



## **TERMS OF REFERENCE FOR A CONSULTANT TO DEVELOP A USER MANUAL, PROTOCOL AND FIREWALL FOR THE BIO-HOLOGISTIC DATABASE, INCLUDING THE SET-UP OF AN INTERNAL NETWORK (INTRANET).**

**Local:** SPGA, Seychelles

**Duration:** 3-month Contract

**Starting date:** 7<sup>th</sup> March 2025

**Application Deadline:** 28<sup>th</sup> February 2025

### **A. BACKGROUND**

The Seychelles Parks and Gardens Authority (SPGA) is a financially autonomous Public Enterprise (PE), which operates under the umbrella of its parent Ministry; the Ministry of Agriculture, Climate Change and Environment, (MACCE). The Authority is entrusted with managing the protected areas and designated gardens of Seychelles, operating under its founding legislation; the Seychelles Parks and Gardens Authority Act 2022 and the Nature Reserves and Conservancy Act 2022 - following the merger between the former Seychelles National Parks Authority and the National Botanical Garden Foundation. Within its jurisdictions and mandates, SPGA oversees the Morne Seychellois and Praslin Terrestrial National Parks, the Ile Cocos, Ste. Anne, Curieuse, Baie Ternay and Port Launay Marine Parks, as well as the National Botanical Garden and the National Biodiversity Centre and the Veuve Special Reserve.

**Mission:** Ensuring that the Protected Areas and Gardens are managed for the benefit of everyone.

**Vision:** That the Parks and Gardens of Seychelles are secure and thriving, sustained by adequate financing and a network of relevant stakeholders.

#### **Mandates:**

- a) Encourage the involvement of government, the public, and businesses in conservation efforts.
- b) Effectively protect and manage ecosystems and biodiversity within designated Protected Areas under the Authority's jurisdiction.
- c) Implement national conservation policies and fulfill obligations under multilateral agreements.
- d) Apply and manage sustainable forestry practices.
- e) Safeguard habitats and ecosystems from human-induced threats such as forest fires, pollution, and coral destruction.
- f) Provide specialist services, including plant identification and consultancy.

- g) Facilitate and conduct research related to biodiversity and protected areas.
- h) Deliver high-quality services to users of gardens and parks.
- i) Engage in commercial activities aligned with the Authority's functions.
- j) Offer tourism and recreational activities.
- k) Provide gardening and landscaping services, guided tours, and similar offerings.

## **B. INTRODUCTION**

The Seychelles Parks and Gardens Authority (SPGA), is developing a comprehensive database to support conservation efforts and sustainable tourism within the Seychelles' Marine Protected Areas (MPAs). This Terms of Reference (TOR) outlines the scope of work for a consultant to develop a user manual for the database, define the protocols for its use, and establish a firewall to ensure data security. The protocols will incorporate detailed data collection techniques to monitor the health and resilience of the marine ecosystems.

This will include:

**Quantitative Data Collection:** Regular monitoring of key environmental indicators such as coral cover, fish populations, and water quality parameters etc.....

**Qualitative Data Collection:** SPGA will be digitalizing all of its reports through the system and directly uploading onto the database.

The bio-holistic database, will integrate this comprehensive data, providing a holistic view of the ecosystem and daily operations. This database will support adaptive management strategies by tracking changes over time and allowing for adjustments based on the latest data. It will also facilitate engagement with a wide range of stakeholders, enabling informed decision-making and effective conservation efforts.

By integrating both quantitative and qualitative data, the protocols will ensure a holistic understanding of the MPAs' status and trends, enabling evidence-based decision-making and adaptive management strategies. This approach will support the long-term sustainability of the Seychelles' marine ecosystems and the well-being of local communities.

### **1. OBJECTIVE AND CONTEXT OF THIS COMPONENT OF THE PROJECT**

The primary objective of this consultancy is to create a portal for our database system accompanied by a comprehensive user manual that will effectively guide SPGA users. The portal should reflect the requirements of the system and SPGA requirements. The manual should provide clear management guidelines and protocols, including a dedicated section on intranet activities encompassing maintenance and related tasks.

## SCOPE OF WORK

The consultant will be responsible for the following tasks;

Portal:

1. The consultant is responsible for specifying the infrastructure requirements necessary to host the portal. This includes recommending sustainable hardware, software, network components, and an appropriate operating environment for SPGA's consideration and approval.

2. Define Objectives

- Purpose: Determine what the portal is for (e.g., data management, reporting, user access).
- Target Audience: Identify who will use the portal (e.g., internal staff, external clients).

3. Plan the Database Structure

- Schema Design: Define tables, relationships, and data types.
- Data Normalization: Organize data to reduce redundancy and improve integrity.

4. Choose Technology Stack

- Database Management System (DBMS): Select a DBMS (e.g., MySQL, PostgreSQL).
- Backend Framework: Choose a server-side technology (e.g., Node.js, Django).
- Frontend Framework: Decide on a user interface framework (e.g., React, Angular).

5. Develop Database

- Create Tables: Set up tables based on your schema design.
- Set Up Relationships: Implement foreign keys and constraints.
- Data Population: Import or enter initial data into the database.

6. Build the Portal

- User Interface Design: Create wireframes and design the layout of the portal (User friendly).
- Implement Features: Develop functionalities such as:
  - User authentication (login/logout)
  - Data entry forms
  - Query and report generation
  - Search functionality
- Integrate with Database: Connect the frontend to the backend and ensure proper data handling.
- User must be able to have easy access to generate infographics on dashboard

7. Implement Security Measures

- User Roles and Permissions: Define access levels for different users

- Data Encryption: Protect sensitive data in transit and at rest.
- Regular Backups: Establish backup protocols to safeguard data.

## 8. Testing

- Functional Testing: Ensure all features work as intended.
- User Acceptance Testing (UAT): Get feedback from potential users and make adjustments.
- Performance Testing: Test for speed and responsiveness.

## 9. Deployment

- Choose Hosting: Decide where to host the portal (cloud service, on-premises).
- Set Up Environment: Prepare the production environment.
- Launch: Make the portal accessible to users.

## 10. Maintenance and Updates

- Regular Updates: Keep software and libraries updated.
- User Support: Provide helpdesk or support for users.
- Monitor Performance: Track usage and optimize as needed.

## 11. Documentation

- User Manuals: Create guides for users on how to navigate the portal.
- Technical Documentation: Document the architecture and codebase for future reference.
- Comments should be added when coding to facilitate any future developer

## 12. Accountability:

- Track changes such as user login and logout, data amendments, data creation or deletion etc...

## 13. Training

- User manual: A guide to the portal
- User and Administrative training

## 14. Security

- Firewalls to prevent external attack.
- Encryptions for data protection
- 2 step verification for login. (OTP and Password)
- Back up of information and data in case of system crash (data redundancy) insure proper back up of data

## **Deliverables**

The consultant will deliver the following:

1. **Portal creation and its User Manual:**
2. **Set-up an internal network with connections to the server (Intranet)**
3. **Protocol Documentation**
4. **Firewall Implementation**

**The consultant must ensure that all systems are working effectively before the final payment is disbursed.**

The consultant is expected to complete the work within a period of 3 months from the date of contract signing.

All deliverables must be submitted in the required formats, including MS Word, PDF, and any other specified by the Client. Please address them to the Chief Executive Officer, Mr. Allen Cedras, at [a.cedras@gov.sc](mailto:a.cedras@gov.sc) .

## 2. **TYPE OF CONTRACT**

This is a short-term national contract

## 3. **QUALIFICATION OF SUCCESSFUL INDIVIDUAL CONSULTANT**

### **Education**

A master's degree or relevant certifications in database management or cybersecurity will be an added advantage with a minimum of 3 years' working experience.

OR

A bachelor's degree in computer science, information technology, or related field with a minimum of 5 years working experience.

- Proven experience in developing user manuals for databases.
- Experience in defining and implementing database protocols.
- Knowledge of firewall systems and data security.

### **Skills**

- Strong technical writing and communication skills.
- Proficiency in database management systems.
- Ability to work with diverse stakeholders.
- Experience in portal creation

- Portal Creation and its associated activities
- Excellent research, analytical, and writing skills.
- Ability to work independently and manage projects from conception to completion.

4. **DURATION AND TIMELINE**

The assignment is expected to be implemented over 3 months, commencing on the 7<sup>th</sup> March 2025 and be completed by the 7<sup>th</sup> May 2025.

5. **RECOMMENDED PRESENTATION OFFER**

Please submit your resume, a cover letter outlining your qualifications and experience, and a portfolio of previous work related to conservation protocol development.

6. **CRITERIA FOR SELECTION OF THE BEST OFFER**

Proposals will be evaluated based on the following criteria:

- Relevance of experience
- Demonstrated experience in similar projects
- Quality of proposal
- Clarity, feasibility, and comprehensiveness of the proposed approach
- Budget
- Reasonableness and justification of the proposed budget.

**Individual consultant will be evaluated based on the following methodology:**

When using this weighted scoring method, the award of the contract should be made to the individual consultant whose offer has been evaluated and determined as:

- Responsive/compliant/acceptable, and
- Having received the highest score out of a pre-determined set of weighted technical and financial criteria specific to the solicitation.

**The evaluation criteria for the shortlisting of applicants is as per Table 2.**

**Table 2: The Evaluation Criteria for the Shortlisting of Applicants.**

<b>Criteria</b>	<b>Max Point</b>
Education	25
Relevant professional experience in Computer Science and related field	35
Suitability of Technical Approach	25
Budget	15
Total	100

Candidates scoring a minimum of 60% of the maximum marks on the above criteria will be short-listed and assessed by a Desk Review Panel.

The financial offers will be evaluated giving the lowest price proposal 40 marks and marking the other more expensive proposals reverse proportionally to the lowest offer.

The final scoring of short-listed candidates will consider the interview score and the financial score.

The method of calculation of the final score is shown in Table 3 below.

**Table 3: Calculation of Scores for Selection of the Strategic Support.**

Criteria	Max. Score (%)
Desk Review Panel	60
Financial	40

**ANNEX 1**

**TEMPLATE FOR THE PROPOSED WORK PLAN**

The purpose of this template is to provide sufficient details for the proposal to be evaluated, enabling reviewers to see how you intend to complete the job on time.

**NAME:** ..... **TEL: (248):** .....

**WORKPACKAGE:** SeyCCAT Database                      **Manual TIN:** .....

**CONTRACT DURATION:**

(Please refer to TOR – you may propose an alternative)

**SCOPE OF WORK AND PROPOSED APPROACH:**

(Please refer to TOR – and elaborate approach)

**LIST OF DELIVERABLES AND PROPOSED TIMELINE:**

(Please refer to TOR – and indicate a timeline)

**WORKPLAN WITH PROPOSED TIMELINE FOR EACH TASK**

Tasks to be completed (see scope of work in TOR)	Proposed Timeline (weeks/months)									
	<i>Wk.</i> <i>1</i>									
Sign the contract and submit the revised/final work plan	X									
Etc...										

**ADDITIONAL NOTES IF RELEVANT:**