

## **GOVERNMENT OF SAINT LUCIA**

## DEPARTMENT OF PHYSICAL PLANNING



# DISASTER VULNERABILITY REDUCTION PROJECT (DVRP)

## TERMS OF REFERENCE

CONSULTING SERVICES FOR AN INDIVIDUAL CONSULTANT

## **GEOSPATIAL COORDINATOR**

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#### SAINT LUCIA DISASTER VULNERABILITY REDUCTION PROJECT

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## **GEOSPATIAL COORDINATOR**

### I. BACKGROUND

Saint Lucia is exposed to a range of natural hazards, particularly weather related phenomena such as hurricanes, winds, storm surges, heavy rainfall leading to flooding and landslides. In addition, climate change related impacts are expected, including shifts in precipitation patterns, more intense storms, increased hurricane intensity and sea-level rise. These unavoidable adverse natural events and consequences of global warming are coupled with the fact that the majority of the island's population, main commercial activities and major infrastructure are situated on or near the coast. Disasters caused by these hazards and the climate change phenomenon thus impose large costs on the country's fragile economy and exacerbate poverty levels.

In light of the foregoing, the Government of Saint Lucia (GOSL) has requested assistance from the World Bank to develop a project to contribute to the reduction of vulnerability to natural hazards in Saint Lucia. The project is part of the regional Disaster Vulnerability Reduction Adaptable Program Lending (APL-DVRP) for the East Caribbean Region. The other participating countries are Grenada, Saint Vincent and the Grenadines, Dominica.

The DVRP which aims to measurably reduce vulnerability to natural hazards and climate change impacts in Saint Lucia includes various activities such as the technical assistance for improved assessment and application of disaster and climate risk information in decision-making which forms part of Component 2 of the project.

The Department of Physical Planning (DPP), seeks to establish open systems and platforms to create, share, analyse and use disaster risk and climate change data and information for improved decision making and engineering design for risk reduction and climate change adaptation.

In this regard, the Department of Economic Development, Transport and Civil Aviation seeks to engage the services of a Geospatial Coordinator to provide technical and administrative support to the DPP in establishing the National Spatial Data Infrastructure and with the management of activities being implemented under Component 2 of the DVRP. that form part of a National Spatial Data Infrastructure. It is expected that the Geospatial Coordinator will provide guidance on Implementation of the following:

- i. the collection of high resolution LiDAR data and creation of a high resolution digital topographic and bathymetric model for Saint Lucia;
- ii. sea level rise modelling and coastal flood and erosion risk mapping;
- iii. sea level rise monitoring networks to provide high resolution hydrologic data;
- iv. deployment of an environmental health surveillance system;
- v. enhancing the capacity of the Fire Department and NEMO;
- vi. strengthening of the country's GIS analysis capacity to maintain risk and spatial data management system, through technical assistance, training and procurement of equipment.
- vii. Enhancing of the hydromet systems
- viii. Actions to support the work of the NDCC and the NGTC

The Geospatial Coordinator will work in close collaboration with the National GIS Coordinating Committee (NGCC) and the National GIS Technical Committee (NGTC)<sup>1</sup> to provide technical and administrative support to the DPP, for the management of activities being implemented by the Department under Component 2 of the DVRP.

#### II. ACHIEVEMENTS TO DATE

The GOSL has made significant investments in the acquisition and use of spatial information for planning, governance of the nation and the delivery of public services. In this regard and as part of implementation activities under Component 2 of the Project, in and around August 2015, the GOSL established a National GIS Coordinating Committee (NGCC) under the auspices of the former Department of Planning and National Development, now the Department of Economic Development, Transport and Civil Aviation. The Committee which is chaired by the DPP was established in recognition of the importance of spatial information as a driver of economic and environmental development, as well as a tool to improve decision-making processes at all levels of Government. Through the NGCC, the DVRP has sought to undertake a collaborative approach

<sup>&</sup>lt;sup>1</sup> The Terms of Reference for the Committees are attached.

in partnership with key stakeholders, to establish the best strategies for developing greater GIS capacities for the GOSL; and to advise the Government on effective and efficient GIS practices, policies and technology. The NGCC is also responsible for the coordination of GIS related activities across Government ministries.

The activities of the NGCC are supported by a National GIS Technical Committee (NGTC). The overall role of the NGTC is to serve as a technical advisory body to the NGCC; and to provide communication between technical personnel of individual ministries of Government and other stakeholders that seek to participate in the development of the proposed National Spatial Data Infrastructure (NSDI).

#### III. OBJECTIVE OF THE ASSIGNMENT

The objective of the assignment is to engage the services of a suitably qualified and experienced consultant to provide advisory support, to assist the Department of Economic Development in improving coordination between agencies on projects relating to the development of geospatial data in order to reduce duplication of effort and realize tangible returns on investments as well as related actions that fall under the purview of the Component 2 of the DVRP and other complimentary projects.

### IV. SCOPE OF SERVICES

The duties and responsibilities of the Geospatial Coordinator are as follows:

## **Working Group Activities:**

- 1. Work in collaboration with the NGCC to develop appropriate policies and an implementation plan and schedule to guide the execution of the relevant activities of Component 2 of the DVRP;
- 2. In collaboration with the Permanent Secretary, assume direct responsibility for the coordination of the implementation of the various components of the implementation plan and schedule; and the periodic revision of the same;
- 3. Work closely with the NGCC to establish clear operational procedures for relevant activities of the project; and to manage the planning, coordination

- and design processes required for the development of the proposed National Spatial Data Infrastructure (NSDI); including NSDI initiatives funded by other funding streams to be approved by the Permanent Secretary;
- 4. Organize and attend meetings of the NGCC and the NGTC, as well as geospatial stakeholder consultations as it relates to both private and public sector agencies; and prepare and disseminate minutes of meetings convened;
- 5. Provide support to individual committees within the working groups, as needed.
- 6. Provide periodic updates to the NGCC and the NGTC on activities undertaken with the PCU, Division of Public Sector Modernisation (DPSM) and the Communications Officer

# **Activities to Support the PCU:**

- 7. Provide assistance to the Project Coordination Unit (PCU) in the preparation of bidding documents for relevant project activities;
- 8. Collate from consultants, NGCC and other technical personnel, all necessary technical specifications needed for geospatial related Request for Proposals (RFP) and bidding documents;
- 9. Provide assistance to the PCU in developing RFPs;
- 10. In collaboration with the NGTC work with the Communications Officer to develop and manage a communications plan for geospatial activities;
- 11. Participate in World Bank Missions
- 12. Work with Division of Public Sector Modernisation (DPSM) to allow for cross-sharing of knowledge and information;
- 13. Conduct monitoring and evaluation assessments to support the M&E requirements that the PCU needs to carry out for the DVRP;
- 14. Review all deliverables submitted under the DVRP in relation to geospatial consultancies and contractors and provide feedback to the Permanent Secretary on all project activities, highlighting any deviations, bottlenecks and challenges that would impede implementation and make necessary recommendations for the same;
- 15. Disseminate presentations and reports prepared by various geospatial consultancies under the DVRP to the relevant agencies for feedback and comments;
- 16. Foster knowledge sharing between other participating countries in the DVRP to leverage synergies;

## Activities to Support the GOSL through Liaising with External Agencies:

- 17. Work closely with the OECS Commission to allow for collaboration and discussion for cross synergy on spatial data activities.
- 18. Work closely with Professional organizations in Saint Lucia, including the Institute of Surveyors and others as needed.
- 19. Maintain an inventory of other "geospatial" projects implemented and funded by external agencies donors including the UN-GGIM, CCCCC, and others; determine areas for collaboration/duplication of efforts, reporting arrangements, progress to date or lack thereof and potential opportunities for new projects, especially those that would build on existing efforts.

# Activities to Support the GOSL Internal Efforts:

- 20. Support NEMO in developing spatial decision support capability.
- 21. Support Ministry of Health in the development of their Environmental Health Surveillance system.
- 22. Support efforts to mainstream the use of the new projection and datum as well as the CORS within the GOSL.
- **23.** Support SLING through holding workshops and information sessions to make potential users aware of hosted datasets and capabilities.
- 24. Monitor the execution of all relevant project activities, the project schedule and the project budget;
- 25. Coordinate and monitor the relevant project activities to ensure timely completion of all project milestones and targets;
- 26. Prepare monthly reports on the status of relevant project activities and submit to the Permanent Secretary;

#### IV. DURATION AND ESTIMATED TIME INPUT

The planned duration for the assignment is approximately twenty-four (24) months. In the first instance, the Geospatial Consultant will be engaged for an initial period of one (1) year; and will be expected to work for about ninety (90) working days over the period of twelve (12) calendar months. The assignment is expected to commence in September 2017.

At the start of the assignment the consultant and the client will agree on a work plan that is adaptable, sets clear priorities and allows for engagement at all times during the assignment. During the tour of the assignment there would about six (6) missions over five (5) days duration to Saint Lucia/ in the office, though this expectation may be lowered or increased based on need.

The renewal of the consultant's contract will be determined on the basis of inter alia, the evaluationhhh of his/her performance of services during that first term. Performance evaluations will be conducted every six (6) months.

### V. EXPECTED OUTCOMES

The Consultant will be monitored to ensure continuous commitment in meeting the objectives of the assignment, as indicated in the Scope of Services. The expected outcomes are the following:

- i. Coordinate with the LiDAR consultant and the survey firm to make sure all deliverables are provided as per the requirements of the project and make sure that these deliverables are disseminated among members of the NGTC and NGCC;
- ii. Build capacity in the GOSL for using SLING by holding at least 2 training workshops for GOSL staff in the use of SLING for creating maps and performing analysis on spatial datasets;
- iii. Coordinate with consultants engaged for the sea level rise modelling, coastal flood and erosion risk mapping and for the sea level rise monitoring networks to ensure that all deliverables are provided as per the requirements of the project and make sure that these deliverables are disseminated among members of the NGTC and NGCC;
- iv. Coordinate with the firm engaged to support the development of the national spatial data infrastructure (NSDI) and to provide strategic planning and guidance with the implementation of the NSDI to ensure that all deliverables are provided as per the requirements of the project and make sure that these deliverables are disseminated among members of the NGTC and NGCC;

- v. Coordinate with the firm engaged for the deployment of the environmental health surveillance system to ensure that all deliverables are provided as per the requirements of the project and make sure that these deliverables are disseminated to the MOH and among members of the NGTC and NGCC;
- vi. Coordinate efforts to make sure the capacity of the Fire Department and NEMO are enhanced
- vii. Coordinate with consultants, firms and suppliers to make that sure all technical assistance, training and equipment are delivered as per the project requirements for strengthening of the country's GIS analysis capacity to maintain risk and spatial data management system
- viii. Coordinate efforts to ensure that the hydromet systems are enhanced
- ix. Coordinate to make sure that the work of the NDCC and the NGTC are supported
- x. Enhanced M&E in relation to Component 2 of DVRP

### IV. RESPONSIBILITIES OF THE EMPLOYER

The Geospatial Coordinator will be provided with dedicated office space, designated technical staff assistance (when required), office equipment (including a computer and printer) and all necessary software required for the discharge of duties. The consultant is required to maintain a motor vehicle for the performance of his/her duties.

The employer will initiate the consultation and co-operation of other agencies required to provide support to the Geospatial Coordinator for the implementation of the various aspects of the assignment.

# V. REPORTING REQUIREMENTS

The Geospatial Coordinator shall report to the Permanent Secretary, Department of Economic Development, Transport and Civil Aviation; and submit the following deliverables by the deadlines specified by his/her supervisor:

- i. a strategic implementation plan and schedule to guide the execution of the relevant geospatial activities of the Disaster Vulnerability Reduction Project;
- ii. reports on the various components of the implementation plan and schedule;
- iii. monthly reports to be submitted on 25<sup>th</sup> day of each month on the status of project activities and must include a clear update of the implementation plan; utilizing the project's reporting tool;
- iv. minutes of meetings convened by the NGCC and the NGTC and all other geospatial relevant meetings attended;
- v. a project communication plan to be implemented within the first six (6) months of the consultancy;
- vi. prepare and submit quarterly reports to form an annex to the Interim Unaudited Reports.

The following criteria will be utilized for evaluation purposes:

- i. quality (i.e. clarity and accuracy) of reports;
- ii. timely submission of effective reports and other documents;
- iii. efficacy of policy recommendations, operational procedures, assessments and plans submitted;
- iv. effectiveness of advice provided to and collaboration with stakeholder agencies.

# VII. QUALIFICATION AND EXPERIENCE REQUIREMENTS

# Academic Qualifications and Experience:

A Master's Degree in one of the following or a related field - Environmental and Land Information Management; Geomatics (i.e. Land Surveying), Geographic Information / Geospatial Science **PLUS** five (5) years relevant working experience.

OR

A Bachelor's Degree in one of the following or a related field - Environmental and Land Information Management; Geomatics (Land Surveying), Geographic Information / Geospatial Science **PLUS** five (5) years relevant working experience.

# Knowledge, Skills and Abilities:

The additional knowledge, skills and abilities that will be required of successful candidates include:

- i. working knowledge of the operations of the public and private sector; and experience working directly with Government agencies; relevant resource users and international organizations;
- ii. working knowledge of open source GIS would be an asset
- iii. Experience working with hydrological data / models would be an asset
- iv. a minimum of three (3) years project management experience;
- v. effective communication skills and ability to communicate accurate information concerning processes, policies and procedures to diverse project stakeholders;
- vi. demonstrated leadership capabilities, working with multi-disciplinary teams to coordinate multi-sectoral interest;
- vii.knowledge of World Bank procurement and financial management guidelines;
- viii. functionally computer literate; possessing operational skills in word-processing and spread sheet applications, including software programs such as Word, Excel, PowerPoint, Microsoft Projects.
- ix. knowledge of remote sensing technology, mapping and /or surveying principles, spatial data management software; working knowledge of ArcGIS or related software, database design and administration
- x. Professional working capability in English

xi. knowledge of GNSS technology;

xii.ability to handle diverse stakeholders tactfully, courteously and diplomatically;

xiii. must be of high integrity, transparent, and accountable;

xiv. ability to establish and maintain effective working relationships with project stakeholders.

To ensure impartiality, the Geospatial Coordinator (including her or his home office, if any) must not in any way be affiliated with business entities that are currently providing or are seeking to provide goods or services to the project.

Interested eligible candidates must provide information indicating that they are qualified to perform the services; and are invited to submit their Curriculum Vitae (CV), including employment records, description of similar assignments, experience in similar conditions, availability of appropriate skills, previous remunerations, etc. to the following address:

Project Coordinator
Project Coordination Unit
Department of Economic Development, Transport and Civil Aviation
Finance Administrative Centre, 2<sup>nd</sup> floor
Pointe Seraphine
Castries
Saint Lucia
E-mail Address: slupcu@gosl.gov.lc