## CARICOM REGIONAL ORGANISATION FOR STANDARDS AND QUALITY

# CAPACITY BUILDING FOR STRENGTHENING QUALITY INFRASTRUCTURE IN HAITI PROJECT

#### **TERMS OF REFERENCE**

#### CONSULTANCY SERVICES FOR WEBSITE DESIGN AND DEVELOPMENT

#### 1. BACKGROUND

- 1.01 Haiti has a long history of political and social crises, persistent fiscal imbalances, and extreme vulnerability to natural disasters. Haiti also faces intersecting crises, including famine, cholera, fuel shortages, and economic collapse<sup>1</sup>
- 1.02 Demographically, Haiti has a youthful and increasingly urban population, with a median age of 22.7 years. While infant mortality remains high (59 deaths per 1,000 live births), the population has grown steadily at 1.5% annually. More than half of the population is under 25, and a significant portion of youth (19%) are not in employment, education, or training (NEET), with urban areas and women disproportionately affected.
- 1.03 Poverty remains widespread, particularly in rural areas, with 58.5% of Haitians living in poverty. The Multi-Dimensional Poverty Index reports 41.3% of the population as multi-dimensionally poor, with significant contributors including inadequate living standards, health, and education deprivations. Women and persons with disabilities are especially vulnerable.
- 1.04 Gender-based inequality remains a major development challenge. Haiti ranks 163rd on the Gender Inequality Index (GII), with low female political representation (2.7% of parliamentary seats) and lower educational attainment among women. Female labor market participation (60.7%) lags behind men (68.9%), and women dominate the informal sector, earning lower wages. Gender disparities exacerbate vulnerabilities, particularly in post-disaster situations, where women and girls face heightened risks of exploitation and violence.
- 1.05 Over the past five years, Haiti has endured multiple natural disasters, including cyclones and earthquakes. In 2023, severe flooding and a 4.9 magnitude earthquake further compounded economic hardships. These recurring disasters strain fiscal resources, limiting the government's ability to balance social programs with critical development needs.
- 1.06 Over the past five years Haiti was impacted by tropical cyclone Irma in 2017, tropical cyclone Laura in 2021 and a devastating magnitude 7.2 earthquake in August 2021. Thus far for 2023, on June 2–3, heavy rains caused destructive flooding across the country, and this was followed by a 4.9 magnitude earthquake just days after on June 6. These natural disasters continue to compound the adverse effects to human life and livelihood and thrust the economy into deeper economic hardships. These events make it difficult to create the fiscal space necessary to balance social intervention programmes while catering to critical developmental needs to improve economic infrastructure.

#### Quality Infrastructure in Haiti

One of the major thrusts to improve the business facilitation environment and to improve the National Quality Infrastructure (NQI) of Haiti was the establishment of the Bureau Haitien de Normalisation (BHN) (i.e. the Haiti Bureau of Standards), in December 2012. Quality infrastructure (QI) refers to the standards and conformance infrastructure necessary to facilitate, *inter alia* trade and business development particularly for the protection and reassurance of the consuming public.

<sup>&</sup>lt;sup>1</sup> The Guardian (Accessed November 2023) - Haiti crisis: how did it get so bad, what is the role of gangs, and is there a way out?

1.07 The BHN is a public entity and is a technical department of the Ministry of Commerce and Industry under the supervision of the Minister. The BHN is financed from the budget of the Ministry of Commerce and Industry. BHN's mandate is to provide assistance on the standardisation of quality goods and services, and the promotion of quality and conformity assessment services to the Government, the private sector and civil society. At the launch of BHN, a metrology<sup>2/</sup> laboratory was also established for the verification, calibration and/or adjustment of measuring instruments used in trade and industry. To this end the organisation is headed by a Director who is supported by 17 staff members in the technical areas of standardisation, industrial metrology, certification and information.

#### 1.08 BHN's responsibilities include:

- (a) producing, publishing and disseminating standards and reference standards;
- (b) providing training on standards and their technical implementation;
- (c) certifying conformity to standards and reference standards;
- (d) creating and managing quality signs (such as trademarks and labels);
- (e) representing Haiti in national, regional and international bodies of standardisation; and
- (f) organising/coordinating certification and metrology activities.

1.09 In 2013, the United Nations Industrial Development Organisation (UNIDO) hosted training courses for a number of stakeholders including BHN staff, private sector representatives, companies, consumer organisations and university personnel. Courses such as "Principles and Procedures for Establishing Standards," "Management of Certification Systems – International Organisation for Standardisation (ISO) 17065," and the Quality Management System ISO 9001:2008 standard were among the training provided to stakeholders. The ISO 9001:2008 course in particular, given its importance to enterprises, and the fact that it provides the basis for other certifications such as the ISO 14000 (environmental) and ISO 22000 (food safety management standards), serves as a critical building block towards strengthening the country's quality management system (QMS).

- 1.10 A QMS is defined as a formalised system that documents processes, procedures and responsibilities for achieving quality policies and objectives. A QMS helps coordinate and direct an organisation's activities to meet customer and regulatory requirements and improve its effectiveness and efficiency on a continuous basis.
- 1.11 The UNIDO training was conducted at a basic level due to Haiti's limited QI and low level of stakeholder awareness on quality, however, many participants found the training to be largely theoretical and lacking a local context in which to identify the issues being presented. In general, quality management is a complex body of knowledge and developing competence in this area takes time. Both the Director of BHN and UNIDO's consultants have highlighted the need for BHN staff, local consultants and enterprises to obtain more advanced training and practical experience in quality management and attendant systems.

<sup>2&#</sup>x27; Metrology is the science of measurement, the study of how to define and compare different physical and chemical quantities. In all documents values must be accurate and traceable and measurements of course influences, drives and underpins industry and trade and everyday life.

- 1.12 In 2015 an assessment was conducted in the metrology laboratories of BHN. This activity was executed by the Technical Officer for Metrology at CROSQ. The main recommendations of the report were to procure additional equipment to advance the development of the mass metrology and volume metrology capabilities within the Industrial Metrology laboratory to support the verification activities carried out by the Directorate of Quality Control and Consumer Protection, the Legal Metrology arm within Haiti, and also the Haitian industry. In 2021, the need for this equipment was reconfirmed along with demand driven requests by clientele for support in building capacity in additional areas as temperature and Liquid Petroleum Gas (LPG). To date therefore, the recommendations which were highlighted in the 2015 assessment of the metrology laboratories, at BHN, remain valid along with additional capacity requirements in the areas of verification aforesaid.
- 1.13 Given the above challenges (and influenced directly by demands from industry), BHN has expressed a need for QMS training, as well as mentoring in market surveillance. This support would enhance the services which BHN has articulated are important to meet the needs of its clientele.

## CROSQ and its support to QI

- 1.14 CROSQ was established in 2002 by Article 67 of the Revised Treaty of Chaguaramas (RTC), to facilitate the development of a harmonised Regional Quality Infrastructure (RQI). CROSQ is a network of the 15 national standards bureaus of CARICOM Member Countries (which includes Haiti). CROSQ is an inter-governmental agency and is the successor to the Caribbean Common Market Standards Council which was created in 1976. The key functions of CROSQ as outlined in the Treaty include:
  - (a) Facilitation of standards infrastructure development at the national and regional levels.
  - (b) Assisting with metrology infrastructure development at the national level.
  - (c) Encouraging the development and mutual recognition of conformity assessment procedures in and between Member States.
  - (d) Promotion of a quality-competitive culture in CARICOM via demand pull information and awareness raising publications, events etc. and supply push marketing and communication strategies.
- 1.15 In an effort to assist Haiti in achieving its objectives under the RTC, CROSQ will provide project management support, technical expertise and facilitation to BHN, will serve as the Grantee, and will also implement this initiative. The BHN as the prime beneficiary is the champion of the project and will provide support to CROSQ ensuring the quality of the project's deliverables as well as monitor the day-to-day activities of the various consultancies. It is anticipated that this support will assist the BHN in bridging the capacity gaps related to management of a project of this nature.

#### 2. OBJECTIVE OF THE CONSULTANCY

2.01 The objective of the consultancy is to provide comprehensive services for the design and development of a dynamic, visually appealing and user-friendly corporate website for the BHN.

## 3. <u>SCOPE OF SERVICES</u>

- 3.01 The consultant shall undertake the following tasks:
  - (a) Liaise with BHN officers to develop an understanding of the organisation's mandate, strategic goals and objectives, and target audience to inform the website design and content strategy.
  - (b) Develop a user-centric website design concept that aligns with the organisation's brand identity and values.
  - (c) Create wireframes and prototypes to visualize the website's layout, navigation, and user experience.
  - (d) Design custom graphics, icons, and visuals to enhance the website's visual appeal and user engagement.
  - (e) Develop a WordPress CMS website using the latest web technologies, ensuring responsiveness, cross-browser compatibility, and fast loading times.
  - (f) Integrate content management system (CMS) functionality to allow easy content updates and additions.
  - (g) Upload and format content provided by BHN.
  - (h) Implement SEO best practices to optimize the website for search engines and improve its online visibility.
  - (i) Set up analytics tools to track and measure website performance, user behaviour, and conversion rates.
  - (j) Provide training to BHN's officers on how to manage and update the website's content and maintain the website.
  - (k) Prepare a Website Operations Manual and Training Report (to include the training materials used to train the organisation's officers).

## **4. SPECIFIC REQUIREMENTS**

#### 4.01 The website must:

- (a) Be bilingual (French, Haitian Creole, and English).
- (b) Be compliant with international web accessibility standards (WCAG 2.1 AA).
- (c) Be hosted on a secure cloud-based server approved by BHN and CROSQ [TBD].
- (d) Include role-based access controls for BHN staff to manage different content sections.
- (e) Ensure all third-party plugins are properly licensed and GDPR-compliant, if applicable.

4.02 Specifically, the Consultant shall:

#### **Granular Privileges**

(f) Permissions must be configurable to allow for granting or denying privileges for creating, viewing, modifying, and deleting content on a per content basis and MUST support the proposed workflow process.

#### **Audit Trail**

(g) User actions should be recorded to a "who did what" log.

#### **User Authentication**

(h) An underlying architecture should exist to support user accounts and user logins (with proper verification techniques and logging). The Consultants will sit with the relevant authority of the BHN and design an "access control plan" to suit the needs of BHN and at the same time ensure security of the information (e.g., customers who have registered on the website should be able to check on job status, apply for jobs, etc.).

## Friendly URLs

(i) For Search Engine Optimization (SEO) purposes, all areas of the websites should be assigned friendly URL references.

#### **Source Codes**

(j) Upon completion, the Consultant should provide source code to the BHN, as advised by the BHN.

# **Image Control**

(k) The websites should be able to resize or reject images according to desired website specifications.

#### Metadata

(l) The websites should allow for proper metadata administration such as page titles, descriptions, keywords, among others.

# **Spell Check**

(m) Spell check functionality should be available to all publicly displayed content during data entry or upon review.

#### **Preview and Publish Control**

(n) The sites should offer or mandate a preview of all data entry or modification and also grant privileged controls such as un-publishing, revising, or promoting any content item.

## **WYSIWYG**

(o) A web-based rich text editor should be available, allowing content to be formatted without the user having to possess skills in HTML, CSS, XML, and other similar languages.

## **Performance Mechanism**

(p) The websites should offer mechanisms (such as caching and load balancing) that enhance the speed and availability of the websites to users.

#### **Content Scheduling**

(q) The websites must allow for users to enter content and, if needed, schedule said content for automatic publishing and un-publishing (expiration).

#### **Online Administration**

(r) The Website administration in its entirety should be possible via the web browser.

#### Theme / Skinned User Interface

(s) The websites should support smooth and easy major or minor interface changes.

# **Mobile Technology**

(t) The websites will be responsive to mobile devices in accordance with international web standards. All users of the website should be able to use their mobile devices to access all pages.

## Beta Testing, Deployment, and Training

(u) Carry out Beta testing of the websites and CMS developed, in collaboration with the respective programmes and unit, under the supervision of the BHN. Once the testing is over, complete deployment on the domains and provide training to selected staff.

# **Browser Compatibility**

(v) Ensure that the websites can be viewed effectively on all popular internet browsers.

#### Web Analytics

(w) Make recommendations regarding web traffic software to allow for the creation of detailed reports of visitors to the websites.

## **Technical Maintenance**

(x) Provide advice on preventative technical maintenance and upkeep of websites' security systems and their supporting plug-ins/modules.

## 4. **DURATION**

4.01 The duration of the assignment is expected to be for a period of 40 person-days over a period of three (3) calendar months.

# 5. <u>DELIVERABLES AND REPORTING REQUIREMENTS</u>

- 5.01 The consultant will liaise with the Project Officer (PO) who is appointed to lead and monitor the project and will be required to:
  - (a) Deliver an inception report following a meeting with CROSQ and BHN officers, detailing the methodology and work plan and timelines for the design, development and deployment of the website; provision of the training and presentation of the operations manual within five (5) days of the consultancy start up.
  - (b) Present the website design concept and wireframes for approval within 15 days of the commencement of the assignment. The design must consider accessibility and responsiveness across devices.

- (c) Present a partially developed website prototype within 30 days of commencement with front-end design implemented. The site should demonstrate the multilingual toggle functionality and sample content formatting.
- (d) Within 50 days following the commencement of the assignment the following activities should be completed:
  - i. Populate the website with relevant content.
  - ii. Present a fully functional and responsive website developed and ready for deployment.
  - iii. Integrate customs graphics and visuals into the website.
  - iv. Deliver SEO optimization including meta tags, keywords, and sitemap.
  - v. Provide analytics tools configures to track website performance.
- (a) Within 70 days following the commencement of the assignment present a Website Operations Manual and Training Report for content management and website maintenance. The manual should include the yearly cost of website hosting, domain name registration, and SSL certificate renewal; all of which are for the account of BHN after the project closes.

The official working language for the project shall be English; however, where applicable, French and/or French creole can be utilized. At minimum, all deliverables and reports being submitted to initiate the payment process, must be in English.

## 6. QUALIFICATIONS AND EXPERIENCE

- 6.01 The appointed consultant must meet the following minimum requirements:
  - (a) At least an undergraduate degree in computer science, information technology or a closely related degree with a strong computing or IT component.
  - (b) At least three (3) years' experience in designing and developing websites. Three (3) references from past clients should be submitted.
  - (c) At least three (3) publicly accessible web application projects developed for corporate entities within the past five (5) years.
  - (d) Demonstrated competence in the use of client and server-side web technologies such as JavaScript, PHP8, HTML5, and CSS3 (for website CMS) of at least 2 years.
  - (e) At least two (2) years of proven experience in developing custom Word Press websites, including theme and plugin customization.
  - (f) Demonstrated ability to design responsive, user-friendly interfaces. At least 2 examples of work completed should be provided.

Experience with SEO optimization and integration of website analytics tools (e.g., Google Analytics) for a period of at least two years within the past five years. Experience in both areas would be an asset.

- (g) At least 3 years' experience in graphic design including the creation of visual assets for digital platforms, using graphic design software such as Adobe Illustrator, Photoshop, or equivalent.
- (h) Demonstrated knowledge and experience in applying knowledge of website security protocols and maintaining content management systems (CMS) maintenance over a period of at least two years within the past five years.

#### **Skills**

- Strong analytical and problem-solving skills.
- Excellent communication skills.
- Proficiency in written and oral French and/or Haitian and English.

# 7. SUPERVISION OF THE CONSULTANT

7.01 CROSQ will facilitate the work of the consultant and work with the beneficiary countries to make available all studies, reports, and data relevant to the Project. The PO will be assigned to be the liaison between CROSQ, the country and the consultant.

#### 8. LOGISTICS AND RISK CONSIDERATIONS

8.01 Ground Truthing and Travel: If any on-the-ground assessments or site visits ("ground truthing") are deemed necessary to inform the consultancy, the Consultant shall be responsible for making their own travel arrangements. Travel to or within Haiti will be undertaken at the Consultant's own risk. Neither CROSQ nor BHN shall be liable for any personal injury, loss, or damage incurred during such travel.