTY

The outputs and intellectual property created or utilized in the assignment are the property of CARILEC, i.e., the Works-for-Hire. This includes the components, documentation, findings, results, solutions, and recommendations. Documents provided to CARILEC shall be considered drafts until reviewed and commented on by the CARILEC project management team. The selected Consultant will incorporate changes and resubmit any final documentation. CARILEC retains exclusive rights to the branded knowledge portal. All Works-for-Hire shall be delivered to CARILEC as owners, including databases, documentation, and the branded portal and tools. Contractors may use techniques and ideas after that once they do not qualify as CARILEC Works-for-Hire.

7.7 CONFIDENTIALITY

A non-disclosure agreement shall govern all CARILEC proprietary information and data shared with the Consultant/service provider.

7.8 COMMERCIAL REQUIREMENTS

The assignment requires that the Consultant firm is responsible for providing its own office accommodation, communication, supplies, out-of-pocket expenses, equipment, and all other costs incurred in preparing the requisite reports as part of its financial proposal.

Maintenance and license fees for system software should be included in the recommended design proposal to inform CARILEC of the potential annual upkeep of such a system design. . According to the proposed concept, the bidder shall indicate the cost breakdown and specify the required expenses for licensing, updating, and maintaining the used software and servers. A tailored solution built on an open-source platform is preferred. However, the organization is open to an affordable and customizable proprietary solution to meet its needs and is interested in understanding the mobile solution development costs.

In the proposal, the Consultant is asked to indicate the cost of a retainer for product support.

The bidder will be evaluated on competitive pricing for the services with a detailed breakdown of costs for each component and development phase.

The selected contractor will maintain commercial liability insurance in full force, effective throughout the contract term.

7.9 TRAVEL

According to the schedule mentioned in the chapter, the assignment is based in the home country.

The assignment is home-based and does not require travel but does require availability for digital engagement with potential platform users at the time of testing and for meeting with the CARILEC Secretariat teams.

8 PAYMENT

The selected bidder will receive payment based on the delivery of each milestone outlined below. The chosen candidate will provide invoices addressed to CARILEC upon completing each element and deliverable.

All payments shall be made only upon (a) submission of original invoices specifying the amount due and certifying that services requested have been performed and (b) satisfactory performance as determined by CARILEC and the CAREC Management Team.

Deliverables/Milestones	Payment
Kick-Off Fee + Workplan	10%
CAREC Knowledge Portal Ecosystem Interface Design (i.e. CAREC Discourse + CAREEP Moodle integration via CMS,SSO,+ CRM)	20%
Development of CAREC portal prototype and testing	40%
Final Product Launch	15 %
Technical Documentation and Completion of workshops/design charrette	15%
Total:	
Mobile Design for CAREC (optional deliverable)	optional
Annual Maintenance fee	quarterly payment

9 BID SELECTION, EVALUATION, AND ACCEPTANCE CRITERIA

The bidder must provide personnel suited to provide the web-development skillset for full-stack development. The team can consist of an individual, a consortium, or a firm and is referred to as the Consultant. The bidder is required to provide:

1. A company profile.
2. Identify the Program Manager and primary contacts.
3. Identify the expertise of project team personnel.
4. Provide portfolio and references.

5. Share short information the approach to managing the project. If needed, applicants can share any alternative suggestions on the tasks required, in bullet format.
6. Provide a work schedule and breakdown.
7. Provide costs of services for each component, including the cost of the annual maintenance retainer
8. Provide two references from previous clients.

Experience and Expertise

The service provider/Consultant should have at least five years of web development experience and a proven track record of building similar knowledge portals and IT infrastructure for large enterprises, non-profits, and institutions—the expert with demonstrable experience creating web-based applications or in digitalizing processes.

The applicant should demonstrate proficiency in using various programming languages, content management systems, and web development tools.

9.1   PORTFOLIO AND REFERENCES

The service provider/Consultant should present a portfolio of their previous projects to a referral, preferably displaying their work on knowledge portals or similar sites. In addition, the service provider will include references to verify the quality of work.

9.2   TECHNICAL COMPETENCE

The service provider/Consultant demonstrates proficient knowledge of industry standards, web development best practices, and security protocols. In addition, it has been shown the ability to provide critical features described in Appendix 1 and the project components. The candidate should demonstrate experience in the development of responsive, mobile-friendly websites.

9.3   PROJECT MANAGEMENT SKILLS

The service provider/Consultant or consortium should have a team lead with at least five years of experience or more as a Project Manager.

The service provider/Consultant demonstrates a proven ability to deliver projects within an agreed-upon timeline and budget. In addition, the candidate can provide detailed project plans, outlining milestones, deliverables, and development processes.

9.4   BID ASSESSMENT

The potential service provider/Consultant shall be allowed to propose a consortium or team to fulfill the requirements. CARILEC will evaluate proposals based on expertise in web design, the ability to deliver projects on time within budget, the quality of previous work showcased, and the cost-effectiveness or value for money of the bid. Please find the evaluation matrix in the table below:

Requirement	Percentage Score
Expertise	20

Portfolio of similar knowledge portal development demonstrating over six years of professional working experience with full-stack products, Computer Science, and Software engineering. A strong portfolio showcasing visually appealing and modern website designs. The portfolio should indicate experience in conducting user research and implementing user-centered design practices and include the CVs of the project team.	10
Demonstrated experience in relevant program languages such as Ruby on Rails, PHP, Python, PostgreSQL, and PHP. HTML, CSS, JavaScript.	2
Development experience with Open-source software and well-known content management systems such as WordPress, Discourse, Moodle	2
Project Management Skills such as Agile or Scrum	2
Proven Experience in cybersecurity for a cloud-based system	2
Experience in the development of SEO and Data Analytics Frameworks	2
Education Training	**10**
The minimum academic requirement is a bachelor's degree, vocational certification, or equivalent in computer science or a license/certificate in web development.	8
A Master's or Ph.D. is considered an additional asset.	2
Specific Work Experience	**30**
Demonstrated experience in UX and UI design for online brand communities of practice	5
Demonstrated experience in Discourse and customization or integrations with other open-source tools	5
Demonstrated experience working with Moodle and LMS Software	5
Demonstrated experience with database development and administration	5
Workplan proposal based on the scope of work and features described in the RFP and Appendix	5
Demonstrated experience working with utilities, governments, regional organizations, and multilateral and bilateral development agencies	5
Soft Skills and Other Considerations	**5**
Excellent verbal and non-verbal skills	1
English language speaker	1
Experience in Learning & Development for Non-Profits	1
Ability to function effectively within a team	1
Ability to work independently and take initiative	1
Financial Proposal	**35**
Cost per deliverable	20
Time per deliverable and transparent estimation of ongoing maintenance expenses.	10

9.5   CLOSING DATE FOR SUBMISSION

To apply, please submit a Letter of Intent that demonstrates your experience, qualifications, and proposed professional fee, along with your latest CV, proposal (work and budget plan), portfolio, and supporting documents. Please send all materials in PDF format with the subject titled: "Consultant: Full Stack Web Development Services for the CARILEC Resilient Energy Community (CAREC)." For any queries related to the submission, please get in touch with the CAREC Management Team and Training Manager at community@carilec.org and slprimus@carilec.org no later than April 12th, 2024.

All proposals must be submitted by April 12, 2024 at 11:59 PM (AST) via email to: community@carilec.org and slprimus@carilec.org

10 APPENDIX: FEATURES AND FUNCTIONALITY ENVISIONED FOR CAREC KNOWLEDGE PORTAL EVOLUTION.

This appendix showcases features envisaged for the evolution of the CAREC Knowledge Portal evolution. Features will be prioritized based on the Consultant/Service Provider inputs from the initial design session and the budget proposed for services.

Community of Practice Potential Features:

1. Comprehensive search functionality optimized across the website and discussion spaces. The taxonomy/tags are evident across the ecosystem and can help facilitate analysis of usage and help structure databases. Navigation bars/tools should allow users to access any location within 1 to 3 clicks.

2. Integration of APIs that can assist in structuring knowledge management across the portal, e.g., ClimateTagger

3. Discussion spaces /forum – enhance the design and usability of the discussion forum and connection functionalities to support user retention. The users can create profiles, save documents, share documents, update details, have a ledger of contributions and responses, create their own discussion spaces, and join different discussion groups. The forum should allow for sharing content such as graphs or typing in mathematical notation. Working groups have designated areas for the discussion of respective topics.

4. Single-sign-on – allow for sign-on across the CAREC knowledge portal ecosystem. Social Log-in features to allow access across social media. The system should allow a high level of personalization.

5. Personalization – data such as demographics and searches. The level of engagement and content viewed should be available to let administrators provide personalization of content and targeted engagement.

6. Security Measures to support feature combination selected - Two Factor Authentication, cybersecurity patches, real-time protection, coverage for threat vectors, e.g., email. Security management and interoperability across all products and services, APIs. The platform offers continuous security penetration testing and is of a high standard—spam control tools to be included. The site should facilitate CARILEC in maintaining confidentiality, integrity, and availability of some data, allow functionality for privacy, and have secure features to protect members of the CARILEC organization.

7. Area to place information on data on privacy and data ownership and the legal considerations of using the community

8. Content Management System (CMS) – improve the landing page design to expand the repository and include accessibility to crucial content and events.

    a. WordPress (CMS) serving as the main skin of the UI/UX

    b. I updated the Media Page to increase user interactions and support digital storytelling/marketing with a searchable media library. The media page allows user-generated content to be embedded via video links, audio recordings/podcasts, photography, and files. The library should link to

forums and have different levels of access based on the user. The page can allow the ability to embed live conferences using Zoom or other Widgets. CARILEC Staff can leverage the site to upload links and media.

c. Document repository – Members can search reports, publications, templates, blogs, articles, and select journals. Members can submit new pieces for review and upload. The repository should be searchable based on uniform taxonomy. The relevant discussion forums are linked to the warehouse. There should also be the capability of sharing private documents between users or working groups.

d. Document collaboration features & shared calendar with the ability to have public and private settings.

e. Blog + Microsite features community members, and CAREC Branded thought leadership.

f. Functionality to create topic summaries of portal activity.

g. Quick links – the users can navigate to more popular features, e.g., library, blog, shop, forum, help & support, charter, and working groups.

h. CARILEC Social Media Integration: Integration with social media platforms to allow users to share content on their social media channels. – e.g., LinkedIn, Facebook, Instagram, etc., for public-facing content, advertising, event calendar and sign-up.

i. Rich Site Summary (RSS) Feed – Identify regionally relevant podcasts, news, and updates from member and partner sites and other channels/outlets.

j. Notifications – members should receive updates from CAREC and the CARILEC Secretariat. The users should be able to control the feature.

9. Integration of other current CARILEC platform tools into the new CAREC knowledge portal:
   a. Learning Management System (LMS)
   b. Caribbean Disaster Assistance Program (CDAP) – and requests

10. Supporting Plug-ins and API integration capabilities

11. Hosting: option to host on CARILEC servers versus cloud-based

12. Expert Data Base – the ability to search individual members by area of expertise, organization type, location, qualifications, or project. This component can link to their contributions to the CAREC ecosystem. Profiles can be displayed, and contact information is optional.

13. Tagging of individuals or organizations from within the CAREC membership

14. Private messaging and Customer Relationship Management (CRM) features. Preferably, the open source should be linked to the Single-Sign On functionality that places inputs into member and expertise database.

15. Subscriptions for groups or calendar events. Technical working groups have designated areas, and users can request to join groups.

16. Multilingual functionality – ideally to Latin America and the Caribbean languages – English, French, Spanish, Dutch, Portuguese. This feature exists on the current LMS versus the Discourse platform, but CARILEC wishes to extend it across the ecosystem.

17. Interactive Rating and Comments – users can comment on content, rate responses, and recommend products and services. They can also mark queries as solved.

18. Artificial Intelligence & Machine Learning Integrations:

    a. Automation - Welcome chatbot system – feature to support community newcomers in navigating Frequently Asked Questions (FAQ), setting up a profile, and making requests to the CAREC Management and CARILEC Secretariat. The tool can help schedule meetings with the CAREC Team
    b. Content personalization & summary/checklist generation
    c. Support gamification of the learning + training services on CAREC
    d. AI integrations and plug-ins offered by Discourse or Moodle

19. Interactive Polling, Surveys, and Checklists – The ability to embed polls or surveys for various working technical groups and display/upload results for discussion or feedback.

20. Staff and User -facing Dashboard features:

    a. Robust administrative console dashboard easy for support
    b. Search Engine Optimization (SEO) + Website Analytics – keyword research and analysis; site analysis, competitive analysis, schema, meta-tags, alt-tags, header tags.
    c. Data Dashboards – allow for real-time visualization of data gathered by CARILEC for learning purposes' Project Dashboards
    d. CAREC ambassadors/superusers from member utilities can contribute to the dashboard.
    e. Support Google Analytics
    f. Data-Download Functionality

21. Accessibility in design:
    a. Responsive design on mobile devices: accessible across multiple devices: desktops/laptops (Windows and Mac), tablets, mobile phones (Android and iOS), and the possibility to package in App;
    b. Compliant with international accessibility standards (accessible via screen readers, colorblind-friendly color schemes, etc.); Compatible with all modern browsers; Optimal performance in low-bandwidth locations.
    c. Open-source stack for customization

       d.   Automated Community Tours + Rules

22. Training Request feature for all membership levels

23. Community driven B2B + B2C Marketplace or Product & Service Database
    a. Search + review categories of products used in the industry.
    b. Search, review, and categorize vendors and tech solutions.
    c. Provide advertising room for vendors/members.
    d. Reviews- users can provide product reviews + feedback.
    e. Bookings with members
    f. Secure payment
    g. Listings: jobs, tenders, expert requests
    h. , Partners + members can utilize.
    i. Establish demand-driven buyer groups for coordinating products and services.
    j. Contributes to data dashboard to track deals/projects of the membership.
    k. Project map feature to demonstrate where utility-scale projects are located (optional for members).
24. Process mapping.
25. Match-making features and scheduling for B2B and B2C interactions.
26. Robust reporting features
27. Legal Disclaimer page linked to document repository where the CAREC charter can be found alongside data policy.