

# **Regional Disaster Vulnerability Reduction Project**

## **Request for Statement of Capability for Individual Consultant for Consulting Services to digitize historical aerial photography and provide training in aerial photo analysis**

### **BACKGROUND**

The Government of Grenada (GoG) has entered into financing arrangements with the World Bank, the proceeds of which will be allocated towards the financing of the Regional Disaster Vulnerability Reduction Project (RDVVRP). The Support from Pilot Program for Climate Resilience (PPCR) and World Bank under the RDVVRP is aimed at providing Grenada with financial and technical assistance to reduce vulnerability to natural hazards and climate change impacts. Among the specific aims of the project are the goals to integrate disaster vulnerability reduction and climate resilience in national development strategies and management of public infrastructure.

Under the project, the GoG is seeking the services of a qualified Individual Consultant to assist with the creation of a digital database of historical aerial stereo imagery collected by the Directorate of Overseas Surveys (DOS) and successors. The consultant will also provide training in the use of this imagery to analyze land cover changes over time. The consultant will be responsible for determining the most effective method for digitizing and registering (preferably orthorectifying) the images and then performing analysis to create data products such as DEMs and coastline delineation. Once complete, the consultant will provide training in the analysis of aerial imagery for the purposes of land cover change detection and other related topics.

### **SERVICES REQUIRED**

The consultant is expected to analyze the historical aerial stereo photography catalog held by the GoG to provide guidance on the possible methods for scanning and co-registration of these images. Based on the methodologies agreed to with the client, the consultant will carry out the following activities:

- i. The project requires 1902 individual aerial photographs to be Catalog and assembled creating stereo-pairs in sets by year of capture.
- ii. Assemble metadata for each set of imagery based on metadata contained on the images, supporting documentation and any other information provided from the GoG, DOS historical archives, or another source.
- iii. Analyse of images to reconstruct mission flight lines (if not available), photo-centers as well as image ground extents.
- iv. Analyze images to determine possible methods of scanning, co-registration, DEM creation from stereo-pairs.
- v. Create a training plan and perform training activities.

## **Training Activities**

All training will be carried out using a remote sensing software package such as, ERDAS Imagine or PCI Geomatica, as agreed to by the client.

## **REQUIRED EXPERIENCE AND QUALIFICATIONS**

**The consultant should possess the following qualification and experience;**

The Individual Consultant must have the following minimum qualifications and experience:

BSc in Geography, Geomatics, Remote Sensing, Physics, Mathematics, Computer Science or a related field.

At least 6 years of experience working in a position as a remote sensing technician/manager.

Proven experience with film and digitally based aerial imagery acquisition and analysis including analysis of stereo-pairs.

Proven experience with ERDAS Imagine or PCI Geomatica, and ArcGIS Desktop software and extensions.

Proven experience in the use of ERDAS Imagine, or equivalent, to create orthorectified image mosaics, of an area of 300 sq.km or greater, in at least two projects in the last 5 years.

Proven verbal and written English communication skills are essential.

Experience working with aerial photography produced by the Directorate of Overseas Surveys (DOS) is an asset.

An Advanced certificate or diploma in remote sensing is an asset

## **TIME FRAME**

The consultant's services are expected to be needed over a period of 6 months or 130 days.

Interested persons should submit their Statement of Capability entitled:  
**Individual Consultant to digitize historical aerial photography and provide training in aerial photo analysis**

To:

*The Project Coordinator  
Project Co-ordination Unit  
GCNA Building, Kirani James Boulevard  
ST. GEORGE'S*

[Margaret.belfon@gmail.com](mailto:Margaret.belfon@gmail.com); [jenlaki@gmail.com](mailto:jenlaki@gmail.com) or [rtheodore.rdvvp@gmail.com](mailto:rtheodore.rdvvp@gmail.com)

***The deadline for the submission of Statement of Capability is June 16, 2017***

**A copy of the detailed TOR can be made available upon request.**