



INDIVIDUAL CONSULTANT PROCUREMENT NOTICE

Date: January 16, 2018

REF NO.: BBRSO33798

Country: Barbados

Description of the assignment: Information Management Systems Specialist

Project name: Conserving Biodiversity and Reducing Habitat Degradation in Protected Areas and their Areas of Influence

Period of assignment/services (if applicable): 1 March 2018 – 30 November 2018

ADMINISTRATION

To apply, interested persons should upload the **combined*** *Technical Proposal/Methodology* (if applicable), CV and *Offeror's Letter* to "UNDP Jobs" by navigating to the link below and clicking "APPLY NOW", no later than the date indicated on the "UNDP Jobs" website. Application submitted via email will not be accepted: -

UNDP Job Site – https://jobs.undp.org/cj_view_job.cfm?cur_job_id=76741 (cut and paste into browser address bar if the link does not work)

*** PLEASE NOTE:** *The system allows the upload of one (1) document ONLY – as you are required to submit a Technical Proposal/Methodology, this document along with your CV and Offeror's Letter MUST be combined and uploaded as one*

NOTE: The *Financial Proposal* should not be uploaded to "UNDP Jobs".

If requested by the Procurement Unit, the *Financial Proposal* should be submitted to procurement.bb@undp.org within 24 hours of a request. Failure to submit the *Financial Proposal* will result in disqualification.

Any request for clarification must be sent in writing to procurement.bb@undp.org within three (3) days of the publication of this notice, ensuring that the reference number above is included in the subject line. The UNDP Barbados & the OECS Procurement Unit will post the responses** two (2) days later, including an explanation of the query without identifying the source of inquiry, to: -

http://procurement-notices.undp.org/view_notice.cfm?notice_id=43585 (cut and paste into browser address bar if the link does not work)

A detailed Procurement Notice, TOR, and all annexes can be found by clicking the above link.

**** UNDP shall endeavour to provide such responses to clarifications in an expeditious manner, but any delay in such response shall not cause an obligation on the part of UNDP to extend the submission date of the Proposals, unless UNDP deems that such an extension is justified and necessary**

1. BACKGROUND

The twin island Federation of St. Kitts and Nevis (SKN) is located in the northern part of the Lesser Antilles chain of islands in the Eastern Caribbean. The existing system of protected areas in the Federation is limited to two (2) terrestrial protected areas on the island of St. Kitts, and three recently (2016) established Marine Management Area (MMA) Conservation Zones that form part of a MMA that extends 2 miles out from the shoreline of both islands. Only the Central Forest Reserve National Park was established primarily for ecological conservation, and there are no legally established terrestrial protected areas on the island of Nevis. The Global Environment Facility (GEF) investment, through the Conserving Biodiversity and Reducing Habitat Degradation in Protected Areas and their Areas of Influence Project, will expand the protected areas system from two terrestrial sites totaling 5,260 hectares to four terrestrial sites totaling 8,810 hectares and support management of the three marine sites totaling 11,693 hectares.

At the systemic level, the project is enabling support for improved ecosystem representation and biodiversity conservation in the protected areas system through the strengthening of the institutional, policy and legal/regulatory framework and the development of sustainable finance mechanisms. The project is further supporting the Government of St. Kitts and Nevis in establishing, staffing and equipping an institutional body to manage this System of Protected Areas and MMA Conservation Zones (System), the first such institution dedicated to protected areas, or MMA Conservation Zones in the country's history. At the site level, the project is supporting the establishment and strengthening of protected areas / MMA conservation zones management operations at key sites, including management planning and site-based sustainable financing activities, capacity building of Protected Areas staff and collaboration with NGO, CSO and private sector partners at the system and site levels, and the gathering of biodiversity and ecosystem data to support effective decision making.

Currently, there is no centralized interinstitutional integrated information management system for natural resources, biodiversity, land use data or related relevant data. Lack of such a system limits resource managers and decision-makers from easily accessing and using the extensive existing data that is generated by government and external institutions working in the country. The enhanced availability of data through the development of a Centralized Integrated Information Management System (CIIMS) will further support the ability to make informed protected area, conservation and overall land use decisions. Enhanced coordinated planning and management between agencies through improved data access will also enhance the ability to identify and manage the links between land use and its impacts, such as soil erosion and storm water runoff in productive landscapes adjacent to existing and planned protected areas / MMA conservation zones as well as the negative impacts on downstream marine ecosystems. Readily available consolidated information will also contribute to increased level of general awareness and understanding in the Federation of protected areas and their potential benefit. As such, a consultant is being hired to develop and operationalize (including training) this multi-institutional Centralized Integrated Information Management System.

2. SCOPE OF WORK, RESPONSIBILITIES AND DESCRIPTION OF THE PROPOSED ANALYTICAL WORK

OBJECTIVE

The objective of this consultancy is to develop a web-based multi-institutional Centralized Integrated Information Management System which will consolidate information from different systems across ministries / departments in the Federation of St Kitts and Nevis. This CIIMS will support the management of protected areas, natural resources, and associated land uses. It will further enable /

facilitate resource managers, decision-makers and stakeholders to share data (existing and new) that will include spatial / non-spatial data, digitized reports, images, maps and other data / information deemed relevant. This web-based CIIMS will link existing databases with end user dashboards capabilities to facilitate use (i.e. spatial mapping capabilities). With data-sharing securities and protocols established, broad access to secure data can be controlled enabling use by both government, NGO and private sector stakeholders. This CIIMS will be detailed in a Functional Specification Document (FSD).

SCOPE OF WORK

Task 1. Functional Specifications Document

The Consultant will develop a Functional Specification Document (FSD) for the development and operationalization of a web-based Centralized Integrated Information Management System. This information management system will be comprised of and / or provide access to existing and new data and databases relevant to PA management, land use, ecosystem services, biodiversity and other uses to support the management of the SKN system of protected areas, MMA conservation zones, natural resources and land uses in / adjacent to protected area sites. This task will entail carrying out stakeholder consultations to assess the existing components available for the development of an effective and functional CIIMS, including available hardware, software, data, reports and appropriate data sharing agreement needs. The primary output of this task will be an FSD that includes, but is not limited to, those components outlined below, including SOPs outlined in Task 2. A preliminary Inception Report will outline components of the FSD and issues to address / information to be gathered during the assessment phase. Stakeholder consultations with government departments on both St Kitts and on Nevis will be essential to successful completion of this consultancy (St Kitts: Dept. of Physical Planning, Dept. of Marine Resources, Dept. of the Environment, Dept. of Agriculture, Water Services Dept., Dept. of Sustainable Development and on Nevis: Dept. of Physical Planning, Natural Resources and the Environment, Dept. of Agriculture, Dept. of Fisheries, Water Dept.), with particular attention paid to collaboration with existing department database managers / IT specialists as well as the Department of Information technology in both St. Kitts and Nevis.

A. Inception Report and Assessment

- An inception report will include issues to be addressed during the assessment, a detailed outline of components to be included in the FSD, as well as a proposed operationalization strategy and timeline for consultancy implementation. Those FSD components will include, but not be limited to, those outlined in the consultancy tasks below. This inception report will be presented at an inception workshop for stakeholder feedback.
- An assessment of existing databases, systems and protocols located within the relevant departments in both St Kitts and Nevis (SKN) that can support the development and operationalization of a CIIMS will be conducted. This assessment will form the basis for procurement needs and will inform software design. This task will also include assessing existing inter-departmental agreements in place / proposed (i.e. Principle 10 LAC Regional Agreement on Access to Information). These will support recommendations for institutional arrangements for data sharing that will ensure that privacy and accessibility constraints / permissions will be appropriately addressed within the system developed. Technical support for operationalization of the CIIMS will also be assessed, with training provided (Task 3). Mechanisms for a synchronized (connected) parallel systems between St Kitts and the Nevis Island Administration will be assessed to ensure, as possible, all available data is accessible across the Federation. The Consultant will work closely with the *Conserving Biodiversity Project* (Project Coordinating Unit) to assess / detail

institutional arrangements for this inter-departmental system to be housed in Department of the Environment. Additionally the Consultant can work closely with the Department of Information Technology to assess their Data Hosting Infrastructure for hosting of the inter-departmental system for main and / or backup site.

B. Detailed hardware and software specifications.

The Consultant will detail hardware and software / database design specifications, incorporating the outputs of the information gathered in Task 1A. Functional and operations specifications, an operationalization strategy, in addition to those specifications outlined below, will be detailed in the Inception Report (Task 1a.) and included in the FSD. SOPs developed in Task 3 will also be included in the FSD.

- Hardware specification, based on the assessment (Task 1) of existing equipment and needs defined to meet proposed system requirements will be detailed and will include, but are not limited to, those outlined below:
 - a. Graphics display;
 - b. Processor / Operating System / Memory / Ram;
 - c. Disk Space Requirement (for OS / Database / Software Application;
 - d. Disk Type – SSD;
 - e. Security Appliance including IDS, Firewall;
 - f. Screen display resolution;
 - g. Number of terminals;
 - h. Warranty / after sales requirements (i.e. service unit to be provided during repairs).
- Software related specification will include, but are not limited to:
 - a. Web Services;
 - b. Database platform (web-enabled), functional and non-functional requirements, data and metadata standards;
 - c. Data Visualization Tools / Business Intelligence / On Demand Reporting;
 - d. Dashboard capabilities (web-enabled, user friendly) for departments, ministries, external / private users with access code capacity;
 - e. Data security management measures (access, erasure, security, piracy, privacy), long-term access, data quality (accuracy, integrity, validity and completeness), number of simultaneous users; end-point security measures; minimum of two (2) Factor Authentication;
 - f. Procedures to i) process, upload, transfer and share data, and ii) handle data storage and preservation;
 - g. Formats for exporting data (i.e. CSV, ASCII, Open data Format);
 - h. Use of Web Data API to allow authenticated data sharing between other department database systems and mobile app;
 - i. Mobile data gathering, with database download capabilities / links (details tbd);
 - j. Future ability to increase system capacity (increase in data processing);
 - k. Connectivity between departments, parallel system between St Kitts and Nevis, geo-localizations and mapping.
- Prepare and obtain 3 quotes for the above-mentioned hardware and software, to be procured by the Conserving Biodiversity Project.

Task 2. Development of the CIIMS

- Based on outputs in Task 1 and stakeholder feedback, the Consultant will develop and create the agreed-to database / software, website, mobile app and hardware. Synched parallel databases for St Kitts and Nevis will be ensured. Necessary software will be procured by the PCU. PCU counterparts will facilitate access to relevant data for database input. This task can be carried out from the Consultant's home / office, as possible, supported by remote access to prior agreed to government computer systems. This will include an in-country pilot phase that will be combined with database management training (Task 3).

Task 3. Database management and training.

- The Consultant will support department IT specialists / database managers and other key stakeholders (TBD) in the management and use of the database, with training provided. This will be supported by detailed SOPs (to be included in the Functional Specification Document). Management support for specified departments / personnel will be provided, and program / software bugs will be addressed remotely for a period of 2 months post training.
- Quality Assurance / Software Testing procedures should be detailed with test cases to ensure adequate testing is performed. SLA to resolve software bugs should be included for two (2) months period, this is to ensure all bugs are resolved before official handover.
- Standard Operating Procedures will be developed for database use and management, and will include detailed explanations to carry out the following:
 - a. Spatial data entry;
 - b. Security / data sharing protocols;
 - c. Entering of notes and comments;
 - d. Means for external input – addition to database, forms with appropriate questions;
 - e. Documents – non-spatial data entry;
 - f. Use restrictions (if any) on whom how will function;
 - g. Standardization of data entry (i.e. forms, notes, etc.);
 - h. Querying and reporting;
 - i. Generating dashboards, geo-localization maps; user printing;
 - j. Data transfer, import, export, store and freeze, secure and protect, backup;
 - k. Other components of the FSD components (identified in Task 1).

DELIVERABLES

Payment will be remitted subject to the approval of final deliverables by the Project Coordinator, UNDP and a Technical Committee, and based on the contractor's price proposal. At least 2 weeks will be given for review of draft deliverables prior to finalisation and acceptance.

Expected deliverables and deadlines are as follows:

Deliverable	Due date	% payment
1. Inception Report (Task 1a) outlining FSD components and issues to be addressed during the assessment, to be presented at an inception workshop and with Stakeholder feedback incorporated.	1 month after contract signature	10%
2. Draft Functional Specification Document (Part 1) addressing outputs of Task 1A & B, data sharing mechanisms / protocols, brief	2 months after contract signature	20%

deployment strategy (departments, terminals, software licenses), stakeholders consulted with comments / feedback incorporated.		
3. Submission of 3 quotations for hardware and software, based on agreed to specifications (Task 1B).	3 months after contract signature	5%
4. Web-enabled <i>functional</i> CIIMS developed with in-country set-up / implementation, based on agreed to specifications. Implementation will include integration of a number of existing datasets (estimated 5) into CIIMS and 5 number of functional interfaces / dashboards set up, and data sharing protocols / security measures in place, synchronization between St Kitts and Nevis. Brief summary report on implementation submitted.	6 months after contract signature	35%
5. Draft Functional Specification Document (Part 2) detailing SOPs, capacity needs, support / training provided, and other components as outlined in FSD (Task 1A – Inception Report), with comments and feedback incorporated.	8 months after contract signature	20%
6. Final Version of the Functional Specifications Document, approved by PCU, UNDP and stakeholders. Brief summary outline of remote support provided post CIIMS set-up / operationalization.	9 months after contract signature	10%

3. REQUIREMENTS FOR EXPERIENCE AND QUALIFICATIONS

I. Academic Qualifications:

- Advanced university degree (Master's degree or equivalent) in information management, information technology, information security or any related area.
- A Bachelor's degree with additional 2 years of qualifying experience may be acceptable in lieu of the advanced university degree

II. Years of experience:

At minimum 10 years of experience in development and management of information management systems, including

- Data management development and archiving, including use of web-enabled platforms and common statistical analysis tools;
- Demonstrated experience in software development for centralized information management systems;
- Experience working in developing countries is an asset, in particular working with governments. Related experience in the Caribbean is an asset.
- Demonstrated working experience in development and deployment of Information management systems in developing countries;
- Experience with data retrieval, data warehousing and processing functions;
- Experience with creating metadata visualization and editing interface;
- Ability to formulate IMS technical requirements and Operating Procedures;
- Ability to support and provide recommendations for compiling diverse datasets;
- Experience with different data collection methodologies;
- Experience with data sharing and data protection protocols and handling confidential data;

- Demonstrated experience providing hands on training in the management and monitoring of information management systems / IT;
- Experiencing working collaboratively with clients / stakeholders to address needs;
- Experience in/understanding of protected areas, natural resources management, biodiversity conservation is an added plus, but not a requirement.

III. Competencies:

- Possess strong communication skills (verbal and written);
- Fluency in spoken and written English

4. DOCUMENTS TO BE INCLUDED WHEN SUBMITTING THE PROPOSALS.

Interested individual consultants must submit the following documents/information to demonstrate their qualifications:

1. Proposal explaining why they are the most suitable for the work
2. Personal CV including past experience in similar projects and at least 3 references
3. Financial proposal (prepared, but **not submitted unless requested to do so**)

5. FINANCIAL PROPOSAL

• Lump sum contracts

The financial proposal shall specify a total lump sum amount, and payment terms around specific and measurable deliverables. Payments are based upon output, i.e. upon delivery of the services specified in the TOR. In order to assist the requesting unit in the comparison of financial proposals, the financial proposal will include a breakdown of this lump sum amount (including travel, per diems, and number of anticipated working days).

Travel:

All envisaged travel costs must be included in the financial proposal. This includes all travel to join duty station/repatriation travel. It is envisioned that at minimum 2 10-day trips to SKN will be needed, with ability to carry out aspects of database development and management remotely. In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the IC wish to travel on a higher class he/she should do so using their own resources.

In the case of unforeseeable travel, payment of travel costs including tickets, lodging and terminal expenses should be agreed upon, between the respective business unit and Individual Consultant, prior to travel and will be reimbursed

6. EVALUATION

Individual consultants will be evaluated based on the following methodologies:

2. Cumulative analysis

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:

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

** Technical Criteria weight; [70%]*

** Financial Criteria weight; [30%]*

*Only candidates obtaining a minimum of **49 points** would be considered for the Financial Evaluation*

Criteria	Weight	Max. Point
<u>Technical</u>	70	70
• <i>Experience in data management development and archiving, including use of web-enabled platforms and common statistical analysis tools</i>		30
• <i>Demonstrated experience in software development for centralized information management systems in</i>		15
• <i>Relevant professional experience working with governments in developing countries, particularly in the Caribbean</i>		15
• <i>Experience in/understanding of protected areas, natural resources management and/or biodiversity conservation</i>		10
<u>Financial</u>	30	30

ANNEXES

ANNEX I – TERMS OF REFERENCES (TOR)

ANNEX II – GENERAL TERMS AND CONDITIONS

ANNEX III – OFFEROR'S LETTER

ANNEX IV – FINANCIAL PROPOSAL TEMPLATE

ANNEX V – SAMPLE INDIVIDUAL CONTRACT

ANNEX VI – P11 FORM