



**THE COMMONWEALTH OF THE BAHAMAS**

**GEOMATICS CAPACITY ENHANCEMENT  
FOR  
DISASTER RISK MANAGEMENT PROJECT**

**REQUEST FOR EXPRESSION OF INTEREST**

**COMPONENT 1: HIGH RESOLUTION AERIAL PHOTOGRAPHY, ORTHO  
RECTIFICATION, TOPOGRAPHIC MAPPING AND DIGITAL TERRAIN  
MODEL**

**September 7<sup>th</sup> 2018**

# THE BAHAMAS NATIONAL GIS CENTRE

## GOVERNING LEGISLATION

The Bahamas Spatial Data Infrastructure (BSDI) Act No.9 of 2014

An act to establish The Bahamas National Geographic Information Systems (BNGIS) Centre as a department of Government within article 127(c) of the constitution; to define its special purposes and functions of the Department; to establish The Bahamas Spatial Data Infrastructure System & Program and the Geospatial Advisory Council; to define the functions and objectives of the Program and the Council and for connected matters.

## VISION

To create a robust Spatial Data Infrastructure Program that delivers a national framework for systematic access, maintenance and exchange of accurate, reliable and consistent Geospatial data to enable analysis and understanding of our environment on demand.

## MANDATE

To serve as the Governments technical focal point for Geographic Information Systems and central repository for the collection, analysis and management of geospatial data on The Bahamas; to provide GIS training and technical support. It is also the remit of the Centre, in collaboration with the Geospatial Advisory Council, to develop GIS policy standards and procedures.

## MISSION STATEMENT

To Promote Educate, Coordinate and Advance the Practical and Efficient use of Geospatial Technologies in The Bahamas

## MOTTO

Geospatial Technologies a window to our future connecting people in and around The Bahamas

## **Bahamas Spatial Data Infrastructure (BSDI) SYSTEM and PROGRAM Guiding Principles:**

- Best available non-confidential spatial information: BSDI Library data is as complete and thorough as current resource assignments or source data custodians and information will allow;
- Accurate and reliable: BSDI Library data will have met standards for data creation;
- Cooperative: BSDI will facilitate the cooperation and interoperability of participating governmental agencies and other groups;
- Self-organizing: BSDI will enable levels of participating governmental agencies and other organizations to contribute geospatial information, metadata, services and applications without the requirement for centralized administration, access and warehousing. Governmental agencies and other organizations are responsible for their own content;
- Sustainable: The BSDI will ensure its long-term sustainability through its relevance to the needs of the participating governmental agencies and users;
- Timely: BSDI and the GAC will define and recommend technologies and services that will support real-time and/or timely response in support of distributed access to information and location-based services;
- Ownership and accountability: Creators/providers will facilitate clear understanding and use of geospatial data, provide metadata, inclusive of ownership and technical specifications. Data creators are accountable for the compliance to the specifications of data sets made available for consumption and use;
- Transparency: National geospatial information organizations are to be transparent about the references of sources and processes that are used to create and provide official geospatial data.
- Respect and confidentiality: Exhibit high levels of regard and consideration to stakeholders in the execution of daily operations. Particular care will be instituted to protect the confidentiality of geospatial information that may bring harm to an individual, community and/or nations.
- Standards of service: Employ geospatial information management best practices and solutions, in addition to excellence in the delivery of geospatial data and services.
- Adherence to the Rule of Law: Work within the confines of BSDI Legislation, national/international laws and conventions, and promote awareness of those laws (specifically BSDI Act 2014) as it relates to stakeholder operation

GOVERNMENT OF THE COMMONWEALTH OF THE BAHAMAS

GEOMATICS CAPACITY ENHANCEMENT FOR DISASTER RISK MANAGEMENT PROJECT  
CONSULTANCY SERVICES FOR COMPONENT 1: HIGH RESOLUTION AERIAL IMAGERY, TOPOGRAPHIC MAPPING AND  
DIGITAL TERRAIN MODEL

**REQUEST FOR EXPRESSIONS OF INTEREST (EOI)**

The Government of the Commonwealth of The Bahamas (GOBH) is seeking to implement the GEOMATICS CAPACITY ENHANCEMENT FOR DISASTER RISK MANAGEMENT Project. Component 1 of the Project comprises acquisition of High resolution Aerial Imagery, Topographic Mapping and Digital Terrain Model and other technical requirement stated in the scope of services.

The Project executing agency, The Bahamas National Geographic Information Systems (BNGIS) Centre, Ministry of The Environment and Housing, now wishes to procure consultancy services for High Resolution aerial Imagery, Topographic Mapping, Digital Terrain Model.

The objective of the services is to acquire high resolution Aerial Photography and Ortho-rectified and mosaicked imagery tiles of selected islands in The Bahamas (and their surrounding cays), namely Bimini, Exuma, Eleuthera, Long Island, Cat Island and New Providence as well as Topographic Mapping and an accurate Digital Terrain Models (DTM)/Contours for these islands. The data should be geo-referenced to the Universal Transverse Mercator Grid System, Zone 17 or 18 (where applicable), ITRF AND WGS84 Datum.

The scope of services includes, but is not limited to:

- a) Acquiring high resolution Aerial Photography, Ortho-imagery rectification, Topographic Mapping at 1: 1,200 and 1:5,000 scale and Digital Terrain Model extending seaward 3 nautical miles of the coast/seashore for the Islands of New Providence, Long Island, Cat Island, Eleuthera, Bimini and Exuma and their surrounding Cays;
- b) Producing Aerial Photography at a) 0.5cm resolution for the New Providence; and Aerial Photographs at 20cm resolution for all other Project Islands;
- c) Producing ortho-photography/aerial photography (imagery grid tiles in both 1000m x 1000m and 5000m x 5000m grid tiles) for project Islands and their surrounding cays;
- d) Producing Digital Terrain Model(DTM) with 1 ft, 2 ft and 10 ft contour intervals;
- e) Developing and documenting parameters to transform survey coordinates from North American Datum of 1927 (NAD27) to International Terrestrial Reference Framework (ITRF) and /or WGS84 for the project Islands and surrounding cays;
- (f) Reporting and providing all raw data collected in formats that can be used in common digital databases and/or Geographic Information Systems (GIS) with associated metadata;
- (h) Providing Data Acquisition Plan for the remaining Islands of The Commonwealth of The Bahamas including flight plans and projected cost estimates by island (based on same specifications indicated in this EOI ie. Aerial Photography, Ortho-Imagery rectification, Topographic Mapping and Digital Terrain Model Data Acquisition Plan);
- (i) Creating GIS Road Centre line/street coverage with address range attributes for the Island of New Providence with standards and guidelines that may be replicated on other Islands;

The Consultancy will also include the production of a series of Project Reports including but not limited to Inception, monthly progress report and Final Report.

The minimum qualifications of the members of the consulting team shall include Masters Degrees in the relevant disciplines and minimum of 10 years' relevant experience, or Bachelor of Science degrees in the disciplines identified and a minimum of 15 years' relevant experience including but not limited to aerial photography, Photogrammetry, Survey and Mapping, GIS/Geomatics, Cartography, and QA/QC.

The Consultancy is to be implemented over a period of One year (12) months with the Firm being responsible for correcting any and all errors related to deliverables for Component 1.

### **PROCUREMENT STRATEGY:**

The procurement will have two stages. In **Stage One (this document - EOI)**, respondents will provide their responses to the EOI (THIS DOCUMENT) in accordance with the requirements stipulated in the EOI. An evaluation will be undertaken of the responses received and a short-list will be prepared of those Firms invited to proceed to the next Stage. In **Stage Two (RFP)** the short-listed Firms will receive the request for proposal and be invited to provide technical and cost proposals. The Firm that best meets the scope of work, schedule, cost and quality objectives will then be selected for contract negotiation.

Interested, eligible consulting firms are required to submit Expressions of Interest in the following submission format indicating technical competence, qualifications and experience required to provide these consultancy services. Additionally, in the assessment of submissions, local and regional experience on similar assignments, financial capability and existing commitments will be considered. All information must be submitted in English.

#### **EOI SUBMISSION FORMAT:**

- a. Expression of Interest Cover Letter;
- b. Table of Contents
- c. General Company/Firm Information;
- d. Description of Organization;
- e. Relevant qualifications and Experience;
- f. Examples of Contracts of Similar Nature and Complexity;
- g. Current Contracts and Commitments;
- h. List Key Personnel Assigned to the Project, Nationality, Title, Role and Responsibility;
- i. Resume/CV for each Key Personnel Assigned to the Project and describing education, relevant professional development over the last 10 (ten) years, number of years of relevant experience field of competency, and a listing of relevant previous experience in the last 10 years, work experience in similar projects in The Bahamas, the Caribbean Region and any other locality;
- j. Experience in The Bahamas;  
(Firms should include summary descriptions of assignments carried out in The Bahamas and sample of products);
- k. Experience Caribbean Region and Globally;  
(Firms should include summary descriptions of assignments carried out in the Caribbean Region, Globally);

## **STAGE 1 EOI ASSESSMENT PROCESS OVERVIEW**

All responses submitted in accordance with the requirements of the EOI (this package) will be assessed by the Project's **Assessment Committee**. The Committee will be composed of members of the Government of The Bahamas. The Client reserves the right to add, delete, and/or change members of the Committee.

The Assessment Committee will assess/rank the EOI based on submission format stipulated in this document. Shortlisted Firms will be invited to advance to Stage 2 (Request for Proposal (RFP -Technical & cost)).

Three (3) hard copies of the Expressions of Interest must be received at the address below no later than 3:00pm on Friday 12<sup>th</sup>, October. Each submission must include a compact disc, flash drive or other media containing an electronic copy of the submission as a single PDF file and Microsoft word file. The sealed envelope containing each submission should include the name and address of the applicant and shall be clearly marked "Expression of Interest – Consultancy Services – "EOI –The Geomatics Capacity Enhancement for Disaster Risk Management Project component 1: High resolution Aerial Imagery, Ortho Imagery Rectification, Topographic Mapping and Digital Terrain Model".

## **PRICES SHOULD NOT BE SUBMITTED WITH THE EOI.**

Any questions may be forwarded via email to Project Coordinator, BNGIS Centre email: projectcoord@bahamas.gov.bs by no later than Friday 28<sup>th</sup>, September at 5.00pm. Subject Line must be "EOI —The Geomatics Capacity Enhancement for Disaster Risk Management Project – High resolution Aerial Imagery, Ortho Rectification, Topographic Mapping and Digital Terrain Model". Responses to questions will be provided by Friday 5<sup>th</sup>, October.

## **DISQUALIFICATION**

An applicant may be disqualified on the following basis:

- Failure to provide information that is essential to evaluate the applicant's Qualifications;
- Submission of inaccurate and or misleading information;
- Submission of incomplete information as stipulated in the submission format.

## **EVALUATION OF EXPRESSION OF INTEREST**

An **Evaluation/Assessment Committee** composed of members of the Government of The Bahamas will assess the Expressions of Interest and determine a short-list of not less than three and not more than six Firms who will be provided with the full terms of reference for the Aerial Imagery, Topographic Mapping And Digital Terrain Model and other aspects and invited to submit technical and financial proposals for further evaluation.

The Government of The Bahamas (GOBH) reserves the right to accept or reject any (including late applications) or to cancel the present invitation partially or in its entirety. It will not be bound to assign any reason for not engaging the services of any applicant and will not defray any costs incurred by any applicant in the preparation and submission of Expressions of Interest.

All Responses must be received no later than 3:00 pm on Friday 12<sup>th</sup>, October, 2018, and addressed to:

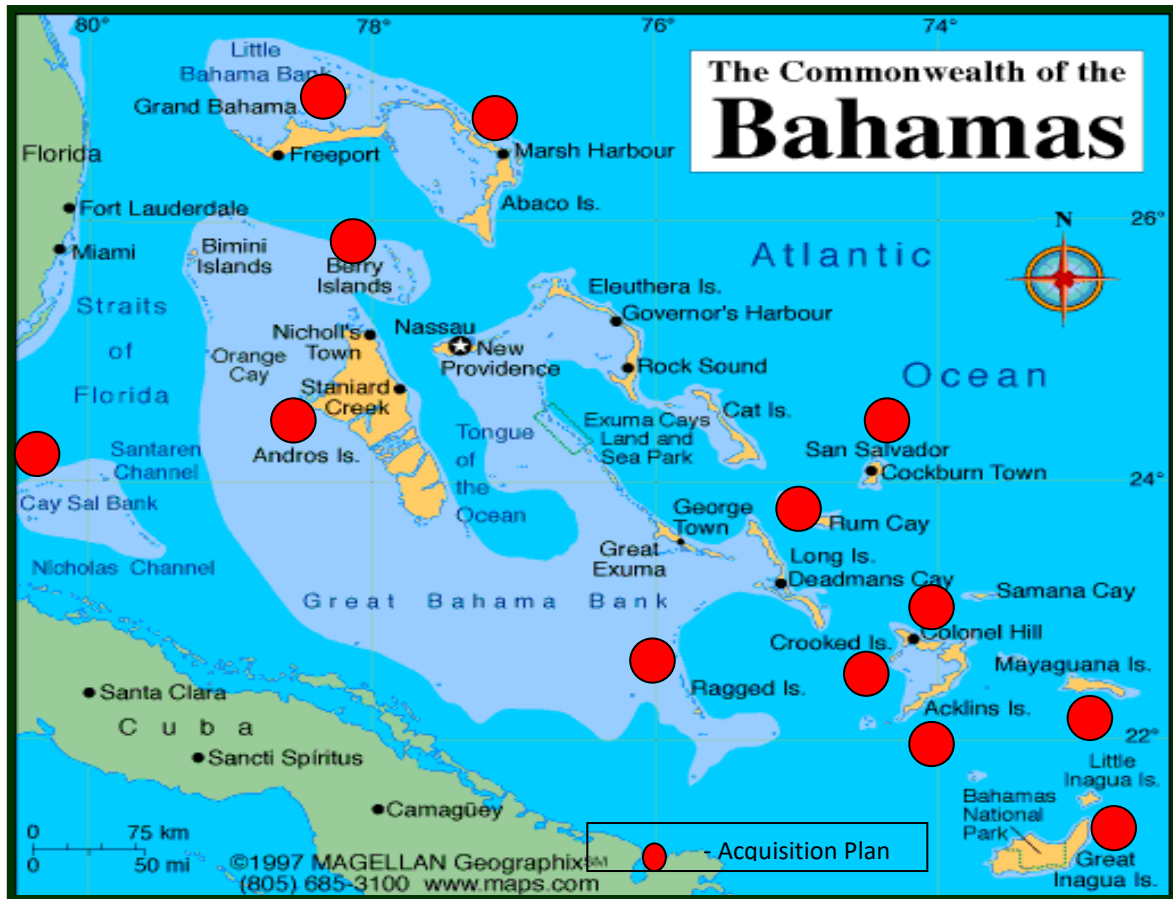
Chairman, The Tender Board  
c/o Acting Financial Secretary  
Ministry of Finance  
Cecil Wallace Whitefield Centre  
P. O. Box N-3107  
Nassau, N.P., The Bahamas

ANNEX 1: HIGH RESOLUTION AERIAL PHOTOGRAPHY, ORTHO-IMAGERY, TOPOGRAPHIC MAPPING, DIGITAL TERRAIN MODEL PROJECT ISLANDS



Ref #	Island Name	Geographic Coordinate
1	Cat Island	2423N07530W
2	Eleuthera	2510N07614W
3	Long Island	2315N07504W
4	New Providence	2505N07733W
5	Bimini	2542N07915W
6	Exuma	2330N07545W

ANNEX 2: REMAINING ISLANDS TO BE INCLUDED IN THE DATA ACQUISITION PLAN (HIGH RESOLUTION AERIAL PHOTOGRAPHY, ORTHO-IMAGERY, TOPOGRAPHIC MAPPING, DIGITAL TERRAIN MODEL)



Ref #	Island Name	Geographic Coordinate
1	Grand Bahama	2638N07825W
2	Abaco	2628N07705W
3	Conception Island	
4	Moorre's Island	2618N07733W
5	Berry Islands	2534N07745W
6	Andros	2426N07757W
7	Cay Sal	
8	Semana Cay	
9	San Salvador	2402N07430W
10	Rum Cay	2340N07453W
11	Mayaguana	2223N07257W
12	Crooked Island & Long Cay	2245N07413W
13	Acklins	2226N07400W
14	Ragged Island	2211N07543W
15	Little Inagua	
16	Great Inagua	2105N07318W
17	Cat Cay	