



The Government of the Commonwealth of The Bahamas  
Bahamas National Geographic Information Systems Centre,  
Ministry of the Environment and Housing



**GEOMATICS CAPACITY ENHANCEMENT FOR  
DISASTER RISK MANAGEMENT PROJECT  
# BNGIS003-4-2019**

**REQUEST FOR PROPOSAL**

**COMPONENTS 3: FLOOD, STORM SURGE INUNDATION, WIND  
AND COASTAL EROSION MODELING AND MAPPING  
COMPONENT 4: DISASTER RISK MANAGEMENT INFORMATION  
SYSTEM (DRMIS)**

**9<sup>th</sup> JANUARY 2020**

## THE BAHAMAS NATIONAL GIS CENTRE

The Centre was established by The Bahamas Spatial Data Infrastructure (BSDI) Act No.9 of 2014 as a department of Government within article 127(c) of the Constitution of the Commonwealth of The Bahamas; To define its special purposes & functions of the Department; to establish The Bahamas Spatial Data Infrastructure System & Program and the Geospatial Advisory Council; to define the functions & objectives of the Program & the Council and for connected matters.

### VISION

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

### 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

## DISCLAIMER

The information contained in this Request for Proposals document (the “RFP”) is provided to Respondent(s) on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is not an agreement and is neither an offer nor invitation by the Government to the prospective Respondents or any other person. The purpose of this RFP is to provide Respondents with information that may be useful to them in making their submissions (the “Proposals”) pursuant to this RFP. This RFP may include statements which reflect various assumptions and assessments arrived at by the BNGIS or the Government. Such assumptions, assessments and statements do not purport to contain all the information that each Respondent may require. This RFP may not be appropriate for all persons, and it is not possible for BNGIS, its employees or advisors to consider the investment objectives, financial circumstances and particular needs of each Respondent. The assumptions, assessments, statements and information contained in this RFP may not be complete, accurate, adequate or correct. Each Respondent should, therefore, conduct its own investigations and analysis and should check the accuracy, adequacy, correctness, reliability and completeness of the assumptions, assessments, statements and information contained in this RFP and obtain independent advice from appropriate sources.

The Government accepts no responsibility for the accuracy or otherwise for any interpretation or opinion on law expressed herein.

The Government, its employees and advisors make no representation or warranty and shall have no liability to any person, including any Respondent under any law, statute, rules or regulations or tort, principles or restitution or unjust enrichment or otherwise for any loss, damages, cost or expense which may arise from or be incurred or suffered on account of anything contained in this RFP or otherwise, including the accuracy, adequacy, correctness, completeness or reliability of the RFP and any assessment, assumption, statement or information contained therein or deemed to form part of this RFP or arising in any way in this Bid Stage.

The Government also accepts no liability of any nature whether resulting from negligence or otherwise howsoever caused arising from reliance of any Respondent upon the statements contained in this RFP.

BNGIS may in its absolute discretion, but without being under any obligation to do so, update, amend or supplement the information, assessment or assumptions contained in this RFP.

The issue of this RFP does not imply that BNGIS is bound to select a Respondent or award a contract for the Project and BNGIS reserves the right to reject all or any of the Respondents or Bids without assigning any reason whatsoever.

The Respondent shall bear all its costs associated with or relating to the preparation and submission of its Bids including but not limited to preparation, copying, postage, delivery fees, expenses

associated with any demonstrations or presentations which may be required by BNGIS or any other costs incurred in connection with or relating to its Bid. All such costs and expenses will remain with the Respondent and BNGIS shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Respondent in preparation for submission of the Bid, regardless of the conduct or outcome of the Bidding Process.

The RFP Process shall be governed by, and construed in accordance with, the laws of The Bahamas and all disputes arising under, pursuant to and/or in connection with the RFP Process shall be determined by arbitration.

# REQUEST FOR PROPOSAL

## GEOMATICS CAPACITY ENHANCEMENT FOR DISASTER RISK MANAGEMENT PROJECT COMPONENT 3: FLOOD, STORM SURGE, WIND AND COASTAL EROSION MODELLING AND MAPPING AND COMPONENT 4: DISASTER RISK MANAGEMENT INFORMATION SYSTEM (DRMIS)

### CONTENT

I.	EXECUTIVE SUMMARY .....	i
	OBJECTIVES AND DESIGN INTENT .....	ii
	SUMMARY OF DELIVERABLES - GCE - DRM PROJECT COMPONENT 3 AND 4 .....	iii
	PROCUREMENT STRATEGY .....	iv
	QUALITY PERFORMANCE AND RISK MANAGEMENT .....	iv
	NOTIONAL TIMELINES AND MILESTONES.....	iv
	PROJECT EXECUTION,ORGANIZATIONAL STRUCTURE AND CHAIN OF COMMAND .....	v

### REQUEST FOR PROPOSAL

1.	INTRODUCTION .....	1
2.	CONTACT INFORMATION .....	2
3.	DUE DATES .....	2
	ISSUANCE OF RFP .....	2
	LETTER OF TRANSMITTAL.....	2
	QUESTIONS.....	2
	RESPONSE TO QUESTIONS .....	2
	PROPOSALS.....	2
	PROOF OF CONCEPT/DEMONSTRATION OF INFORMATION SYSTEM .....	2
4.	SUBMISSION OF PROPOSALS .....	3
5.	AMENDMENTS AND ADDENDA .....	4
6.	PROCUREMENT STRATEGY .....	4
7.	FIRM RESPONSIBILITY .....	4
8.	GENERAL REQUIREMENTS AND RESPONSIBILITIES.....	4
8.1	WORKING APPROACH AND RESPONSIBILITIES .....	4
9.	FINANCIAL RESPONSE .....	6

9.1	OWNERSHIP AND USE OF DOCUMENTS .....	6
9.2	GENERAL OBLIGATIONS OF THE FIRM .....	7
9.3	CORRECTION OF WORK .....	8
9.4	NEGOTIATIONS.....	8
9.5	TAXES.....	8
9.6	INSURANCE.....	8
9.7	INDEMNIFICATION .....	8
9.8	TRAVEL EXPENSES .....	9
9.9	PROJECT MEETINGS.....	9
9.9.1	LANGUAGE .....	9
9.9.2	POST AWARD AND EXECUTION OF THE CONTRACT .....	9
9.10	SUCCESSORS AND ASSIGNS .....	9
9.11	OTHER GENERAL TERMS AND CONDITIONS .....	10
10	PROJECT MANAGEMENT AND ADMINISTRATION .....	10
10.1	ORGANIZATION .....	10
10.1.1	THE CLIENT .....	10
10.1.2	ADDITIONAL INPUTS FROM THE CLIENT .....	10
10.1.3	THE FIRM .....	11
10.2	PROJECT MANAGEMENT REPORTS.....	11
10.2.1	COST CONTROL/FINANCIAL REPORTING .....	12
10.2.2	SHECULE CONTROL / PROGRESS REPORTING .....	13
11.	VALUE ENGINEERING PROPOSALS.....	14
12	GOVERNMENT SUPPLIED MATERIAL AND EQUIPMENT.....	14
13	STRUCTURE OF PAYMENTS.....	14
13.1	MOBILIZATION .....	15
13.1.2	MONTHLY PROGRESS.....	15
13.1.3	SUBSTANTIAL COMPLETION .....	15
13.1.4	FINAL COMPLETION.....	15
13.1.5	RETENTION.....	16
13.2	PAYMENTS:GENERAL .....	16

13.2.1	STATEMENT OF CERTIFICATION.....	16
14.	COMPLETION .....	17
14.1	INSPECTION AND EXAMINATION OF WORK .....	17
14.2	DEFICIENCY LIST.....	17
14.3	CERTIFICATE OF SUBSTANTIAL COMPLETION.....	17
14.4	CERTIFICATE OF FINAL COMPLETION .....	17
14.5	DEFAULT BY FIRM .....	17
14.6	LIQUIDATED DAMAGES .....	18
15.	DISPUTE RESOLUTION .....	18
16.	GUIDELINES FOR PROPOSAL PREPARATION - PRE-SUBMISSION OF PROPOSALS .....	18
16.1	TRANSMITTAL LETTER - NOTICE OF CONFIRMATION OF INTENT TO SUBMIT .....	18
16.2	SOLICITATION.....	18
16.3	QUESTIONS AND ADDENDA.....	19
16.4	PROPOSAL REQUIREMENTS.....	19
16.4.1	GENERAL REQUIREMENTS.....	19
16.4.2	PROPOSAL CONTENT .....	20
16.4.3	PROPOSAL OUTLINE .....	21
16.5	GENERAL PROPOSAL STIPULATIONS .....	31
16.5.1	DISCLOSURE OF CONTENT.....	31
16.5.2	FIRM'S RESPONSIBILITY WITH REGARD TO PROPOSAL REQUIREMENTS.....	31
16.5.3	WAIVER OF MINOR IRREGULARITIES .....	31
16.5.4	INCURRED EXPENSES .....	31
16.5.5	GENERAL PERSONNEL RESPONSIBILITIES .....	32
16.5.6	PUBLICITY AND ANNOUNCEMENTS .....	32
16.5.7	CORRESPONDENCE DURING THE RFP PROCESS.....	32
16.5.8	FRAUD AND CURRUPT PRACTICES.....	32
16.5.9	PRESENTATIONS .....	33
17.	ASSESSMENT CRITERIA AND PROCESS .....	34
17.1	ASSESSMENT PROCESS OVERVIEW.....	34
17.2	ASSESSMENT COMMITTEE .....	34

17.2.1	STAGE ONE ASSESSMENT.....	34
17.2.2	STAGE TWO ASSESSMENT .....	34
17.3.	MINIMUM/MANDATORY REQUIREMENTS .....	34
17.3.1	RATED REQUIREMENTS .....	35
17.3.2	WEIGHTED VALUE FOR WRITTEN PROPOSAL ASSESSMENT.....	35
17.4	TABLE OF TECHNICAL REQUIREMENTS (TOTR).....	35
17.4.1	TABLE OF TECHNICAL REQUIREMENTS (TOTR) FOR COMPONENT 4 .....	35
17.4.2	NON FUNCTIONAL.....	40
17.5	OTHER REQUIREMENTS .....	42
17.5.1	METADATA CATELOGUING SYSTEM REQUIREMENTS .....	42
17.5.2	SMART ORGANIZATIONAL CHART REQUIREMENTS.....	42
17.5.3	HAZARD MAP ATLAS REQUIREMENTS.....	43
17.5.4	REQUIREMENTS FOR THE BNGIS CENTRE'S RESPONDER OPERATIONAL PLAN.....	45
17.5.5	ALIGNMENT WITH BSDI ACT 2014 REQUIREMENTS .....	46
18.	NOTIONAL TIMELINES AND MILESTONES.....	46
19.	BEST VALUE .....	46
20.	CONFIDENTIALITY OF PROJECT INFORMATION AND DELETION OF PROJECT DATA .....	47
21.	DECLARATION OF DISTRUCTION .....	47
<b>ANNEX</b>	.....	<b>48</b>
1.	LETTER OF TRANSMITTAL - NOTICE OF CONFIRMATION OF INTENT TO SUBMIT PROPOSAL.....	48
2.	PROPOSAL FORM .....	49
3.	COMMONWEALTH OF THE BAHAMAS AND SELECTED GCE-DRM PROJECT ISLANDS.....	50
4.	LOCATION DETAILS OF PROJECT ISLANDS .....	51
5.	GCE-DRM PROJECT COMPONENT 3 AND 4 ORGANIZATIONAL STRUCTURE .....	52
6.	DRMIS NEEDS ASSESSMENT OF KEY STAKEHOLDERS/BENEFICIARIES.....	53
7.	SAMPLE NEEDS ASSESSMENT SURVEY CONTENT.....	54
8.	GEOSPATIAL DATA (AUTHORITATIVE DATA) THEMES FOR DEPOSIT IN THE BSDI PORTAL .....	55
9.	PROJECT COMPLETION GUIDELINES FOR DECLARATION OF DESTRUCTION .....	56
10.	GCE-DRM PROJECT DECLARATION OF DISTRUCTION FORM.....	58
11.	THE GCE-DRMIS AND BSDI SMART ORGANIZATIONA CHART REQUIREMENTS.....	59
12.	GCE-DRM PROJECT EVALUATION WEIGHTING SCHEME .....	65



## I. EXECUTIVE SUMMARY

The Bahamas National Geographic Information Systems (BNGIS) Centre with statutory responsibility for The Bahamas Spatial Data Infrastructure (BSDI) System and Program, is the Government's technical focal point and central repository (BSDI Portal) for geospatial data (see Annex 8) and imagery on The Bahamas. The BSDI Program is an integrated Geospatial framework to advance effective use of information to measure, monitor and achieve national goals and to support informed decision making while providing geospatial services to all Governmental agencies including member agencies of the Geospatial Advisory Council (see Annex 6) and other groups. It should be appreciated that a fundamental requirement of the BSDI System and Program is that base mapping needs adequately meet collective needs for authoritative, accurate and reliable geospatial data and that Geographic Information Systems (GIS) data standards, procedures and protocols are developed to nurture a comprehensive approach to GIS implementation on an agency-wide platform. A holistic approach that seeks to minimize the production of GIS data silos, duplication of effort and waste of scarce resources.

During the past few years The Bahamas experienced a series of disasters, including Hurricane Joaquin, Matthew, Irma and Dorian (2015, 2016, 2017 and 2019 respectively) all of which severely taxed and in many cases overwhelmed responding agencies and more importantly effected people's quality and way of life. As an integral part of the BNGIS Centre's Climate Resilience Strategy mainstreaming the use of geospatial technologies for Disaster Risk Management is critical.

The Government of The Bahamas recognize that the application of Geospatial technologies has tremendous potential in supporting all aspects of disaster and emergency management cycles in terms of saving lives, limiting damage and reducing the costs of the event. The BNGIS Centre provides geospatial services and in particular appreciates that due to the chaotic nature of emergencies, emergency managers need geospatial data and tools that are collected and distributed in the form of useful products to manage disasters/emergencies without the minimum amount of confusion. GIS and Disaster Risk management systems will integrate information from different sources, of scales, accuracies and formats, into a single source and these can facilitate modeling, mapping and spatial decision support.

As such the Government of the Commonwealth of The Bahamas (hereinafter referred to as "the Government") is seeking to strengthen the capacity of the BNGIS Centre to provide geospatial services to Governmental Agencies (including the National Emergency Management Agency (NEMA) Emergency Support Function (ESF) 5 "Planning and Information") through the execution of the Geomatics Capacity Enhancement for Disaster Risk Management Project (GCE-DRM) administered/executed by BNGIS. The project has several components including:

- 1) High Resolution Aerial Photography, Ortho-Imagery rectification, Topographic

- Mapping and Digital Terrain Model (Ongoing);
- 2) Quality Assurance Quality Control review of deliverables produced by Component 1 (Ongoing);
  - 3) Flood, Storm Surge, Wind and Coastal Erosion Modelling and Mapping (**This RFP**);
  - 4) Disaster Risk Management Information System (DRMIS) (**This RFP**); and
  - 5) Equipment/ICT.

The Government now invites Proposals from Firms to provide Component 3, and 4 deliverables including (but not limited to) a) Component 3: Flood, Storm Surge Inundation, Wind and Coastal Erosion Modelling and mapping for select islands of The Bahamas (New Providence, Eleuthera, Bimini, Long Island, Cat Island and Exuma); and b) Component 4: a user friendly functional Disaster Risk Management Information System (DRMIS) and relational database, leveraging the existing Bahamas Spatial Data Infrastructure (BSDI) Portal, as a service to The Bahamas National Geographic Information Systems (BNGIS) Centre and its Key Stakeholders (Annex 6) as outlined in this Request for Proposal (RFP). The scope of work will also include the Firm making recommendations regarding ICT and equipment to support system operations and training and other policy and technical requirements as outlined in this RFP.

**OBJECTIVES AND DESIGN INTENT:**

Solutions that collect and store copies of spatial data created by diverse organizations have the advantage of making all data available from a single coherent data source.

As such the overall objectives of GCE-DRM Project Component 3 and 4 of the Project are to **a)** ensure that geospatial technologies and The Bahamas Spatial Data Infrastructure (BSDI) System and Program play a more prominent role in Disaster Risk Management; **b)** ensure the collection, availability and accessibility of quality authoritative geospatial information and services across all phases of disaster risk reduction and management; **c)** link and Integrate relational database and associated census, demographic and socio economic data to enable accurate economic and disaster risk management research and analysis/reporting; **d)** build local capacity to apply science based research, flood analysis and modelling utilizing surge modelling software application and geospatial technologies for long term planning and development, and improve analytical competencies, creative thinking Knowledge Management and strengthening Problem-Solving Skills; **e)** leverage existing and improve systems and networks for the collection and analysis of information on disasters, vulnerabilities and disaster risks to inform decision-making and services to support emergency response and disaster risk reduction, **f)** build institutional capacity to provide expertise that are trained in risk analysis in order to support practical project designs especially related to resilience and sustainable development; **g)** nurture and institutionalize good governance practices and science-based policies by promoting the BSDI (and BSDI Act) as the Government's national strategy for geospatial data/information management; **h)** produce BSDI Regulations, technical specifications and Request for Proposal for a full blown BSDI System and Program; **i)** enable crowd sourcing for improved

geospatial services to communities and the general public; **j**) build public awareness program targeting various audiences (Executive, Technical, General public, and education arena (students and teachers)) to impart the global effects of climate change on The Bahamas; **k**) Strengthen BNGIS Capacity to provide improved geospatial services to the National Emergency Management Agency’s Emergency Support Function (ESF) 5 “Planning and Information” leveraging the Spatial Data Infrastructure System and Program; and **l**) recommend ICT and specialized equipment and software solutions to support BNGIS Centre’s delivery of Geospatial, modelling and Spatial Data Infrastructure Services locally, nationally, regionally and Globally.

This participatory and inclusive approach in generating, improving and managing geospatial information is designed to employ best practises and engage all entities involved in disaster risk management efforts. This is required to address “Isolated silo approaches” and improvements in lateral and vertical institutional collaboration between agencies, sharing, disseminating data and articulating results of advanced analysis concisely and precisely.

A detailed Table of Technical Requirements (ToTR), Section 16.4.3, 17.4 and 5, identifying and defining specifications is an integral part of this RFP package. The Firm will be required to respect these requirements as described.

#### **SUMMARY OF DELIVERABLES - GCE-DRM PROJECT COMPONENT 3 and 4:**

The Geomatics Capacity Enhancement for Disaster Risk Management (GCE-DRM) Project’s components 3 and 4 will collectively provide the following:

- 1) Situational Assessment (Gap analysis and needs assessment);
- 2) Flood, Storm Surge wind and coastal erosion modeling for Project Islands and their surrounding cays and flood, storm surge, wind modeling based on multiple scenarios preformed for real time disaster response;
- 3) Mapping: Field data collection (on each Project Island) including existing land/building use and other relevant information;
- 4) Hazard Map atlases for all Project Islands;
- 5) Training program including Training sessions, workshops, training manuals and public awareness sessions;
- 6) BNGIS Centre Responder Operational Plan for providing improved support to NEMA’s Emergency Support Function (ESF) 5 “Planning and Information” and other groups. The plan must also include Pre and Post disaster services/response (standard damage assessment protocols (desktop mapping, detailed assessment and field verification) & mitigation strategies).
- 7) Identification of data custodians and Updating Maintenance Plans for Custodians of Core DRM geospatial data
- 8) Multiple reports: Inception, Monthly Progress Reports, Final Report, Sustainability Report and Action Plan, Return on Investment (ROI) Report and any other reports

- required in this RFP;
- 9) Metadata Catalogue Management System;
  - 10) Methodology to integrate Drone Imagery in DRMIS;
  - 11) Rectifying and mosaicking existing scanned maps and plans and any other data/information as required including Maps & Plans or maps/plans identified by the BNGIS Centre;
  - 12) Developing electronic smart organizational chart of government structure as a tool to support improved DRM coordination and geospatial services to governmental agencies;
  - 13) Conducting select agency needs assessment for System Development and integration of databases from a central repository leveraging the BSDI System Portal;
  - 14) DRM Information System which is an application/software solution that is scalable in terms of the expandability and functionality it provides i.e. application should exhibit a level of functionality in all aspects of DRM and emergency services with ability to add features and functionality according to the needs and priorities of BNGISC and Stakeholder agencies. The Firm should also provide mobile device apps for rapid damage assessment with backup questionnaire that can be used to allow data collection in the event that there is no mobile data available;
  - 15) Developing Bahamas Spatial Data Infrastructure (BSDI) System and Program Technical specifications and RFP for a full-blown SDI as a fundamental infrastructure for sustainable development and supporting multiple agency business needs in a GIS environment;
  - 16) National Policy Statements to support sustainable use of the DRMIS and the BSDI System;
  - 17) Regulations and Guidelines to support BSDI Act 2014;
  - 18) Presentations and demonstration of DRMIS to the Cabinet of The Bahamas, Senior & Technical officers (Government) and to Communities/general public;
  - 19) Training, training manuals. Training Program to include training in surge modeling, GIS, GNSS/GPS for technical and DRM system administrators;
  - 20) Service level Agreement as required and System software maintenance and support requirements and associated cost.

Firms are to note that access to information produced by Component 1 of the GCE-DRM Project will be made available to support Components 3 and 4 activities.

The Consultancy is expected to be conducted over a period of twelve months (12 months) with the Firm being responsible for coordinating and collecting field data in collaboration with the BNGIS Centre staff and stakeholder agencies, populating databases and correcting any data and /or system errors as required.

**PROCUREMENT STRATEGY:**

The procurement strategy comprises three stages. Stage 1: Request for proposal. All Firms

short listed from Stage One, (RFP) will be invited to advance to Stage 2: Proof of Proposal/Demonstration of DRM System concept. Firm selection will be made following stage 2. All Firms are now invited to provide Proposals as stipulated in this RFP.

**QUALITY, PERFORMANCE AND RISK MANAGEMENT:**

Respondents will be required to prepare and submit a quality assurance/quality control program:

- identifying the lines of authority and responsibility within the Firm’s team;
- indicating the internal review procedures and processes to be undertaken to ensure that all Work will conform to the contract requirements; and
- Identifying the specific steps to be taken to correct deficiencies in the quality of Work.

**NOTIONAL TIMELINES AND MILESTONES:**

➤ Issuance of RFP	9 January 2020
➤ Submission of Transmittal Letter	17 January 2020
➤ Deadline for submission of questions	22 January 2020
➤ Response to Questions	28 January 2020
➤ Due Date for Receipt of Proposals	7 February 2020
➤ Notification of Short listed Firms	TBD
➤ Stage 2 Proof of Proposal (Short listed Firms only)	TBD
➤ Award and Execute Contract	Cabinet’s Approval
➤ Initial Project Briefing and Information Session (Nassau)	TBD
➤ Project Implementation	TBD
➤ Completion	Dependent on Start date

**PROJECT EXECUTION, ORGANIZATIONAL STRUCTURE AND CHAIN OF COMMAND**

The executing agency for The Geomatics Capacity Enhancement for Disaster Risk Management Project is the BNGIS Centre. A Project Coordinator from the BNGIS Centre’s Office will be assigned and a Project Steering Committee will be established to provide technical assistance and guidance particularly as it relates to facilitating data access and sharing, addressing issues, reviewing project deliverables for acceptance and ensuring successful completion of the Project. The Committee shall comprise select agencies (determined by the BNGIS Centre) represented on the Geospatial Advisory Council and will be chaired by The Project Coordinator and/or BNGIS representative as required.

The Firm shall report directly to the Project Coordinator (PC) and provide all deliverables to the Project Coordinator who in turn reports to the Director of the BNGIS Centre. The Project Coordinator will act as the liaison for consultations between the Firm and the relevant governmental agencies and other key stakeholders throughout the duration of the assignment (see Annex 5, Project organizational structure illustrating operational structure and reporting mechanism).

## REQUEST FOR PROPOSAL

### 1. INTRODUCTION

Large-scale disasters caused by natural hazards (among them hydrological events such as Hurricanes and tornadoes - Joaquin, Matthew, Irma and Dorian (2015,2016, 2017 and 2019 respectively) negatively impacted communities and demonstrated the gap between the state of geospatial information and informed decision-making. Advanced research and analysis skillsets and solutions aimed at building resilient communities by improving not only the availability and accessibility of quality geospatial information and services, but also improving coordination and communication among stakeholders at all levels of decision-making across all phases of disaster risk management, is critical. This is a pillar of the BNGISC Climate Resilience Strategy, to mainstream geospatial technologies and information management across all phases of disaster risk management including decision support for planning, response, recovery, reconstruction and mitigation.

The availability and accessibility of quality imagery, geospatial data and information from an authoritative source such as The Bahamas National Geographic Information Systems Centre, leveraging the BSDI System and Program, will ensure that decision makers, Governmental agencies and other groups (local, regional and international) as well as the general public, have an accurate common operational picture of critical scenarios before, during and after disasters. During disaster situations, cohesive data-sharing mechanisms in support of informed decision making are generally not in place. As a result, the many actors and stakeholders simultaneously engaged in response are not only gathering volumes of concurrent and inconsistent geospatial datasets but are also concerned with issues of coordination and communication.

The Government is seeking to identify and select a Firm to implement the Geomatics Capacity Enhancement for Disaster Risk Management Project's Component 3 and 4, Flood Storm Surge Inundation, Wind and Coastal Erosion Modelling and Disaster Risk Management (DRM) Information System.

Project components are designed to collectively build local capacity to conduct scientific research and analysis to inform policy decisions as well as develop and install a Disaster Risk Management System built on the existing Bahamas Spatial Data Infrastructure (BSDI) System and Program to improve geospatial services in general and more specifically for DRM in The Bahamas.

The GCE-DRM System solution must leverage The Bahamas Spatial Data Infrastructure (BSDI) System and Program and be a web-based solution designed to facilitate the development and deployment of multiple integrated spatial, business and e-commerce (fee based) applications on a centralized spatial database repository.

The remainder of this document provides additional information that will allow the Firm to understand the entire scope of work and to develop a proposal in the format desired by the

Government.

## 2. CONTACT INFORMATION

Any questions regarding this RFP must be emailed to:

NAME: Project Coordinator  
Bahamas National Geographic Information Systems (BNGIS) Centre  
ADDRESS: East Bay Street P. O. Box 55 – 5194 Nassau, Bahamas  
TELEPHONE: 1 (242) 604 2026  
EMAIL: [PROJECTCOORDBNGIS@BAHAMAS.GOV.BS](mailto:PROJECTCOORDBNGIS@BAHAMAS.GOV.BS)  
SUBJECT: GCE-DRM Component 3 and 4 QUESTIONS

The Project Coordinator will serve, throughout the life of the Contract, unless the Firm is otherwise specifically advised in writing by BNGIS, as the **Client Representative** for all issues arising out of and relating to the Contract.

All communications - Includes oral, written and graphic communications and reports shall be in the English Language.

## 3. DUE DATES

- **Issuance of RFP:** RFP (This document) will be published on the Government of The Bahamas Website and in local newspapers in order to allow interested parties to bid on this procurement opportunity, **9<sup>th</sup> January 2020**.
- **Letter of Transmittal.** The Deadline for submission of letter of Transmittal (Notice of intent to submit proposal on or before, **17<sup>th</sup> January 2020**.
- **Questions:** The deadline for the submission of questions by Firms is **3:00 p.m.** (Eastern Standard Time) on or before, **22<sup>th</sup> January 2020**. All questions must be submitted in writing, surface mail or by e-mail at [GCE\\_DRMAdministration@bahamas.gov.bs](mailto:GCE_DRMAdministration@bahamas.gov.bs) to Project coordinator at the contact information provided above.
- **Response to Questions:** Written responses to all questions submitted, along with a copy of the originating question(s), will be provided to all short-listed Firms by email and will become official addenda to the RFP, no later than **28<sup>th</sup> January 2020**.
- **Proposals:** All proposals are due by **3:00 p.m.** (Eastern Standard Time) on or before **7 February 2020**. Any proposal received at the designated location after the required time and date specified for receipt shall be considered late and non-responsive. Any late proposals will not be evaluated for award and will be returned unopened to the respondent.
- **Proof of Concept/Demonstration of Information System:** Short listed Firms advancing from Stage 1 will be requested to advance to Stage 2 and provide an online or in country (Nassau, Bahamas) demonstration of the System/or similar system to meet DRM Information System requirements. No negotiation of proposed contract provisions will be allowed to take place.

All Shortlisted Firms will be provided with a copy of Stage 2 Proof of Concept/ Demonstration Terms of Reference document prepared by the BNGIS Centre in consultation with the Evaluation Committee. Generally, Firms will be expected to install and setup their solution for the DRMIS online or at facilities located in Nassau, The Bahamas. For Firms performing the demonstration in Nassau, Firms will be contacted to confirm the date they should begin installing their solution. The Firms will be informed of any change in dates. Firm's demonstrations are not to exceed **4 hours** and will be expected to answer questions posed by the Evaluation Committee and any other relevant agency as required. The Firm must complete the proof of proposal and answer questions. As the Client team runs through the testing of the Vendor's product, the Firm will also be required to indicate any features and functionality that the Firm has indicated its solution contains but that cannot be demonstrated in the demonstration/test environment.

#### **4. SUBMISSION OF PROPOSALS**

Proposals must include/be accompanied by the Proposal Form (see Annex 2 to the RFP). Firms are required to deliver nine **(9) sealed copies** of their submissions and a digital copy in Word and PDF on USB drive.

##### **Airmail:**

Chairman  
The Tenders Board  
c/o Financial Secretary  
Ministry of Finance  
Cecil Wallace Whitfield Centre,  
West Bay Street  
P. O. Box N - 3017  
Nassau, N.P., Bahamas  
Téléphone :(242) 327-1530

**Labeled:** RFP – GEOMATICS CAPACITY ENHANCEMENT FOR DISASTER RISK MANAGEMENT PROJECT COMPONENTS 3 and 4 – **FLOOD, STORM SURGE MODELING, MAPPING AND DISASTER RISK MANAGEMENT INFORMATION SYSTEM (DRMIS)**

##### **Surface Delivery:**

Chairman  
The Tenders Board  
c/o Financial Secretary  
Ministry of Finance  
3<sup>rd</sup> Floor Reception Desk  
Cecil Wallace Whitfield Centre,  
Cable Beach, West Bay Street  
Nassau, N.P., Bahamas

**Labeled:** RFP – GEOMATICS CAPACITY ENHANCEMENT FOR DISASTER RISK MANAGEMENT PROJECT COMPONENTS 3 and 4 – **FLOOD, STORM SURGE**



## MODELING, MAPPING AND DISASTER RISK MANAGEMENT INFORMATION SYSTEM (DRMIS)

**Note:** Please ensure, if a third party carrier (Federal Express, UPS, DHL, EMS, USPS, etc.) is used, that they are properly instructed to deliver proposals only to the reception desk on the third floor of the Ministry of Finance, Cecil Wallace Whitfield Centre, West Bay Street, Nassau, N.P., Bahamas.

Proposals submitted must be received in a sealed envelope/container plainly labeled “GCEDRM PROJECT COMPONENTS 3 and 4 – FLOOD, STORM SURGE MODELING, MAPPING AND DRMIS”. Proposals **will not** be accepted by email or facsimile.

For more details on Proposals see Section 16, Guidelines for Proposal Preparation.

### 5. AMENDMENTS AND ADDENDA

At any time prior to the close of the RFP, the Government may alter, amend, delete or add to, in whole or in part, any terms or provisions of this RFP. The Government may modify, amend or revise any provision of this RFP or issue an addendum at any time. The Government will publish any such modification or amendment, revision or addenda in writing to all Firms by hard copy or e-mail. Amendments or addenda generally will not impact the deadline unless otherwise specifically and clearly indicated. Firms are asked to make certain that the prescribed deadlines are respected.

### 6. PROCUREMENT STRATEGY – STAGE 1 AND 2

The procurement for **Stage 1** the RFP requires all responding Firms to submit proposals based on the requirements of this RFP. An evaluation will be undertaken of the responses received and short-listed Firms will be invited to advance to **Stage 2**: Proof of Concept/Demonstration of DRM Information System Solution. Following Stage 2 an evaluation will be conducted, and a Firm selected for contract negotiation.

### 7. FIRM RESPONSIBILITY

It is the Firm’s responsibility to ensure its complete comprehension of the requirements and the instructions requested by the Government. To clarify any discrepancies, it is required that Firms submit a written inquiry as specified (see Section 3 for questions by Firms).

### 8. GENERAL REQUIREMENTS AND RESPONSIBILITIES

#### 8.1 WORKING APPROACH AND RESPONSIBILITIES

The successful and timely implementation of the GCEDRM Component 3 and 4 will be characterized by the co-operative approach between key parties. It will require the close collaboration and involvement of:

- Permanent Secretary, Ministry of the Environment & Housing; (as the representative of the Government),

- Director, and the Project Coordinator, BNGIS (as the Client and Implementing Agency for the Project),
- Project Steering Committee (as representatives of the Geospatial Advisory Council);
- Other stakeholders concerned with Disaster Risk Management, in particular agencies providing support to NEMA's Emergency Support Function ESF 5 "Planning and Information; and
- The Firm and its consultants and/or sub-contractors.

A co-operative approach is essential to successful project implementation, delivery and management, including the definition of roles and responsibilities, as well as agreement on a communications protocol and on measures for dispute resolution.

The terms of the Contract between the selected Firm and the Government ("the Contract") will more fully define the nature of the relationship, obligations and responsibilities of the Government and of the Firm, incorporating the above requirements and stipulations amongst others, and will be fully negotiated between The Government and the successful Firm following review of the proposals received. It is the responsibility of, and incumbent upon, the successful Firm to notify the Client of any and all errors and omissions that, in the Firm's opinion, require clarification or correction.

In the course of discharging its responsibilities under the Contract, the selected Firm shall provide supporting specifications and reports to the Client or his delegate for consideration. Additional reviews will be arranged by the Client to seek the input from the Project Steering Committee and other stakeholders or specialists as appropriate. The Client or his delegate(s) reserves the right to review all deliverables and to reject Work found unsatisfactory. All deliverables can be considered final only when acceptance is made in writing by the Permanent Secretary or his/her delegate. Such notice of acceptance will not relieve the Firm of responsibility for correctness of design, details, specifications, professional responsibilities or compliance with the cost estimates or schedule.

As required by the Contract, the selected Firm will prepare a detailed cost estimate and proposed schedule for the acquisition of products. Once the Client or his designate has indicated acceptance in writing of the cost estimate and schedule documents, the Firm shall proceed with the Work employing such qualified experts as may be required to meet the scope, work schedule, cash flow schedule, implementation cost and quality objectives.

The selected Firm, where required by Contract, will provide a full range of required expertise to perform services to the Client. Such services will include (but may not be limited to):

- Project Management - The primary function in providing such services is to plan, establish and maintain a work environment that effectively supports the Project's goals and service objectives of the RFP and to produce Project reports (initial, midterm and final reports) as required.
- Communications - Includes oral, written and graphic communications and reports, the development of associated work practices and procedures, and
- The establishment of a complaints tracking system identifying the originator of the complaint, the time and date of the complaint, the nature of the complaint, the response to the complaint, and the measures taken to resolve the complaint.

## **9. FINANCIAL RESPONSE**

The Government requires that Firms submit a financial response which should include a description of the financial arrangements proposed by the Firm and the supporting documentation described. While the format of the description of the financial arrangements is at the discretion of the respondents, it is expected that the matters set out below will be addressed. Any additional information which is considered relevant should be included. The financial response will include at least the following supporting documentation:

- A cost estimate is required for the Project. The financial information should detail the cost composition of each relevant element as follows (see ToTR of this RFP, Section 17.4.1):
  - Overall total cost estimate for the project.
  - Total cost estimate for professional services (supervision and support staff).
  - Cost estimate per sub component and reporting requirements (see ToTR Section 17.4.1 )
  - Total cost estimate for travel
  - Total cost estimate for Software solution and licenses
  - Total cost for annual maintenance fees
  - Total Cost estimate for any hardware and specialized equipment
  - and Other (to be identified).

Firms are to note that costs to carry out the scope of work must include Value Added Tax (VAT) at 12%.

- A financial certificate is required from each respondent. It should include the following:
  - Financial statements are required for each firm having a significant interest in the Firm's proposal.
  - Financial and credit capacity.
  - Industry standing and current projects (including roles, budgets, and timelines).
  - Evidence of sufficient capacity to complete Component 3 and 4 of the project.

### **9.1 OWNERSHIP AND USE OF DOCUMENTS**

All data, System Solutions and any other deliverables and reports procured under this contract or other materials used from other components of the Project i.e. Aerial Photography, Ortho-Imagery, Topographic Mapping, Digital Terrain Model products etc., and any other deliverables

and reports procured under this contract becomes the sole property of the Government all rights reserved. **The Firm has no copyrights.** New and original specifications and other documents, materials, manuals or other copyrightable matter prepared or furnished by the Firm are instruments of service and are to be the property of The Bahamas National Geographic Information Systems (BNGIS) Centre in Right of The Government of The Bahamas whether or not the GCE – DRM Project Components 3 and 4 for which they are made is commenced or completed. Such specifications, materials and other documents furnished by the Firm can be used by The Government of The Bahamas on other projects or for additions to this Project.

Submission or distribution of documents to meet official regulatory requirements or for other purposes in connection with the project is not to be construed as publication in derogation of copyrights or other reserved rights.

New and original technical documentation (including reports, maps etc.) shall contain the following copyright notice:

**© The Bahamas National Geographic Information Systems (BNGIS) Centre  
Government of The Bahamas (year)**

Where the application of Bahamian, United States or other applicable law alters the contractual condition described above so as to vest copyright with the Firm, any such copyright shall be subject to a perpetual, royalty free license to The Government of The Bahamas to use such documents and any material subject to said copyright in any manner that it may reasonably choose except for commercial exploitation to third parties. The Firm shall ensure that this complete provision is captured in any subcontracts that it may enter for which copyrightable material is furnished as part of the obligations or responsibilities under the Contract.

## **9.2 GENERAL OBLIGATIONS OF THE FIRM**

The Firm agrees to produce all Work necessary for the completion of the project. Such Work shall be performed by qualified Project Manager, System development specialists, GIS Specialists, programmers and any other relevant professional staff selected, engaged, and paid by the Firm as required. The professional obligations of such persons shall be undertaken and performed in the interest of the Government of The Commonwealth of The Bahamas.

The Firm shall be responsible to The Government of The Commonwealth of The Bahamas for acts and omissions of the Firm's employees and parties in privity of contract with the Firm to perform a portion of or the entire of the Work, including their agents and employees. The Firm shall be responsible to The Government of The Bahamas for acts and omissions of its subcontractors, suppliers, agents, and employees of all entities and organizations which may be in privity of contract with the Firm as regards this project.

### **9.3 CORRECTION OF WORK**

The Firm shall promptly correct Work that is rejected by the Client or authorized delegate(s) or Work that is otherwise known by the Firm to be defective or failing to conform to the technical requirements stipulated in the RFP, and shall correct Work found to be defective or non-conforming as may be provided in the Contract documents.

### **9.4 NEGOTIATIONS**

The Government reserves the right to enter into discussions or negotiate with any Firm as it deems essential, or with another Firm or Firms concurrently. Under no circumstances will the Government be required to enter into discussions or negotiations on contract terms and conditions or to offer any modified terms to any particular Firm. The Government's decision as to which Firm it wishes to enter into contract with shall be based on the Government's determination of overall best value to the Government and shall be final and binding on all parties. The Government shall incur no liability to any Firm as a result of these discussions, negotiations or modifications.

### **9.5 TAXES**

For the purpose of establishing the amount of taxes that are to be included in any project cost estimating, Firms shall include any amount payable for Bahamian and other taxes (including Value Added Tax @ 12%) and duties in their estimates. On award of the Contract and during the term of the Contract as required, the successful Firm shall pay all applicable sales, consumer, user, and similar taxes. The Firm will also assume any responsibility for any changes in tax rates that may occur during the term of the Contract.

### **9.6 INSURANCE**

The selected Firm will be required upon the grant and execution of the Contract to procure and hold and produce evidence of insurance for general liability (including bodily injury and property damage, loss or damage to any project product) as required by Bahamian law and practice as they relate to the full range of the Firm's responsibilities and obligations under the Contract. In all cases of insurance, the Firm shall ensure that any and all sub-contractors shall carry and maintain insurance appropriate to the role, function and duties for which they have been engaged.

### **9.7 INDEMNIFICATION**

To the fullest extent permitted by law, the Firm shall indemnify and hold harmless the Government of The Bahamas and the Government's consultants and separate contractors, any of their subcontractors, sub-subcontractors, agents, and employees from and against claims, damages, losses and expenses, including but not limited to legal fees, arising out of or resulting from performance of the Work or Services as they relate to the full range of the Firm's responsibilities and obligations under the Contract. These indemnification obligations shall include claims, damages, losses or expenses (1) that are attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting there from, and (2) to the extent such claims,

damages, losses or expenses are caused in whole or in part by negligent acts or omissions of the Firm, the Firm's sub-contractors, anyone directly or indirectly employed by either or anyone for whose acts either may be liable, regardless of whether or not they are caused in part by a party indemnified hereunder.

## **9.8 TRAVEL EXPENSES**

The Firm, in accordance with the Guidelines for Proposal Preparation, Proposal Outline, Item #13 of the RFP, shall include, among other things, travel expenses associated with the discharge of its responsibilities to undertake the Work in its cost proposal. The Firm, with all other sub-contractors and suppliers, is responsible for all other travel costs associated with the proposal including, but not limited to costs associated with attending and participating in stage 2 Proof of Concept/Demonstration of DRM Information System Solution.

## **9.9 PROJECT MEETINGS**

### **9.9.1 Language**

All meetings will be conducted in the English language. All minutes (if any) to meetings shall be issued in English.

### **9.9.2 POST AWARD AND EXECUTION OF THE CONTRACT:**

Initial Project Briefing and Partnering Session: Following award and execution of the contract, the Firm and such sub-contractors as the Firm deems necessary shall meet with the Client and the Client's Project Team and Steering Committee. The purpose of this meeting is to establish a firm and mutual understanding of the project objectives and to provide a sound foundation for the working relationship that will govern the Client-Firm relationship.

Other Meetings as Determined by the Client: The Client reserves the right to call for a meeting for a specific purpose at any time with 48 hours notice to the Firm. Appropriate Firm personnel, or those in privity of contract with the Firm shall attend such meetings as requested by the Client and/or as necessary. The Firm shall notify appropriate subcontractors and/or other appropriate personnel for attendance. The Client will conduct the meeting and record the minutes.

Other Meetings as Determined by the Firm: The Firm has an equal right to call for a meeting for a specific purpose at any time with 48 hours notice to the Client. The Firm will conduct the meeting and record the minutes and make minutes available to the Project Coordinator and Steering Committee.

## **9.10 SUCCESSORS AND ASSIGNS**

The Firm shall not assign or transfer an interest in the Contract or portions of the Project's scope of work without the prior written consent of the Client.

## **9.11 OTHER GENERAL TERMS AND CONDITIONS**

- The Government reserves the right to accept or reject any or all bids.
- All proposals will be considered final. No additions, deletions, corrections or adjustments will be accepted after the time stated for submission has expired.
- The Government shall not purchase goods or services from any business owing delinquent taxes to the Government of The Bahamas.
- Proposals received after the designated time of receipt will be considered as “NO BID” and “VOID”. The Government’s time stamp for proposals received will be the official indicator of timely, or untimely, receipt. It is the Firm’s responsibility to allow sufficient time for delivery and submission to the designated place.
- Firms responding to this proposal will be required to demonstrate, in their responses, quality control and management in their installation, repair and service procedures
- Any equipment/solution is to be fully configured to the user location and where required, connected to the Cloud Environment leveraging the existing BSDI Portal and its service provider’s infrastructure (network). The equipment delivered must have proper Vendor identification (stickers) attached including the Vendor name and phone contact. Details of all equipment including manufacturer, model number, and serial number must be delivered and documented for future reference

## **10. PROJECT MANAGEMENT AND ADMINISTRATION**

### **10.1 ORGANIZATION**

#### **10.1.1 The Client**

The Client is the Government of The Commonwealth of The Bahamas, as represented by The Bahamas National Geographic Information Systems (BNGIS) Centre (Executing Agency for the GCE-DRM Project) which shall serve as and discharge the duties and responsibilities of the Client Representative under the contract.

The BNGIS Centre shall assign a Project Coordinator. The assigned Project Coordinator will have a holistic understanding of the application of Geographic Information Systems and Spatial Data Infrastructure to support disaster risk management, leveraging the existing BSDI System.

The Director of BNGIS will report to the Permanent Secretary of the Ministry of the Environment and Housing. A Project Steering Committee shall be established to provide support and guidance as well as to address any issues which may arise. The client shall also make available office space as required to conduct the scope of work associated with the Project and provide meeting space for Project Launch and presentations/workshop and training etc.

#### **10.1.2 Additional inputs from the Client**

The following services and facilities will be provided by the Client to the awarded Firm:

- (a) Office Accommodation: BNGIS Centre will provide desk space for the Firm’s personnel and in-office use of computers, printers, plotters, scanner if and when required;
- (b) Access: BNGISC will arrange for access by the Firm to the BSDI Portal and establish and

monitor communications with key Government officials including the Department of Transformation and Digitization (DTaD) responsible for the Government's Cloud environment;

- (c) Access: BNGIS Centre will arrange for access by the Firm to key Government officials and other stakeholder agencies;
- (d) Data: BNGIS Centre will provide access to available geospatial data and existing legislation, policies, etc. pertaining to activities/tasks associated with Component 3 & 4;
- (e) Training Facility: BNGIS Centre will make its training facility including computers, projectors available for the conduct of training sessions and workshops;
- (f) Cabinet Briefing: The Ministry of the Environment will make the necessary arrangements to facilitate a Project Cabinet Briefing;
- (g) Interface with Governmental Agencies and other groups: The BNGIS Centre's designate personnel will accompany the Firm on all local and Family Island field visits, meetings, etc., to the extent required.

### 10.1.3 The Firm

The Firm's team is expected to consist of the Firm and such other consultants, sub-consultants as the Firm may consider necessary and appropriate to complete the Work. The Firm shall work from the BNGIS Centre's Office during normal work hours (Monday to Friday, 9.00am to 5.00pm daily) and shall report directly to the Project Coordinator, BNGIS Centre. All deliverables/products/reports etc. generated by this contract are to be directly turned over to the Director, BNGIS Centre through the Project Coordinator (See Annex 5 – GCE-DRM Project Component 3 and 4 Project Organizational Structure). At the conclusion of the Project all spatial data topographic mapping, imagery, and any other GIS data must be deleted from any devices belonging to or used by the firm or its agents (See Annex 9 & 10). The Firm will also be responsible for (among other things) the preparation and cost for the publication all maps/map atlases as stipulated in this RFP.

At the time a proposal is submitted, all key members of the Firm's team must be identified along with their experience and qualifications. In general the consultancy must be completed by professionals with university degrees and experience in Project Management (15 years experience), Disaster Risk Management, Spatial Data Infrastructure, geospatial information management, GIS, Policy/Legislation, Training, Programming, Surge modeling, GPS/GNSS for data collection, Topographic Mapping, GIS/Geomatics, Cartography or Geography, knowledge in crowd sourcing utilizing multiple devices (including mobile devices/cellular phones and other smart devices etc.). Professionals with at least 15 years work experience in System Solution for disaster risk management is required. Once the team members have been identified in the proposal submission, substitutions of team members will only be allowed with the written permission of the Client.

## 10.2 PROJECT MANAGEMENT REPORTS

The Firm will be required to provide the Client Representative with a range of reports (including **Project Work plan with milestones/benchmark indicators**), from discipline specialists,



specifically including cost control and schedule control. Cost and time reports shall be fully coordinated. In addition, the Firm will be required to produce Inception Report, monthly progress reports, draft final report and final Report, Service Level Agreement between the Client and Department of Information Technology, sustainability report, and a Return on Investment (ROI) Report. All reports will be reviewed by the Client, and Government's IT Specialists and other relevant stakeholders.

### **10.2.1 Cost Control / Financial Reporting**

Delivering this project within budget is a high priority. It is required that a fully qualified Cost Specialist, with a demonstrated record of successful cost management, be retained by and included in the Firm's team.

The Cost Specialist shall provide an interactive and continuous tracking and reporting service from commencement of this project through to completion, including the preparation of complete estimates for all Firm services, including applicable allowances (if any and they must be specified and identified) for escalation, inflation and contingency costs. The Cost Specialist shall be prepared to present and defend the estimates directly to the Client Representative or his designate(s).

Estimates are to be prepared in detail and summarized consistent with the Firm's project Work breakdown structure and must be supported by all backup work sheets clearly detailing the process used in preparing the estimates. The Cost Specialist shall provide a complete cost estimate as an integral part of the Firm's proposal submission. By the 15<sup>th</sup> calendar day of each month, the Cost Specialist shall also provide a Monthly Report, using earned value analysis, with status dated on the last working day of the previous month. A typical monthly report will contain:

- Project Estimate Summary (Planned Value, Earned Value, Actual Cost, Estimate to Completion, Estimate at Completion, Budget at Completion)
- Estimate Back-Up Supporting Detail (as appropriate)
- Narrative:
  - outline description of estimate basis
  - description of information obtained and used in the estimate
  - listing of items/issues carrying significant risk
  - cost performance index
- Identification of cost variances and remarks concerning action to be taken

The Cost Specialist will also provide quarterly Exception Reports that outlines early warnings of all changes that affect or potentially affect the estimated implementation costs of the project. The exception report will include sufficient description and cost detail to clearly identify:

1. Scope change;
2. Cost overruns and under runs;
3. Options enabling a return to the Original cost estimate.

The cost reports/estimates shall be provided to the Client in MS Excel and Word, or an appropriate combination of the two. The Cost Specialist shall submit the cost reports/estimates in three (3) hard copies and one soft copy of all reports.

The Client Representative or his designate(s) will review all aspects of the Cost Specialist's work on a continuing basis to determine the validity and completeness of the information provided. In the event the Client Representative may identify areas of concern including errors and omissions as well as areas of inadequate detail or areas that require further explanation, the Cost Specialist shall re-examine the estimates provided and make such revisions as may be subsequently agreed to be necessary and/or provide ample acceptable evidence that such corrections or amendments are unnecessary.

### **10.2.2 Schedule Control / Progress Reporting**

Delivering this project on time is a high priority. It is required that the Firm employ a fully qualified and well experienced time planning, time control and scheduling team, referred to herein as the Time Specialist, with a demonstrated record of successful time management on similar projects. The Time Specialist will be conversant with all aspects of scheduling during all phases of this project, including the use of Work Breakdown Structures, Critical Path Method, Schedule Risk Analysis, and earned value analysis techniques.

The project baseline schedule shall be prepared to be fully consistent with the Firm's project work breakdown structure and baseline cost estimate. The project schedule must be supported by all backup work sheets clearly detailing the process used in preparing the estimates. The Time Specialist will provide the complete baseline schedule as an integral part of the Firm's proposal submission. All schedule reports, including the original baseline and monthly reports, shall be provided in one (1) hard copy and one soft copy in Microsoft Word Format and PDF (and any other format as required) .

All schedules shall include and maintain reasoned time risk allowances as are deemed necessary considering the current information available. The Time Specialist shall provide a satisfactory explanation of the level and/or amount of all such items included within any schedule.

By the 15<sup>th</sup> calendar day of each month, the Time Specialist shall also prepare a Monthly Progress Report with status dated on the last working day of the previous month. The report shall consist of:

- Progress of each activity to the date of the report;
- Projections of progress and completion;
- The actual start and finish dates of all activities being monitored compared to the project baseline schedule;
- Activities due to start, to be underway, or finish within two months from the report date
- Identification of variances and remarks concerning action to be taken (schedule variances);

- Detail of the work performed to date;
- Schedule performance index;
- Identify outstanding issues and concerns;
- Identify options for dealing with any serious planning and scheduling issues and their impact on the project's critical path.

The Firm's Time Specialist shall also prepare quarterly Time Exception Reports which shall consist of the following:

- **Scope Change:** Identify the nature, reason and total time impact of all identified and potential project scope changes affecting the project's baseline schedule.
- **Time Overruns and Underruns:** Identify the reason for the total time impact of all identified and potential time variations
- **Options Enabling a Return to the Baseline Schedule:** As applicable, identify the nature and potential time effects of all identified options proposed to return the project to the approved schedule.

#### **11. VALUE ENGINEERING PROPOSALS**

The Client invites the Firm to submit ideas and proposals which may reduce the overall cost of the project as a result of revised methods, design or products, and still meet the quality and functional requirements of the Client. The Firm should present its cost saving ideas and support them with sufficient detail to permit quick review and assessment by the Client. If a proposal or idea is accepted as a value-engineering proposal, the resulting savings will be shared on an equal basis between the Client and the Firm. Ideas or proposals which are not adequately supported will not be considered. The Client holds no obligations for considerations brought forward by the Firm and may, at its sole discretion, refuse to consider any or all ideas or proposals.

#### **12. GOVERNMENT SUPPLIED MATERIAL AND EQUIPMENT:**

The Firm is liable to the Client for any loss or damage to material, anomalies with imagery acquisition that is supplied or placed in the care, custody and/or control of the Firm by the Client for use in connection with the Work. Whether or not that loss or damage is attributable to causes beyond the Firm's control, excepting loss or damage that results from and is directly attributable to reasonable wear and tear.

#### **13. STRUCTURE OF PAYMENTS:**

The Client shall make payments to the Firm in accordance with terms that are negotiated and finalized between them. Generally, the payments may be comprised of:

- A mobilization payment 10%;
- Monthly disbursements: Monthly progressive invoicing up to 50% of Contract value;
- Substantial completion 15%
- Final completion 10%
- Retention of 15%

### **13.1 Mobilization:**

The Client will pay to the Firm a sum not to exceed ten per cent (10%) of the total contract value upon contract award to facilitate the mobilization of the Firm's resources in The Bahamas in order to commence the scope of work to be undertaken.

#### **13.1.2 Monthly Progress:**

Following mobilization and upon on-site project initiation through to substantial completion, the Client will pay to the Firm a sum not to exceed fifty per cent (50%) of the total contract value payable in equal monthly installments upon receipt, validation and acceptance by the Client of an invoice together with the Firm's monthly statement of certification attesting that progress has been achieved and Work has been accomplished in accordance with the terms of the Contract. Should the Work not have been completed as per the Contract terms and conditions, the Client may approve payment of such lesser amount as the Client may deem appropriate.

#### **13.1.3 Substantial Completion:**

Upon the granting of the Certificate of Substantial Completion by the Client to the Firm, the Client shall pay to the Firm an amount equal to fifteen per cent (15%) of the total contract value. Substantial completion will be the provision of final QA/QC review and correction of any anomalies supported by a statement of certification attesting that progress has been achieved and Work has been accomplished in accordance with the terms of the Contract.

#### **13.1.4 Final Completion:**

Subject to the following conditions, upon the granting of the Certificate of Final Completion by the Client to the Firm, the Client shall pay to the Firm an amount equal to ten percent (10 %) of the total contract value. The Client shall not release the final payment until the granting of a Certificate of Final Completion in accordance with the Contract and the Firm submits to the Client:

- (1) a statutory declaration that payrolls, bills for materials and equipment, and other indebtedness, connected with the Work for which the Client could conceivably be liable, have been paid or otherwise satisfied;
- (2) if required by the Client, other data or documents establishing payment or satisfaction of obligation, such as receipts, releases and waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the Client;
- (3) a statement of certification attesting that progress has been achieved and Work has been accomplished in accordance with the terms of the Contract; and
- (4) a declaration of destruction form - formal notice of deletion of all files including imagery, topographic mapping, digital terrain models (DTM) for all project Islands etc.

Note: If the Firm refuses to furnish such statutory declaration or other documents as may be required by the Client, the Firm may instead furnish a Letter of Credit in a form satisfactory to the Client to indemnify the Client against the Firm's obligations relating to the Work. Submission of said statutory declaration or Letter of Credit does not absolve the Firm of its responsibility to reimburse the Client for monies the Client may be compelled to pay to discharge any such obligations related to the Work, including all costs and reasonable fees.

#### **13.1.5 Retention:**

An amount of 15% shall be retained by the Client to allow for final review and Project signoff.

#### **13.2 Payments: General**

Notwithstanding any delay by the Client in making any payment when due, such delay shall not be a breach of the terms of the Contract by the Client.

The Firm is responsible for all payments owing to any sub-contractor or supplier it may employ on account of such sub-contractor's work and shall pay to each sub-contractor the amount to which said sub-contractor is entitled in accordance with the terms of the Firm's contract with such sub-contractor. The Firm shall, by appropriate agreement with each sub-contractor, require each sub-contractor to make payments to any sub-subcontractors employed and to their respective suppliers in similar manner.

The Client shall have no obligation to pay or to be responsible in any way for payment to a sub-contractor or supplier to the Firm or to a sub-contractor's or supplier's sub-subcontractors and/or sub-suppliers.

#### **13.2.1 Statement of Certification**

The Firm shall provide a Statement of Certification to the Client indicating that the Work has progressed to the point indicated in the Firm's project schedule and that the quality of the Work covered by the Statement of Certification is in accordance with the terms of the contract. These Statements of Certification shall accompany each monthly invoice for payment provided by the Firm to the Client as well as the invoices for Substantial Completion and for Final Completion.

In the Statements of Certification provided by the Firm to the Client, the Firm shall warrant and attest: (1) that the Work, materials and equipment covered by previous Statements of Certification are free and clear of liens, claims, security interests or encumbrances; and (2) that no Work, materials or equipment covered by a Statement of Certification will have been acquired by the Firm, or by any of its sub-contractors, that is subject to an agreement under which an interest therein or an encumbrance therein is retained by the supplier or otherwise imposed by the Firm or such other person.

## **14. COMPLETION**

### **14.1 Inspection and Examination of Work**

The Firm is to note that the Client along with relevant stakeholder agencies will examine all Work produced by Component 3 and 4. As such if, at any time after the commencement of the Work but prior to the expiry of the warranty or guarantee period, the Client Representative or his designate has reason to believe that the Work or any part thereof has not been performed in accordance with the Contract, the Client Representative will advance these matters for correction by the Firm.

If, at any time before the Client has issued a Certificate of Final Completion, any question arises between the parties about whether anything has been done as required by the Contract or about what the Firm is required by the Contract to do, the question shall be decided by the Client Representative or his designate(s) whose decision shall be final, binding on all parties and conclusive, notwithstanding any provision relating to Dispute Resolution to the contrary.

### **14.2 Deficiency List**

Without restricting any warranty or guarantee implied or imposed by law or elsewhere contained in the Contract, the Firm shall, at his own expense rectify and make good any defect or default that appears in the Work or comes to the attention of the Client Representative or his designate(s) within a reasonable time frame of the issuance by the Client Representative or his designate(s) of the Certificate of Final Completion.

### **14.3 Certificate of Substantial Completion**

Once the Client Representative or his designate(s) is satisfied that the Work is substantially complete, he shall issue a Certificate of Substantial Completion to the Firm. The Certificate of Substantial Completion shall describe the parts of the Work that have not been completed by the Firm to the satisfaction of the Client Representative or his designate(s) and will indicate what must be done by the Firm to remedy and correct the deficiencies noted before a Certificate of Final Completion can be issued.

### **14.4 Certificate of Final Completion**

On the date that the Work has been completed and the Firm has fully complied with the relevant terms of the Contract, both to the satisfaction of the Client Representative, the Client Representative or his designate shall issue a Certificate of Final Completion if, in the sole opinion of the Client Representative or his designate, the Project deliverables are completed in accordance with the terms of the Contract. The Certificate of Final Completion shall describe any deficiencies or defaults noted in the Work that have not been corrected or completed by the Firm to the satisfaction of the Client Representative or his designate and will indicate what must be done by the Firm to remedy and correct the deficiencies (see 14.2 Deficiency List above).

### **14.5 Default by Firm**

If the Firm is in default of its obligations (including material default) pursuant to the Contract,

the Client may, without prejudice to any of its remedies at law or under the Contract, make good such deficiencies and take possession of all materials, as well as any plans and specifications (acquired utilizing project funds) and finish the Work by whatever means the Client may deem expedient.

#### **14.6 Liquidated Damages**

The Work shall be deemed to be completed on the date that the Certificate of Final Completion is issued, excepting those items identified on the Punch / Deficiency List.

If the Firm does not complete the Work by the day fixed for its completion by the Contract but completes it thereafter, the Client may execute such penalty provisions as may exist in the Contract including, but not necessarily limited to, an amount equal to the aggregate of such costs as may reasonably be determined by the Client as a result of the Work not being completed by the date fixed for its completion, including the correction and making good of identified deficiencies.

The payment or deduction of such damages shall not relieve the Firm from his obligation to complete the Work, or from any other of his obligations and liabilities under the Contract.

#### **15. DISPUTE RESOLUTION**

By informal discussion and good faith negotiation, the Firm shall make all reasonable efforts to resolve any dispute, controversy or claim arising out of or in any way connected with the Contract. In the event that the Client or the Firm considers that the reasonable efforts of the parties have failed to reach a settlement of any such dispute, controversy or claim then any such unsettled dispute, controversy or claim (a "Dispute") shall be subject to resolution through arbitration in accordance with the terms and procedures set out in the Contract.

#### **16. GUIDELINES FOR PROPOSAL PREPARATION - PRE-SUBMISSION OF PROPOSALS**

##### **16.1. Transmittal letter – Notice of Confirmation of Intent to Submit**

All Firms who intend to submit a Proposal must return the Transmittal letter – Notice of Confirmation of Intent to Submit form to the Client Representative at the contact address noted on page 2 no later than **3:00 PM** on or before 6<sup>th</sup> January 2020. The Confirmation of Intent to Submit form is attached to the RFP Package as **Annex 1**. It may be sent by e-mail (scanned or .pdf format).

##### **16.2 Solicitation**

For the purposes of communication, the Client Representative will only accept questions directly relating to the project and as required for clarification. There will be no solicitation to any Minister or Ministerial or Departmental staff concerning this project. Failure to comply with this requirement may result in the Firm's submission being disqualified. Proposals shall be deemed to be under consideration immediately after they are opened until such time the BNGISC or the Tenders Board makes an official notification of award or rejection to the respondents. While the Proposals are under consideration, the respondents and/or their

representatives or other interested parties shall refrain from contacting by any means, the Tender's Board, the BNGIS and/ or their employees, advisors and/or representatives on matters related to the Proposals under consideration.

### **16.3 Questions and Addenda**

All enquiries concerning this project are to be referred to the Client Representative. All questions and requests for clarification must be submitted in writing from the prime contact of the Firm. Answers and corresponding questions will only be sent by the Client to the prime contact of the Firms as formal Addenda to the RFP. Firms will be responsible for their own internal distribution and/or communication.

## **16.4 PROPOSAL REQUIREMENTS**

### **16.4.1 General Requirements**

All data and documents shall be prepared and submitted by the Firm, along with the **Proposal Form** (see Annex 2), by the due date and time specified in the RFP. Firms should review all documents in the RFP for all submission requirements. Failure to provide the required information specified in this or other sections of the RFP may cause the proposal to be rejected by the Client.

One (1) copy of a **Transmittal Letter (confirmation of intent to Submit a Proposal)**, and one (1) original completed copy of the Proposal Form, all with original signatures, shall be separately bound (binding method at Firm's option) and included in the submission in a separate item.

The transmittal letter and proposal form must identify the legal name of the Firm, its business address, and the name, title, address, telephone, facsimile numbers, website address and email of the contact person in the Firm's team with whom the Client is to establish communications. They must also identify and certify the person, who may or may not be the named contact, who has the legal right and authority to bind the Firm to the proposal and to any contractual arrangement which may follow as a result of the proposal. They must also include a statement of certification warranting that the Firm's proposal will remain valid for a period of not less than ninety (90) days following the due date.

The Firm is required to submit nine (9) hard copies and a soft copy of the proposal in MS Word and PDF. Spreadsheets shall be prepared in MS Excel. All proposals will be submitted in English. Firm's and manufacturer's literature may be included in its original form.

The purpose of the Request for Proposals package is to invite the Firms to make proposals; therefore, Firms are encouraged to make such suggestions and proposals as they feel would benefit the project.

The Government reserves the right to pursue any proposal whether it is the lowest cost or not. Further, the Government reserves the right to reject any or all proposals. The proposed project cost is not the sole criteria in the evaluation process. The Government's decision as to which Firm it wishes to enter into contract with shall be based on the Government's determination of



overall best value to the Government and shall be final and binding on all parties and not subject to challenge.

Firms' proposals must remain open for discussion from the due date up to and including midnight for 90 days following the due date. The Government reserves the right to enter into discussions or negotiate with a Firm as it deems essential, or with another Firm(s) concurrently.

**No award will be issued to a Firm which has any violations or past due debt with the Government of The Bahamas.**

#### **16.4.2 Proposal Content**

The Proposal **must** be organized in accordance with the following outline (and in sequential order):

- Cover Page
- Table of Contents
- Letter of Transmittal
- Proposal Form
- Executive Summary
- Introduction
- Approach and Methodology
- Response to Table of Requirements
- Deliverables
- Risk Management Plan
- Quality Assurance/Quality Control Program
- Schedule of Critical / Milestone Dates
- Cost Estimate
- Financial Information
- Supplemental Team Qualifications and experience
- Value Engineering Proposals (if any)
- Other Information (at Option of Firm)
- Technical Proposal
- Data delivery Requirements
- Appendix: References
- Appendix: Team Members
- Appendix: Other

A brief description of each of these elements follows in the "Proposal Outline" below. The **proposal must respond to and address all requirements** of the RFP as stipulated in the proposal outline in sequential order. In the event of contradictions between the Proposal Outline and other elements of the RFP, Firms are advised to comply with the more inclusive or comprehensive requirement.

#### **16.4.3 Proposal Outline**

<b>1. Cover</b>	As determined by the Firm; however, must be clearly labeled “RFP – GCE-DRM PROJECT Component 3 & 4 – FLOOD, STORM SURGE MODELING and DISASTER RISK MANAGEMENT SYSTEM.
<b>2. Table of Contents</b>	Should indicate Contents of the Proposal by page number.
<b>3. Letter of Transmittal</b>	Provides a notice of confirmation of intent to submit Proposal. See Annex 1.
<b>4. Proposal Form</b>	See Annex 2 to the RFP.
<b>5. Executive Summary</b>	A brief, high-level synopsis of the Firm’s responses to the RFP. Provides a brief overview of the proposal as well as identifying the main features and benefits of the proposed Work.
<b>6. Introduction</b>	Introduces the reader to the Firm and to the approach and structure of the proposal.
<b>7. Approach and Methodology</b>	Describes the manner in which the Firm proposes to do the Work. Based on Understanding of the Client’s objectives; Overall presentation, comprehensiveness and clarity of proposal; Proposed working/organizational structure for the delivery of the Work; Work is structured so as to ensure minimum disruption to the on-going provision of services to BNGISC Clientele.
<b>8. Response to Table of Technical Requirements</b>	The Firm’s response to Component 3 and 4 Table of Technical Requirements (ToTR) contained in the RFP. Each of the functional features in the ToTR should be addressed. The Firm should indicate if the geospatial features are a part of the delivery (by indicating whether in compliance or not). Technical Requirements indicated in the ToTR should clearly indicate how the Firm will address the requirement.
<b>9. Deliverables</b>	The Firm’s statement of what exactly it proposes to provide to the Client as its contract deliverables. Must be clear and unambiguous and based on requirements indicated in this RFP. Sample illustrations of surge modelling and System Solutions must also be included.
<b>10. Risk Management Plan</b>	The Firm’s identification of risks, assessments of probability and impact, overall ranking, anticipated countermeasures, and indication of who on the Firm’s team is responsible for managing each particular risk, Problem solving & dispute resolution culture within the Firm’s organization
<b>11. Quality Assurance/Quality Control (QA/QC) Plan</b>	The Firm’s approach to managing and ensuring a consistent high level of quality through requirements analysis, process improvement, testing procedures, corrective and preventive actions, monitoring, investigating and reporting.
<b>12. Schedule of Critical / Milestone Dates</b>	Provide Gantt chart or table describing tasks, critical milestones, deliverables and timeframes in weeks from the day of commencement of the Project.

<p><b>13. Cost Estimate/Business Proposal</b></p>	<p>Estimates for the acquisition of Component 3 and 4 deliverables must be comprehensive including:</p> <p>Overall total cost estimate for the project components;</p> <ol style="list-style-type: none"> <li>1. Overall cost estimate for the project</li> <li>2. Equipment hire</li> <li>3. Total cost estimate for professional services (supervision and support staff)</li> <li>4. Cost estimate for data collection based on two, two (2) week data collection exercises (in particular collection of existing land use and building use and any other data required for Hazard Mapping) per Family Island (ie. Long Island, Cat Island, Eleuthera, Exuma and Bimini). Note: New Providence is the Project's Project Home Office Site.</li> <li>5. Cost estimate for the production of Hazard Map Atlases for all Project Islands (see Section 17.5.3).</li> <li>6. Cost Estimate for mentoring staff of BNGIS Centre and select stakeholder agencies <b>throughout</b> the conduct of the assignment and host a workshop on the methodologies used to conduct the services and in the use of the specialized software, equipment, data, maps</li> <li>7. Cost Estimate for Travel including Family Island Field Data collection Trips (including per diem, accommodations and airfare). Firm will be responsible for providing 2 teams of 2 persons (GIS Technicians) to assist with data collection</li> <li>8. DRMIS Solution Cost</li> <li>9. Software maintenance and Technical Support cost</li> <li>10. Communications costs</li> <li>11. Cost estimate for recommended fee charge for revenue generation through the sale of Map Atlases</li> <li>12. Contract documentation production costs</li> <li>13. Any other cost to meet requirements of this RFP.</li> <li>14. Financial Capability</li> <li>15. Other (identify)</li> <li>16. Value Engineering Proposals</li> </ol> <p><b>Cost estimates must also include:</b></p> <ul style="list-style-type: none"> <li>• life-cycle software licensing and any hardware costs as appropriate, as well as travel costs and the provision of training</li> <li>• the provision of system support and maintenance services on an annual basis following system implementation. This estimate may provide for inflationary adjustments and it may be a time and materials estimate.</li> <li>• Indicate similar projects on which the Vendor's team has</li> </ul>
---	--

	worked and when the work was undertaken. Describe similarities and differences as regards this project.
<b>14. Financial Information</b>	Provide the information required in accordance with this RFP. See Section 9 on “Financial Response”.
<b>15. Supplemental Team Qualifications</b>	Indicate similar projects on which the FIRM’s team has worked and when the work was undertaken. Describe similarities and differences as regards this project.
<b>16. Value Engineering Proposals</b>	Identify and describe value added service which could enhance production.
<b>17. Other Information</b>	Provide other information at the Firm’s discretion. This may include general company and/or manufacturers’ material.
<b>18. Technical Proposal</b>	<p><b><u>COMPONENT 3 Flood Storm surge, wind and coastal erosion modelling and Mapping</u></b></p> <ol style="list-style-type: none"> <li>1. Identifying data sources, data gaps and developing and executing a strategy for the compilation/acquisition and field data collection of missing data including existing land/building use data on all project islands for integration in the project: Incorporating socio economic statistical data from multiple governmental agencies (including the Department of Statistics) and other groups;</li> <li>2. Conducting a minimum of 4 agency specific workshops focusing on data custodianship and responsibilities, data collection and dissemination standards, procedures and protocols in alignment with BSDI Program.</li> <li>3. Producing project training program and Conducting Training in GIS and storm surge wind and erosion modelling (and analysis) and software solution(s) and methodologies to convert storm surge, wind and erosion modelling results for research and analysis in a GIS environment;</li> <li>4. Collecting topographic data including existing land and building use for all Project Islands (utilizing GPS/GNSS Technology). Traveling to the Family is expected for data collection and verification; Providing methodology to integrate Drone Imagery in DRMIS and acquiring/capturing drone imagery and as a project activity; Data collection must also incorporate the use of existing GNSS Stations;</li> </ol> <p>Note: Surge modelling must be integrated in the DRMIS</p> <ol style="list-style-type: none"> <li>5. Developing BNGIS Centre First responder GIS operational Plan to support all NEMA’s Emergency Support Functions more specifically ESF 5 “Planning and Information”;</li> <li>6. Recommending Existing GNSS network management requirements and strengthening BNGISC ability to manage same.</li> </ol>

	<ol style="list-style-type: none"> <li>7. Compiling, rectifying and mosaicking existing scanned maps and plans and any other data/information as required; Researching historic records and Creating Local Government Administrative boundaries and creating and recommending Island Settlement Boundaries for Cat Island, Long Island, Bimini and Eleuthera with bounding descriptions;</li> <li>8. Collecting and analyzing relevant rainfall data, reviewing existing rainfall intensity-duration-frequency (IDF) curves for The Bahamas and proximate locations, consulting with relevant authorities, including the Caribbean Institute for Meteorology and Hydrology, and developing rainfall IDF curves for return periods of 2, 5, 10, 25, 50, 100, 150 years and otherwise, as may be directed by GOBH in respect of its requirements for considerations of climate change;</li> <li>9. Considering and factoring available historic precipitation data, catchment surface area, slope, soil conditions, and other existing catchment model data; developing and/or applying relevant hydraulic models to characterize day-to-day and storm-water runoff (1-in-5, 10, 25, 50,100, 150 year events, etc.) research and apply the projections for climate change impacts on The Bahamas;</li> <li>10. Preparing flood-vulnerability maps at minimum 1:5000 scale or of a useful size relative to the catchment, as determined in consultation with BNGISC end-users; showing predicted water levels for 1-in-5, 10, 25, 50, 100, 150 year flood events and current socio-economic development activities, key facilities, and populations at risk in the flood zones identified;</li> <li>11. For the purposes of public communication, preparing flood risk maps showing levels of risk: areas with frequently occurring flood events; areas with less frequently occurring flood events; and areas with very rare flood events or other such indications of risk as may accord with current recommended best practices;</li> <li>12. Critically reviewing past practices, and in consultation with the BNGISC, NEMA and other key stakeholders, identifying and developing, a practical plan for flood/surge emergency response and management for GOBH;</li> <li>13. Developing an appropriate methodology for undertaking the flood, storm surge, wind and coastal erosion modelling and mapping. This should include: mapping guidelines; analysis of the climatology of the study areas i.e.: relevant storm data – location, intensity, wind speed and flooding patterns; topographic and bathymetric meteorological parameters –</li> </ol>
--	--

	<p>pressure, wind speeds; tidal variations; sea level rise; etc.;</p> <ol style="list-style-type: none"> <li>14. Performing flood, storm surge, wind and coastal erosion modelling (modelling Cat 1,2,3,4 and 5 scenarios) and mapping for Project Islands utilizing Surge Modeling and spatial analysis software;</li> <li>15. Documenting technical requirements for expanding slosh modelling to cover the entire Commonwealth of The Bahamas with a view to applying for grant funding;</li> <li>16. Supplementing available open-source storm-surge data for The Bahamas through the conduct of storm surge modelling for the project islands;</li> <li>17. Developing guidelines for the use of the storm surge maps for engineering, physical and economic planning decision-making;</li> <li>18. Integrating all modeling in Component 4;</li> <li>19. Mentoring the designated staff of Governmental agencies throughout the conduct of the assignment and conducting formal training in the methodologies used to provide the services and in the use of the modeling software, data, maps, etc., produced;</li> <li>20. Producing hardcopy production of Hazard Mapping and Storm Surge, Wind and Erosion Modeling Map Atlases (See Section 17.5.3 Hazard Map Atlas Requirements) for the project Islands and surrounding Cays in professionally bound, hard backed map Atlases (total of ten copies per Island), format determined in consultation with the BNGISC. Provide the necessary data, digital files and software requirements for the reproduction of map atlases and replication of map atlases for remaining islands of The Bahamas. Recommend fee structure for the sale of map atlases;</li> <li>21. Conducting formal training of BNGIS Centre staff and select Government agencies and produce training materials and manuals (estimate minimum of 40 persons); <ul style="list-style-type: none"> <li>- Conduct train the trainer Program for BNGISC in Storm surge modeling and scientific analysis including standards for articulating results to decision makers;</li> <li>- Conduct 2, 3day Workshops on how to conduct research and analysis utilizing Project data.</li> </ul> </li> <li>22. Conducting public awareness sessions for a) the general public b) Academic arena (leveraging the GI Education Program) and c) Geospatial Advisory Council on the impact of Component activities, of Climate resilience and benefits of the Project;</li> <li>23. Creating Metadata for all component 3 and 4 products;</li> <li>24. Demonstrating to Cabinet (utilizing BNGIS Technical Officers),</li> </ol>
--	--

Executive and Technical Officers on the application of Storm surge, wind and erosion modelling and mapping to support disaster risk management planning, recovery reconstruction and mitigation strategies;

25. Conducting participatory stakeholder meetings during the Project to determine the perspectives, concerns, needs, and preferred options of key stakeholders with regard to vulnerability reduction, maintenance and land use. Stakeholders to be consulted shall include business groups and vulnerable groups (located in New Providence and Project Family Islands);
26. Recommending technical requirements for expanding slosh modelling to cover the entire Commonwealth of The Bahamas.

#### **COMPONENT 4 – DISASTER RISK MANAGEMENT SYSTEM (DRMIS)**

1. Conducting Stakeholders Meetings;
2. Conducting a DRMIS User Needs Assessment and data gap analysis through consultation with key stakeholders;
3. Conducting a specific Institutional Needs assessment of the BNGISC with a focus of strengthening the Centre in alignment with BSDI Act. Assessment must include an assessment of Organizational Structure, Posts, Qualifications & Salary structure based on best practices. Making recommendations for long term sustainability of the BSDI System and Program;
4. Designing, creating and populating a GIS Emergency Management Relational Database with existing and new data adhering to BSDI standards (ESRI ArcGIS Server / SQL Server format, data management processes and develop and implement searchable metadata cataloguing etc.);
5. Identifying data sources, data gaps and developing and executing a strategy for the acquisition and or field data collection of missing data (including existing land/building use data) for integration in the project: Incorporating socio economic statistical data from multiple governmental agencies (including the Department of Statistics) and other groups;
6. Conducting a start-up and wrap-up seminars with stakeholders to explain each aspect of the Project, discuss the procedures, expected applications and products, training plans, and project deliverables etc.;
7. Providing a Quality Assurance and Quality Control plan, describing

issues of quality of the spatial data being compiled and of applications to be developed and describing how QA/QC will be incorporated into the consulting services;

8. Developing and integrating a multi-user DRMIS application leveraging/building on BSDI and Central Geospatial Repository and deliverables from other Geomatics Capacity Enhancement for Disaster Risk Management Project Component 1 (see Annex 1, 2 and 3);
9. Installing the database and portal application within the BSDI computing environment following Information Technology (IT)/BSDI standards for implementing production applications (i.e. through a beta testing, staging/user acceptance testing and 'go live' production IT methodology);
10. Delivering User and Administrator Manuals and Training Guides/Manuals for DRMIS;
11. Conducting formal training of BNGISC staff (DRM Information System administrator) and other GOBH officials on DRMIS (estimate 80 no.) (separate training for Executive, Technical and Train the Trainers), in spatial data/information management and maintenance and expansion of the database;
12. Recommending equipment, hardware and software to be procured by BNGISC to strengthen its capacity to a) maintain and enhance DRMIS and b) to provide enhanced mapping and first responder assessment tools;
13. Delivering an IT/BNGISC service level agreement with the Department of Information Technology and/or managers of the Governments internet/cloud environment to delineate roles and responsibilities for ongoing management of the application. Recommend policy statements for sustainable use of the System;
14. Developing/designing, integrating and populating a multi-user Disaster Risk Management Information System (DRMIS) application and relational database leveraging The Bahamas Spatial Data Infrastructure (BSDI) and Central Geospatial Repository (i.e. through a beta testing, staging/user acceptance testing and 'go live' production IT methodology);
15. System Requirements:
  - Supply all software and licenses as required
  - Implement/install and test all products (hardware and



	<p>software);</p> <ul style="list-style-type: none"> <li>• Deliver database model schematics and application/database architecture documents, technical support plan;</li> <li>• Deliver all application source code to The Bahamas National Geographic Information Systems Centre</li> <li>• Training of end-users and technical staff.</li> <li>• User documentation and training manuals</li> <li>• System documentation</li> <li>• Operational manuals</li> <li>• Error processing documentation</li> <li>• User Acceptance <b>Test Scripts</b></li> <li>• Test system by conducting a disaster simulation exercise</li> </ul> <p>16. Providing documentation/manuals and training for select staff administering the system to make any modifications to the information system solution as required;</p> <p>17. Conducting workshops on the BSDI System and Program for Developing a) The Bahamas Spatial Data Infrastructure (BSDI) System Technical specifications and draft RFP for a full blown SDI as a fundamental infrastructure for sustainable development and supporting multiple agency business needs in a GIS &amp; Govt. Cloud environment; b) Reviewing the BNGISC listing of data categories (approximately 300) and identifying the data custodians and or potential data custodians; c) Regulations &amp; Guidelines to support BSDI Act 2014 and DRMIS; d) providing national Policy Statements to support sustainable use of DRMIS and the BSDI System;</p> <p>18. Identifying, Developing and Updating Maintenance Plan for Custodians of Core DRM geospatial data;</p> <p>19. Developing procedures and protocols for the transmission and exchange of information prior to, during and after disaster events;</p> <p>20. Developing and populating electronic smart organizational chart of government structure (See Annex 10 for requirements) as a tool to support improved DRM and BSDI coordination and BNGISC geospatial technical support services to governmental agencies and other groups;</p> <p>21. Documenting DRMIS Sustainability Action Plan and Monetary Return on Investment (ROI) Report;</p> <p>22. Producing a integrated Metadata Catalogue Management System and populating with metadata;</p>
--	--

	<p>23. Reviewing and making recommendations on Memorandum of Understanding for BSDI and DRM Cooperative data access and sharing;</p> <p>24. Conducting Project completion Demonstrations/Wrap-up;</p> <p>25. Delivering formal presentations and demonstration on the functionality and administration of the DRMIS to Cabinet of The Bahamas, The Modernization Unit, Senior &amp; Technical officers (Government), Academic Institutions including University of The Bahamas, BTVI, Private Schools and to Communities/general public;</p> <p>26. Producing Required Reports for both Component 3 and 4 including but not limited to Initial, Intermediate, Monthly Progress, Draft Final and Final Reports;</p> <p>For more details of DRMIS Solution requirement please see section</p>
<p><b>19. Data delivery Requirements</b></p>	<p>Data deliveries (either electronic or physical) to the BNGIS Centre must include a packing slip that, at a minimum, specifies the following:</p> <p><b>Source</b> - Name of company(s) which acquired Products</p> <p><b>Job title</b> - A descriptive title for the contract</p> <p><b>Job No</b> - The Firm’s job number</p> <p><b>Reference number</b> - The source company or agency project reference number</p> <p><b>Client</b> –The Bahamas National Geographic Information Systems Centre</p> <p><b>Media type</b> - external HDD, DVD, CD Rom (Firm responsible for all media and courier charges)</p> <p><b>No. of media</b> - Number of individual media in the delivery</p> <p><b>Label on media</b> - Each supplied portable media device must be with the following: Project Name: Firm/Supplier: Client: Geographic Coverage: date captured</p> <p><b>Delivery method:</b> in person, courier, etc.</p>
<p><b>20. Appendix: References</b></p>	<p>Describes the number of implementations of Firm’s solution to date, including a description of support service arrangements established. Describes relationship with similar clients where the proposed solution has been deployed, etc. Contacts should be at the executive management level. Clients should be of similar or greater size.</p> <p>Firm provides a full Client List and at least three (3) client references for similar implementations conducted within the last three years or currently underway. Specific client contacts should be provided, including company name, contact name, title, address, telephone number, email, and should be at the highest executive level based on the project’s charter and sponsorship. The Government of The</p>

	Bahamas may interview these references, and the results will be factored into the evaluation.
<b>21. Appendix: Team Members</b>	<p>Includes short biographies and relevant experience of project team/key staff and project management personnel. Lists of personnel (and their specific roles and responsibility) who would work on this project along with their technical qualifications and relevant experience. Also include recent examples of similar completed projects.</p> <p>Demonstrate corporate technical capabilities (e.g., mention total staff strength), and specific capabilities and qualifications, experience and credentials of the proposed implementation team. Clearly identifies the role of each proposed team member and illustrates this in an organization chart.</p> <p>Describes bonding process and coverage levels of employees. Affirm that no employees proposed for the engagement have ever been convicted of a felony. Once the team members have been identified, substitutions of team members will only be allowed with the written permission of the Client Representative.</p>
	<p>CONSIDER ADDING TRAINING REQUIREMENTS</p> <ul style="list-style-type: none"> <li>• Identifying the knowledge transfer needs and developing a knowledge transfer plan for BNGIS Centre personnel at the outset of the project.</li> <li>• Mentoring of the BNGIS Centre project team throughout the duration of the project.</li> <li>• Using learning checkpoints to measure progress against the approved knowledge transfer plan.</li> <li>• Providing post training support to allow additional “on the job” experience.</li> <li>• Using workshops to address BNGIS Centre specific knowledge transfer topics.</li> </ul>
<b>22. Appendix: Other</b>	Other supplementary information at the Firm’s discretion

**16.5 GENERAL PROPOSAL STIPULATIONS**

**16.5.1 Disclosure of Content**

All submissions become the property of the Government of The Commonwealth of The Bahamas and will not be returned to the Firm. All information submitted with the proposal will be handled with the strictest degree of confidentiality.

If a Firm submits trade secret or commercially sensitive information, the information must be

clearly labeled “trade secret” or “commercially sensitive” as appropriate. The Government will maintain the confidentiality of such trade secrets and commercially sensitive information to the extent provided by law.

Financial Statements will be exempt from examination by anyone other than legally authorized Government employees. The Government will maintain the confidentiality of such financial statements to the extent provided by law.

#### **16.5.2 Firm’s Responsibility With Regard To Proposal**

The Firm, by submitting a proposal represents that:

- The Firm has read and understood the RFP in its entirety and the proposal is made in accordance with the provisions of the RFP.
- The Firm possesses the capabilities, resources, and personnel necessary to provide efficient and successful service to the Government of The Commonwealth of The Bahamas and to The Bahamas National Geographic Information Systems Centre in accordance with the terms outlined in the RFP.
- Before submitting a proposal, each respondent shall make all investigations and examinations as it deems necessary to ascertain site and/or local conditions and requirements affecting the full performance of the contract and to verify any representations made by the Government upon which the respondent will rely. If the respondent receives an award because of its proposal submission, failure to have made such investigations and examinations will in no way relieve the respondent from its obligations to comply in every detail with all provisions and requirements of the contract, nor will a plea of ignorance of such conditions and requirements be accepted as a basis for any claim by the respondent for additional compensation or relief.

#### **16.5.3 Waiver of Minor Irregularities:**

The Government of The Commonwealth of The Bahamas reserves the right to waive minor irregularities in proposals, providing such action is in the best interest of the Government. Minor irregularities are defined as those that have no adverse effect on the Government’s best interests, and will not affect the outcome of the selection process by giving the respondent an advantage or benefit not enjoyed by other respondents.

#### **16.5.4 Incurred Expenses:**

This RFP does not commit the Government of The Bahamas to award a contract. Nor shall the Government of The Bahamas be responsible for any cost or expense which may be incurred by the respondent in preparing and submitting the proposal called for in this RPF, or any cost or expense incurred by the respondent prior to the execution of a contract agreement.

#### **16.5.5 General Personnel Responsibilities:**

The respondent shall be responsible for ensuring that its employees, agents and subcontractors comply with all applicable laws and regulations and meet all governmental and local requirements related to their employment and position. The respondent shall certify that it

does not, and will not, during the performance of the contract employ illegal immigrants or workers or otherwise violate any **Immigration Regulations** set forth by the provisions of the **Immigration Act of 1986, as amended**.

Any information concerning the Government of the Commonwealth of The Bahamas, its products, services, personnel, policies or any other aspect of its business, unless it is deemed public information, learned by the respondent or by personnel furnished by the respondent in the course of providing services pursuant to the Contract, shall be held in confidence and shall not be disclosed by the respondent or any employee or agents of the respondent without the prior written consent of the Government.

#### **16.5.6 Publicity and Announcements:**

BNGIS Centre shall determine the timing and content of any and all announcements or public statements relating to any part of this RFP process. No Bidder shall make any public statements or release any information regarding this process without the prior approval in writing of the BNGIS.

#### **16.5.7 Correspondence during the RFP Process:**

During the RFP Process, BNGIS shall not communicate with any prospective bidder in relation to acceptance or rejection of any Proposal. All communications concerning acceptance or rejection of the Proposals shall be in accordance with this RFP. Proposals shall be deemed to be under consideration immediately after they are opened and until such time the BNGIS or the Tender's Board makes official notification of award or rejection of the Proposals. While the Proposals are under consideration, bidders and/or their representatives or other interested parties shall refrain from contacting by any means, the Tender's Board, BNGIS and / or their employees, advisors and/or representatives on matters related to the Bids under consideration.

#### **16.5.8 Fraud and Corrupt Practices**

The Firms and their respective officers, employees, agents and advisors shall observe the highest standard of ethics during the RFP Process. Notwithstanding anything to the contrary contained herein, BNGIS shall reject any bid or terminate the RFP Process, as the case may be, without being liable in any manner whatsoever to any of the bidders, as the case may be, if it determines that the bidder or selected Firm, as the case may be, has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the RFP Process. In such an event, BNGIS shall disqualify the Firm from further participation in the RFP Process.

For the purposes hereof, the following terms shall have the meaning hereinafter respectively assigned to them:

**“corrupt practice”** means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the RFP Process (for avoidance of doubt, offering of employment to or employing or engaging in any manner

whatsoever, directly or indirectly, any official of BNGIS who is or has been associated in any manner, directly or indirectly with the RFP Process or has dealt with matters concerning the Agreement or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the BNGIS shall be deemed to constitute influencing the actions of a person connected with the Bidding Process); or (ii) engaging in any manner whatsoever any person in respect of any matter relating to the Project or this RFP, who at any time has been or is a legal, financial or technical advisor of BNGIS in relation to any matter concerning the Project, except as in accordance with Clause 16.4 ;

**“fraudulent practice”** means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bidding Process;

**“coercive practice”** means impairing or harming or threatening to impair or harm, directly or indirectly, any person or property to influence any person’s participation or action in the Bidding Process;

**“undesirable practice”** means (i) establishing contact with any person connected with or employed or engaged by the BNGIS with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the RFP Process; and

**“restrictive practice”** means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bidding Process.

#### **16.5.9 Presentations**

BNGIS, at its sole discretion, may ask individual Firms to make oral presentations and/or demonstrations without charge to BNGIS Centre. The purpose of an oral presentation is to clarify or elaborate on the proposal. This is a fact finding and explanation session only and does not include negotiation. The response must be complete in all respects, as presentations and demonstrations **MAY or MAY NOT** be scheduled. All costs incurred by the Firm to conduct the presentation and/or demonstration is/are the responsibility of the Firm.

## **17 ASSESSMENT CRITERIA AND PROCESS**

### **17.1 ASSESSMENT PROCESS OVERVIEW**

All short listed Firms advancing from Stage 1 (Expression of Interest) are invited to advance to stage 2 Request for Proposal (this document). All Proposals submitted in accordance with the requirements of the RFP package, together with the Proposal Form and the necessary Proposal Security will be reviewed by the Client to ensure conformity to minimum requirements.

### **17.2 Assessment Committee**

The Committee will be composed of members of the Government of The Bahamas nominally including members of the project's Steering Committee. The Client reserves the right to add, delete, and/or change members of the Committee.

The Assessment Committee will assess the technical, cost, schedule and functional merits of the proposal. The Assessment Committee will also receive input and advice from such advisors and subject matter experts as it considers appropriate.

#### **17.2.1 STAGE ONE ASSESSMENT:**

The Assessment Committee will then short-list a minimum of three and maximum of six Firms who will be invited to advance to Stage Two select the solution which best meets the scope/functionality, schedule, cost and quality objectives as indicated in this RFP.

The recommendation of the Assessment Committee will be provided to the **Tenders Board**, which will have final approval authority and responsibility for the actual selection of the preferred Firm; that is, the Firm with whom the Client will enter into negotiations for the purpose of finalizing and executing the Contract. The Tenders Board may be advised by such other bodies and parties, whether within or outside of the Bahamian Public Service, as it may deem to be advisable and appropriate.

#### **17.2.2 STAGE TWO ASSESSMENT**

##### **Demonstration of Solution**

Following the bid evaluation, the short-listed Firms advancing from Stage 1 will be required to demonstrate that their products meet the criteria as stated in the RFP. Demonstration and testing of DRMIS solution will be conducted in Nassau, New Providence or by video conferencing (if possible).

Other detailed requirements for the Demonstration will be provided to short-listed Firms.

#### **17.3 Minimum / Mandatory Requirements**

The following Minimum Requirements are mandatory. Failure of any proposal to meet any one of these mandatory requirements will result in the proposal being rejected and returned to the respondent. For ease of reference the RFP page number is indicated following each mandatory requirement:

- Letter of Transmittal: Confirmation of Intent to Submit on time (Section 3 & Annex 1)
- Proposal Form (Annex 2)
- Financial Certificates (Section 9)
- Proposal to the correct location (Section 4)
- Proposal on time (Section 3)
- Nine (9) copies of the proposal

##### **17.3.1 Rated Requirements**

A description of the rated requirements, the weighted value of each criterion and the point value of each of the component factors appear on the following pages associated with the

proposal outline and Table of Technical Requirements (ToTR).

**17.3.2 Weighted value for written Proposal Assessment:**

Heavily weighted items include the following categories:

Approach and methodology, Quality Assurance Quality Control Plan, Cost Estimate, Financial Information, Technical Proposal and Team Members.

**17.4 TABLE OF TECHNICAL REQUIREMENTS (ToTR):**

The following are considered to be Technical Specification for the DRMIS and all other items stipulated in the Table of Technical Requirements. The Firm shall confirm compliance on each category. If the Firm wishes to add any comments to any item, use a separate sheet for item by item response, in sequential order.

**17.4.1 Table of Technical Requirements (ToTR) for Component 4 – DRM SYSTEM:**

Ref #	General Business Requirements
	FUNCTIONAL
	WORKFLOW
WF001	System must provide a flexible, configurable workflow centric framework to automate the damage assessment process performed by various agencies including down loading GPS data into a GIS environment and displaying results.
WF002	System must have the ability to route disaster matters to external Non ESF 5 reviewers in circumstances where an external agency input is required for approval.
WF003	System must have the ability to support multiple hierarchical levels of logistical review approvals to ensure certain types of reviews are approved prior to information being released and or being advanced.
WF004	System must support the issuance of both conditional and transactional based approvals for disaster development projects that require periodic follow-up inspections for certain project elements. i.e. development reconstruction etc.
WF005	The system should route Assessment activities to ESF 5 automatically and provide first responder communications.
WF006	Must be able to facilitate all governmental agencies request online.
WF007	The system should route response to queries to querying officers and alert within any specified time frame if not addressed
WF008	System must be designed for contingency planning for emergency evacuations which combines simulation techniques with spatial data handling and display capabilities of a geographical information system (GIS). System must provide an interactive evacuation simulator with dynamic graphics that allows for experimentation with policies by providing rapid feedback from the simulation to support emergency planners with the ability to use simulations to explore/experiment with emergency evacuation plans in order to plan for different contingencies.
WF009	The system should be capable of being updated by both terminal updating and by batch processing in the case of data from other data suppliers not connected to terminals.
WF010	The system should check validity of addresses utilizing GIS address coding.



	<b>SECURITY</b>
<b>SC001</b>	System must support role based security within the system that defines each user's access rights and restrictions (including jurisdictions) based on the role that each individual performs for NEMA ESF 5, planning and information process or workflow i.e. System administrator, Developer, ESF 5 Planning Officers, Family Island Administrators, Assessment Field Officers, Re-construction development Project Managers, Accountant, logistical support officers, vector control, are examples of different roles.
<b>SC002</b>	The system should implement a security model and mechanisms which provide for identification and authentication of users.
<b>SC003</b>	The System should prevent unauthorized access to and use of resources
<b>SC004</b>	The System should encrypt information during transmission over unsecured communication channels.
<b>SC005</b>	The System should protect the confidentiality and integrity of information
<b>SC006</b>	The System should have ability to encrypt BNGISC Imagery Topographic Mapping and DTM holding to assist with monitoring abuse of data and information assets for commercial purposes
<b>SC007</b>	The System's security implementation should be specified and documented by the vendor.
	<b>INTERFACE</b>
<b>IF001</b>	System must be able interface with the proposed <u>BSDI portal to allow communities/islands, administrators, policy makers to access geospatial data, post incidents related to disasters by either posting pictures or reports at a particular geographic location. The System must be capable of maintaining a full history of IP addresses that utilize this service.</u>
<b>IF002</b>	System must interface <u>with commercial on line meeting and collaboration software services similar to GoToMeeting/Skype to enable on line design review sessions and allow participation of geographically distributed team members throughout the Bahamas to eliminate travel expenses and reduce costs.</u>
<b>IF003</b>	System must interface with the Met Department and automatically generate emails and/or letters notifying Administrators and or communities at large on regular weather alerts.
<b>IF004</b>	The system should interface with NEMA'S/Finance accounting system
<b>IF005</b>	System must apply dashboards to allow users to navigate to specific functions as required.
<b>IF006</b>	The system should interface with the BSDI Portal GIS base maps/imagery, DTM and other datasets.
	<b>FINANCE/PAYMENT</b>
<b>FP001</b>	System must <u>allow donations to recovery efforts on line (Credit Card/Bank Transfer) or manually (Check/Cash) at NEMA offices.</u> All donations must be recorded at time of receipt.
<b>FP002</b>	The system should update other systems when payment is made.
<b>FP003</b>	Must allow for payment and integration with the government's Financial Management System.
<b>FP004</b>	Should have a web interface (including web mapping interface) for users access and payments and /or subscription fees for use of Topo/DTM.

<b>FP005</b>	Must allow for online application submissions for subscription to use of Imagery, topo mapping and DTM.
<b>FP006</b>	The system should provide simplified reconciliation
<b>FP007</b>	The system should generate calculated total cost of damage assessments from all agencies as well as agency-specific cost.
	<b>TRACKING</b>
<b>TK001</b>	System must support system-wide audit trails and transaction logs that track all user activity within the system, recording transaction details along with User ID , date/time stamps etc.
<b>TK002</b>	System must have <u>the ability to display the complete assessment history for each underlying officer collecting data during the QA/QC process.</u>
<b>TK003</b>	System must have the ability to perform data and time tracking for all recovery and damage assessment review activities by review stage and status change.
<b>TK004</b>	System must support tracking of donations and resources/supplies to ensure authorities are held accountable for transactions (receipt, storage/inventory and distribution activities). System must provide visibility for all project stakeholders.
<b>TK004</b>	The System must store and track document changes.
<b>TK005</b>	The System should have real-time tracking or locating when access to the system is made via authorized smart devices.
<b>TK006</b>	Should be able to have a service request tracking feature.
<b>TK007</b>	Must provide audit trails to record the creating, editing, printing, viewing and deleting of all documents.
<b>TK008</b>	The System should provide proper auditing of all data resources, inclusive of the details associated with creation, modification, and deletion operations.  These details should include the identity of the user performing the operation, and the operation timestamp.
	<b>NOTIFICATION/ALERTS/EMAILS</b>
<b>NA001</b>	System must have the ability to generate automated email notifications for ESF 5 users when assigned activities have been updated/modified or new tasks have been assigned to them
<b>NA002</b>	System must have the ability to list warnings, notices or any other restrictions or protocols associated with disaster risk management to avoid duplication of effort or incomplete tasks.
<b>NA003</b>	System must have the ability to set database triggers so that specific planning conditions would automatically initiate approval cycles or re-routing of permits to the appropriate planning officers. An example would be a permit application for a large hotel complex that would require specific utility infrastructure (water/waste water).
<b>NA004</b>	The system should track and send alerts for all completed recovery project by all agencies
<b>NA005</b>	System must allow updating of maps and automatically generate email notifications and letters to applicants as each planning review stage is completed. The system must record and track all communications between the NEMA and ESF 5 member agencies.
<b>NA006</b>	The system should generate notifications to assessment officers to collect data that

	is inadvertently not collected while in the field.
<b>NA007</b>	The system should have optional functionality to email various communications as it related to the function of ESF 5.
	<b>ACCESS</b>
<b>AC001</b>	System must support a nationwide access whereby all governmental, local government, other groups and the general public can view spatial information as well as restrict views to authorized users (including the public where applicable) via the BSDI web mapping portal. Access and display must include the ability to view the details as authorized by NEMA and other relevant authorities.
<b>AC002</b>	The system must not restrict data access and negatively affect scalability, performance, fault tolerance, and system recovery.
<b>AC003</b>	The system must avoid usage of proprietary formats that may restrict data access
<b>AC004</b>	The system should allow officers to enter information on desktops.
<b>AC005</b>	The system should allow assessors to enter data and visualize information on site in real time using smart devices etc.
<b>AC006</b>	The system should allow officers to enter information on desktops
<b>AC007</b>	The System must allow appropriate permission levels for document access.
<b>AC008</b>	The system should allow archive of Disasters for ease of access for comparative purposes and simultaneous display of maps for cross comparison.
<b>AC009</b>	The system should be dynamic and capable of being updated daily by authorized spatial data custodians to give the highest possible level of accuracy. Administrative rights by custodian agencies must be preserved while allowing the sharing of information useful to multiple agencies.
<b>AC010</b>	There should be a compatible system of hardware and software shared by many users, each of whom would retain responsibility for and ownership over their database. No other user should be allowed to modify other agencies data although users could obtain a copy of some system information. A read only function should also be possible.
<b>AC011</b>	There should be a compatible system of hardware and software shared by many users each of whom would retain responsibility for and ownership over their database. No other user should be allowed to modify other agencies data although users could obtain a copy of some system information. A read only function should also be possible.
	<b>INTEGRATION</b>
<b>IG001</b>	System must integrate information from various agencies, devices and databases.
<b>IG002</b>	The system must include an interface or synchronization for hand-held devices or portable, or smart phones for Damage assessment officers
<b>IG003</b>	The system should link financial resources related to a specific project (road repairs, sea walls, buildings Utility Infrastructure from BTC, BEC, and Cable etc.)
<b>IG004</b>	Fully Integrated e-Commerce system with user defined roles to track e-Permit applications (various application types) through the all stages of the planning submittal, approval and inspection process.
<b>IG005</b>	System must support multiple types of recovery and mitigation projects with sub types and check lists unique to each phase of the disaster preparedness cycle. The system must support all classes of disaster risk management surge modeling and alerts, evacuation, site visits for rapid assessment, recovery efforts, detailed

	assessments, Planning and reconstruction and policy decisions/mitigation.
<b>IN006</b>	The system must leverage the BSDI Portal in the Government Cloud Environment.
<b>IN007</b>	System must be capable of utilizing The Street network for all islands properly geocoded with address information to permit routing of vehicles including Bus routing and emergency evacuation routing.
	<b>STORAGE</b>
<b>ST001</b>	Must be able to store, maintain, manage and update metadata catalogue.
<b>ST002</b>	The System should comprise information in a relational database. i.e. geometry and associated attribute data should be stored in relational database tables for unrestricted application access. Oracle, SQL Server are examples.
<b>ST003</b>	The system must have the ability to store scanned documents such as maps architectural floor plans
<b>ST004</b>	The system/solution must not use BLOBs to store geospatial data in a proprietary format
<b>ST005</b>	The system should have data arranged in relational databases so the data is entered/updated one time by authorized operators
	<b>SEARCH</b>
<b>SC001</b>	The system should produce a discovery Master Metadata Catalogue Management System which allows searches on geospatial data resources by various key works and coordinates (see Section 17.5. 1)
	<b>REPORTS</b>
<b>RT001</b>	Must have the ability to generate and print reports.
<b>RT002</b>	The system should track changes in assessment reports
<b>RT003</b>	The system should print customized Reports as required
	<b>MOBILITY</b>
<b>MB001</b>	The system should allow Data be exchanged between hand-held devices or portable computers or smart phones in the field and in the system
<b>MB002</b>	The system should retrieve GPS coordinates for authorized smart devices
<b>MB003</b>	The System must have the ability to upload geospatial data to devices from the Central repository or other locations
	<b>FORMAT</b>
<b>FM001</b>	Must be able to handle varying data formats for import and export.
<b>FM002</b>	The system must be a graphic basis for the Disaster Risk Management support information system. Imagery, shape and locations of properties and other geospatial data/topographic mapping (transportation network, utility infrastructure, contours, building foot prints, coastlines etc.) must be shown on maps of an appropriate scale
	<b>TRAINING</b>
<b>TR001</b>	Must include advanced training for administrators (BNGISC) and train the trainer sessions on System administration
<b>TR002</b>	Must include advanced training for Stakeholder agencies
	<b>CROWD SOURCING/COMPLAINTS/INCIDENT MANAGEMENT</b>
<b>CS001</b>	System must have ability to manage complaints/incident tracking system identifying the originator of the complaint, the time and date of the complaint, the nature of the complaint, the response to the complaint, and the measures taken to resolve the complaint.
<b>CS002</b>	System must be able to map geographic locations, photographs etc. submitted by

	users/general public in the field (including but not limited to Hazard locations/incidents/and route complaint to the appropriate authorities
<b>CS003</b>	The system must allow for e-Democracy/crowd sourcing – receiving feedback electronically from internal & external clients which will allow a diverse range of skilled and ordinary people (in an internet environment) to collaborate and work together to improve public services and reduce Government operating costs at the same time
	<b>MAPPING</b>
<b>MP001</b>	System must interface with BSDI imagery Topo and DTM
<b>MP002</b>	System should allow subscribers to access maps topo/DTM
<b>MP003</b>	System must allow situational awareness mapping leveraging BSDI mapping Assets (imagery/topo/DTM)

#### 17.4.2 NON FUNCTIONAL:

NON-FUNCTIONAL	Description of Bidder’s Method, and/or Approach and Standards adhered to.
<b>Interfaces</b> The solution must interface and interoperate with disparate systems.	
<b>Human Factors</b> Important product features include: usability, customization, user error handling, on-line help.	
<b>Security</b> <ul style="list-style-type: none"> <li>• Identification and authentication of users</li> <li>• Prevention of unauthorized access to and use of resources</li> <li>• Protect the confidentiality and integrity of information throughout its entire lifecycle</li> <li>• Encrypt information during transmission over unsecured communication channels</li> </ul>	
<b>Resource Auditing</b> <ul style="list-style-type: none"> <li>• Record events</li> <li>• Track user actions</li> <li>• Timestamp</li> <li>• Data change</li> <li>• Resource usage</li> <li>• Destination and source addresses</li> </ul>	
<b>Capacity</b> Based on similar systems implemented	

<ul style="list-style-type: none"> <li>• Peak Load (maximum capacity)</li> <li>• Concurrent requests</li> </ul>	
<p><b>Performance</b></p> <ul style="list-style-type: none"> <li>• Response time</li> <li>• Availability</li> <li>• Latency</li> <li>• Transaction throughput</li> <li>• Scalability</li> <li>• Reliability</li> </ul>	
<p><b>Configurability</b></p> <p>Configuration approach for how system elements added, removed, or replaced or modified.</p> <p>Flexibility and ease of shaping to meet needs without technical expertise.</p>	
<p><b>Configuration Management</b></p> <p>Version Control for different aspects: source codes, objects code, configuration files, system documentation.</p>	
<p><b>Language and Localization</b></p> <p>The language for the system is English and the system should be adapted to the locale of The Bahamas.</p>	
<p><b>Accessibility</b></p> <p>Provide accessibility guidelines and standards</p>	
<p><b>Client Environment</b></p> <p>Provide client environment and communication protocols.</p> <p>State which computing devices the solution operates correctly, efficiently, and with reasonable response time. What web browsers, if any.</p>	
<p><b>Look and Feel</b></p> <p>Should follow the look and feel guidelines as agreed during the design phase. Look and feel should be consistent throughout the product solution</p>	
<p><b>Technical Standards</b></p> <ul style="list-style-type: none"> <li>• Network Level Protocol</li> <li>• Transport Protocol</li> <li>• Structured Documents and Messages</li> <li>• Directory and Discovery</li> <li>• Web Services Definition</li> <li>• Workflow</li> <li>• Remote Object Access and Activation</li> <li>• Programming Model</li> </ul>	
<p><b>Hardware</b></p> <ul style="list-style-type: none"> <li>• Platform</li> <li>• Environments (Development, Test/Training, Production, Disaster Recovery)</li> </ul>	

### Software Quality

- Industry practices followed
- Standard coding conventions followed
- Method for tracking and remediation defects and bugs

## 17.5 OTHER REQUIREMENTS:

### 17.5.1 DISCOVERY MASTER METADATA CATELOGUING SYSTEM REQUIREMENTS

Ref#	MASTER METADATA CATELOGUING SYSTEM REQUIREMENTS
1	Must be a Relational Database, must allow queries/keywords entered by user
2	Must be searchable by abstract
3	Select area and list all metadata available in the selected area
4	Must be searchable by author or agency
5	Must be searchable by x y coordinates
6	Must be searchable Island name
7	Must be searchable by any other feature of significance
8	Must be easy to automatically update metadata provided to the Centre from Custodian agencies and governmental agencies (in particular)
9	Must allow agencies to enter metadata that they are custodians of
10	Must allow unlimited system access, viewing and editing simultaneously
11	Must track access and editing by users

### 17.5.2 SMART ORGANIZATIONAL CHART REQUIREMENTS TO SUPPORT BAHAMAS SPATIAL DATA

The mandate of the BNGIS Centre is to provide technical support and training to all governmental agencies and other groups. As such it is essential for the BNGIS Centre (BSDI Administrator and Central repository for Spatial Data on The Bahamas) to know its network of clients on several levels i.e. a) Central Government including Units in Departments, Departments in Ministries, Ministries in the Government and Local Government (See Annex 10) and branch offices located in the Family Islands. Clients also include NGO's and Academic Institutions; Utility Corporations (Bahamas Power & Light Corporation, Bahamas Telecommunications Company, Water and Sewerage Corporation); International organizations: United Nations (UN): UN Secretariat, UN-GGIM and other groups identified by the BNGIS Centre; Consultants/Vendors/Data Suppliers

Ref #	SMART ORGANIZATIONAL CHART REQUIREMENTS
1	Must include information on all governmental ministries/agencies/departments/units in the Commonwealth in The Bahamas
2	Must be a relational database that can be accessed and updated by both the Administrator of the System (BNGIS Centre) and respective agencies by coded access
3	Must be able to track updates by users
4	Associated data must include each organization Vision, Mandate, Mission statements
5	Must include names of Heads of Department with Contact information and email addresses etc.; Laws that govern department/Ministry operations

6	Must include Committees/Councils and UN Conventions by agency
7	Must be GIS map (geometry) ready: Fields for XY Coordinates (to be populated by the BNGIS Centre) for mapping locations of Organizational Network
8	Must provide software code for customized programming purposes and fixes
9	Must provide technical support when required
10	Solution must provide the BNGIS Centre with the ability to display deep levels of interaction between the Centre (as the Hub) and Governmental Agencies including local Government. A general display of regional and international organizations is also required.
11	Must include training for BNGISC and Stakeholder Agencies (Minimum of 15 agencies)

17.5.3 HAZARD MAP ATLAS REQUIREMENTS

Ref#	HAZARD MAP ATLAS REQUIREMENTS
1	All maps/drawings prepared for the Hazard/Environmental Sensitivity Mapping Index Atlas should include the following information and all such additional information necessary to visually convey Hazard/Environmental Sensitivity data to Government agencies, other groups and the general public.
2	Title of Atlas: "The Bahamas National Geographic Information Systems (BNGIS) Centre Hazard Map Atlas Series for the Islands of New Providence, Bimini, Eleuthera, Cat Island, Long Island and Exuma". Use BNGISC Logo and standard details including project name, plot date and BNGISC disclaimer
3	Map Atlas must have Acknowledgement Section (to be scripted by the BNGIS Centre)
4	Copyright Government of the Commonwealth of The Bahamas (year)
5	Identify the Island and insert locator maps;
6	Identify the source data used to produce the maps;
9	Identify the north reference and/or basis of bearings
7	Provide sufficient data for the mathematical closure of the boundary lines depicted with the area enclosed indicated;
8	Depict the Grid Reference (xy cords) and associated labels
9	Provide sufficient data for the mathematical closure of the boundary lines depicted with the area enclosed indicated
10	Reference the hazard data to the local political or boundaries (i.e. island, town, settlement, street lines tax map parcel number and any other relevant available information).
11	Reference a datum & a specific benchmark or reference point when elevations are shown
12	Identify the scale and conversion factor necessary, scale should be inclusive of small scale (say 1:250,000 – Global overview for decision makers) and large scale(1:10,000/25,000/40,000 – for on-site operations, detailed local maps); inserts on regional context (sea and weather, fishing beds and fishing calendars etc. (scale : 1/1,000,000)
13	Identify character and location of visible physical features with reference to boundary lines as necessary etc.
14	Indicate date of field data completion and date of map preparation
15	Identify and describe any monuments found or set in areas where data may have been captured (terrestrial and marine), indicate species listing on back of each map
16	Use of standard classification, symbols, land use, vegetation/forestry
17	Reference apparent easements, right of way and settlement/subdivision boundaries



<b>18</b>	Indicate applicable ties (Le. building corners, intersections, or monuments)
<b>19</b>	Show land and communities impacted by flooding due to rainfall for different return period;
<b>20</b>	Map Atlases should include inland flooding zones and coastal erosion areas
<b>21</b>	Depict on the maps the following: i. Area of hazard and areas risks (including flood zones); ii. Population, Building stock, government assets and existing land use iii. Boundaries of open water habitat of Island ponds, Lakes and other smaller water bodies iv. eco-forestry area and general vegetation cover.
<b>22</b>	Road Edge of pavement of all existing and new roads and label street names. Remove labels that reflect no-name
<b>23</b>	Surge maps must illustrate/depict Island coverage (coastal inundation – surge) due to Category 1, 2, 3, 4 and 5 hurricanes
<b>24</b>	1-ft/2ft/10ft contours to be depicted or as required by the BNGISC
<b>25</b>	All map atlases must have the BNGISC organizational profile sheet depicting governing legislation, Vision, Mandate, Mission, Motto BSDI System and Program Guiding Principles
<b>26</b>	Format is Word format and PDF and all GIS setup requirements for the map atlas in ESRI shapefile format to allow replication of map atlas for project islands and production of other Family Islands not included in this Project.
<b>27</b>	Map information and/or Hazard/Sensitivity reports should be clear, legible, and sufficient in nature so when associated with the record description, the boundary lines are evident without supplemental data or information.
<b>28</b>	35 hardback professionally bound map atlases for each project island must be produced
<b>29</b>	Hazard and Environmental Sensitivity Index Mapping
<b>30</b>	Develop Fee structure for cost recovery (Atlas production)
<b>31</b>	Conduct a Flood Insurance Study report in one pilot project site for the production of Flood Insurance Rate Map and Database;
<b>32</b>	The map Atlas should include storm surge risk at present and storm surge risk maps taking into consideration projected impacts of climate change and climate variability (2030, 2050, 2080, 2100) from sources acceptable to the BNGISC and other relevant authorities. for storm category 1 thru 5 (to be finalized in consultation with BNGISC and stakeholders)

**17.5.4 REQUIREMENTS FOR THE BNGIS CENTRE’S RESPONDER OPERATIONAL PLAN FOR PROVIDING IMPROVED DRM GEOSPATIAL SERVICES TO NEMA’S ESF 5 AND OTHER GROUPS:**

BNGIS Responder operational Plan for the provision of effective and efficient geospatial services to support all phases of DRM (Planning, Recovery, Damage Assessment and analysis, Reconstruction and mitigation) Such template can be applied to Include DRM incidents/events including but not limited to Flood, Hurricanes, Tornadoes, Fires, Health issues, air and maritime disasters (including oil spills etc.) and acts of terrorism etc.:

<b>Ref#</b>	<b>BNGIS CENTRE DRM GEOSPATIAL SERVICES OPERATIONAL PLAN REQUIREMENTS</b>
<b>1</b>	Assess the BNGIS Centre’s geospatial support to NEMA, in particular, Emergency Support Function (ESF 5) “Planning and Information” and NEMA’s Geospatial information needs from the BNGIS Centre. Assessment should include a Literature review of existing legislation that governs the operations of BNGISC (BSDI Act 2019) and NEMA’s Act and any other documents as required.
<b>2</b>	The plan must incorporate/develop standards, procedures and protocols for provision and mainstreaming of geospatial services and leveraging existing BSDI System (Library) & Program

	<p>technologies that address all phases of Disaster Preparedness including:</p> <ul style="list-style-type: none"> <li>• Planning ( A Vulnerability Assessments, Shelter planning surge modeling application , Guidelines for GIS data collection utilizing global positioning systems GNSS and standard data dictionaries);</li> <li>• Recovery (damage assessment (Rapid and detailed damage assessment)</li> <li>• Reconstruction;</li> <li>• Mitigation planning guidelines.</li> <li>• Geospatial information management and distribution protocols must also be addressed.</li> <li>• The plan must also include Training manuals associated with each phase.</li> </ul>
<b>3</b>	Plan must include methodology, procedures and protocols for performing real time flood modeling (due to rain and storm surge) and wind and coastal erosion modeling to predict impact based on scenarios in order to identify areas/communities at risk.
<b>4</b>	Plan must mainstream the use and application of geospatial technologies including but not limited to Global Positioning Systems (GPS), mobile devices, Global Navigational Satellite Systems, drone technology and various DRM applications.
<b>5</b>	Plan must include identification of training requirements/protocols for Leadership, technical staff leveraging the BSDI System and DRM System structure and protocols with recommendations for training type and frequency.
<b>6</b>	Plan must identify agency specific roles and requirements for compliance with Geospatial standards procedures and protocols for coordination and holistic use of technology to support sound decision making.
<b>7</b>	The Plan shall also include a Model/template media/Press Release Format and crisis/public communication protocols.
<b>8</b>	The plan shall address sustainability and actions required to achieve the primary goal to improve geospatial services for multiple agencies.
<b>9</b>	Plan must be consistent with all elements of NEMA’s Emergency Management Plan, and all other relevant governmental agencies that interface with Emergency Support Functions.
<b>10</b>	Plan should include BNGISC operational requirements (HR, Skillsets and Funding).
<b>11</b>	Plan must be provided in PDF, Word and excel as required.

17.5.5 ALIGNMENT WITH THE BAHAMAS SPATIAL DATA INFRASTRUCTURE ACT 2014 REQUIREMENTS:

<b>Ref #</b>	<b>ALIGNMENT WITH BSDI ACT 2014 REQUIREMENTS</b>
<b>1</b>	RFP and technical specifications for a full blown Spatial Data Infrastructure System and Program must be produced
<b>2</b>	Review of comprehensive listing of datasets for the BSDI Library and Identification of data custodians must be produced
<b>3</b>	BSDI and DRMIS Policy Statements must be produced
<b>4</b>	BSDI Regulations to support the BSDI Act must be produced
<b>5</b>	BSDI and DRMIS Return on investment Report must be produced
<b>6</b>	DRMIS Must leverage the BSDI Portal in the Government Cloud environment
<b>7</b>	Draft memorandum of Understanding for corporative data access and sharing must be produced for GAC, Global, International and Regional Organizations and Academic Institutions, Commercial and Private Sectors.
<b>8</b>	Fee Structure for the sale of Map products and other identified geospatial services must be produced.

<b>9</b>	Reviewing the BNGISC's listing of data categories (approximately 300) and identifying the data custodians and or potential data custodians must be produced.
<b>10</b>	GNSS Network Management Recommendations must be produced.
<b>11</b>	Firm will be required to become familiar with BSDI Act 2014 and conduct a literature review on Legislation pertaining to geospatial data and imagery acquisition and agency-wide requirements to assist in the enforcement of BSDI Act 2014.

**18 SUMMARY - NOTIONAL TIMELINES AND MILESTONES**

The work plan developed by The Bahamas National Geographic Information System (BNGIS) Centre includes the key dates indicated below:

- |   |                               |
|---|-------------------------------|
| ➤ Issuance of RFP   | 9 <sup>th</sup> January 2020  |
| ➤ Due Date for Receipt of Proposals                         | 28 <sup>th</sup> January 2020 |
| ➤ Tenders Board Approval                                    | To be determined              |
| ➤ Finalize Negotiations                                     | To be determined              |
| ➤ Award and Execute Contract                                | To be determined              |
| ➤ Mobilize Firm   | To be determined              |
| ➤ Initial Project Briefing and Information Session (Nassau) | To be determined              |
| ➤ Pre-Production Project Evaluation and Analysis            | Firm's Milestone              |
| ➤ Schedule and delivery                                     | Firm's Milestone              |
| ➤ Project Completion  | To be determined              |

\* Note: Subject to receiving proposal from the Firm, it is anticipated that the Firm will require approximately one (1) month to mobilize and implement the scope of work.

**19 BEST VALUE**

The decision to award a Firm will be based on best value in conjunction with the criteria laid out in the RFP Package. The award of the Contract will be made to the Firm whose proposal is deemed to be most advantageous to the Government of The Bahamas, cost and all other factors as the Client may consider appropriate being considered. Although cost will be evaluated, the Client reserves the right to award to other than the lowest-cost proposal.

**20 CONFIDENTIALITY OF PROJECT INFORMATION:**

The Government of The Bahamas requires that the selected consulting firm and its staff assigned to this project keep all information learned about the Governments ICT/Information security system confidential. The Consultant shall not make available or use any system information drafts or reports for any purpose without the written consent of the Government of The Bahamas.. The Firm shall not make available or use any system information drafts or reports for any purpose without the written consent of the Government of The Bahamas.

**21. DECLARATION OF DISTRUCTION:**

At the conclusion of the Project and prior to final payment of funds held in retention the Firm must submit a Declaration of Data Destruction Form(s) (Annex 9 and Annex 10).

**ANNEX 1: LETTER OF TRANSMITTAL - NOTICE OF CONFIRMATION OF INTENT TO SUBMIT PROPOSAL**

[FIRM REPRESENTATIVE'S NAME AND TITLE]

[FIRM'S COMPANY NAME]

[FIRM'S ADDRESS]

WEBSITE URL:

EMAIL:

TIN NUMBER:

[DATE]

Your file:

Our file: BNGISC/401

UNCLASSIFIED

Project Coordinator  
Bahamas National Geographic Information Systems (BNGIS) Centre  
Ministry of the Environment and Housing  
East Bay Street  
P. O. Box SS-5194  
Nassau, The Bahamas

Dear Project Coordinator:

Subject: **Confirmation of Intent to Submit a Proposal**

This is to confirm our intent to submit our proposal in accordance with the terms and conditions of the Request for Proposals (RFP) document for the Geomatics Capacity Enhancement for Disaster Risk Management Project Component 3 and 4 "Flood, Storm Surge inundation, Wind and Coastal Erosion Modeling and Mapping" and " Disaster Risk Management Information System (DRMIS)" issued on [ ] 2019.

We agree to provide Proposal after being advised we are a short listed Firm to advance to Stage 2 as stipulated in Section 17.2.1, page 34 of the Request for Proposal (RFP).

Sincerely yours,

[SIGNATURE]

[NAME AND TITLE OF FIRM'S REPRESENTATIVE]

**ANNEX 2: PROPOSAL FORM**

**PROJECT TITLE: GCE-DRM COMPONENT 3 AND 4: FLOOD, STORM SURGE INUNDATION, WIND AND COASTAL EROSION MODELING AND MAPPING AND DISASTER RISK MANAGEMENT INFORMATION SYSTEM (DRMIS)**

The Government of The Commonwealth of The Bahamas

**LEGAL NAME OF FIRM/IMPLEMENTER:**

**STREET ADDRESS:**

**MAILING ADDRESS:**

**TELEPHONE NUMBERS:**

**TOLL-FREE NUMBERS:**

**FAX NUMBERS:**

**E-MAIL ADDRESS:**

**CERTIFICATION:** The provisions of this proposal shall remain open, valid and binding upon the Firm for a period of not less than ninety (90) days from the date of its receipt by the Government of The Bahamas.

**DECLARATION:** I, the undersigned, being a principal of the Firm and fully authorized to act on the Firm's behalf, hereby certify that the information given on this form and in the attached Proposal is accurate to the best of my knowledge.

**Name (print):** \_\_\_\_\_

**Capacity:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Telephone number:** \_\_\_\_\_

**ANNEX 3: COMMONWEALTH OF THE BAHAMAS AND SELECTED GCE-DRM PROJECT ISLANDS**



● Selected GCE-DRM Project Islands

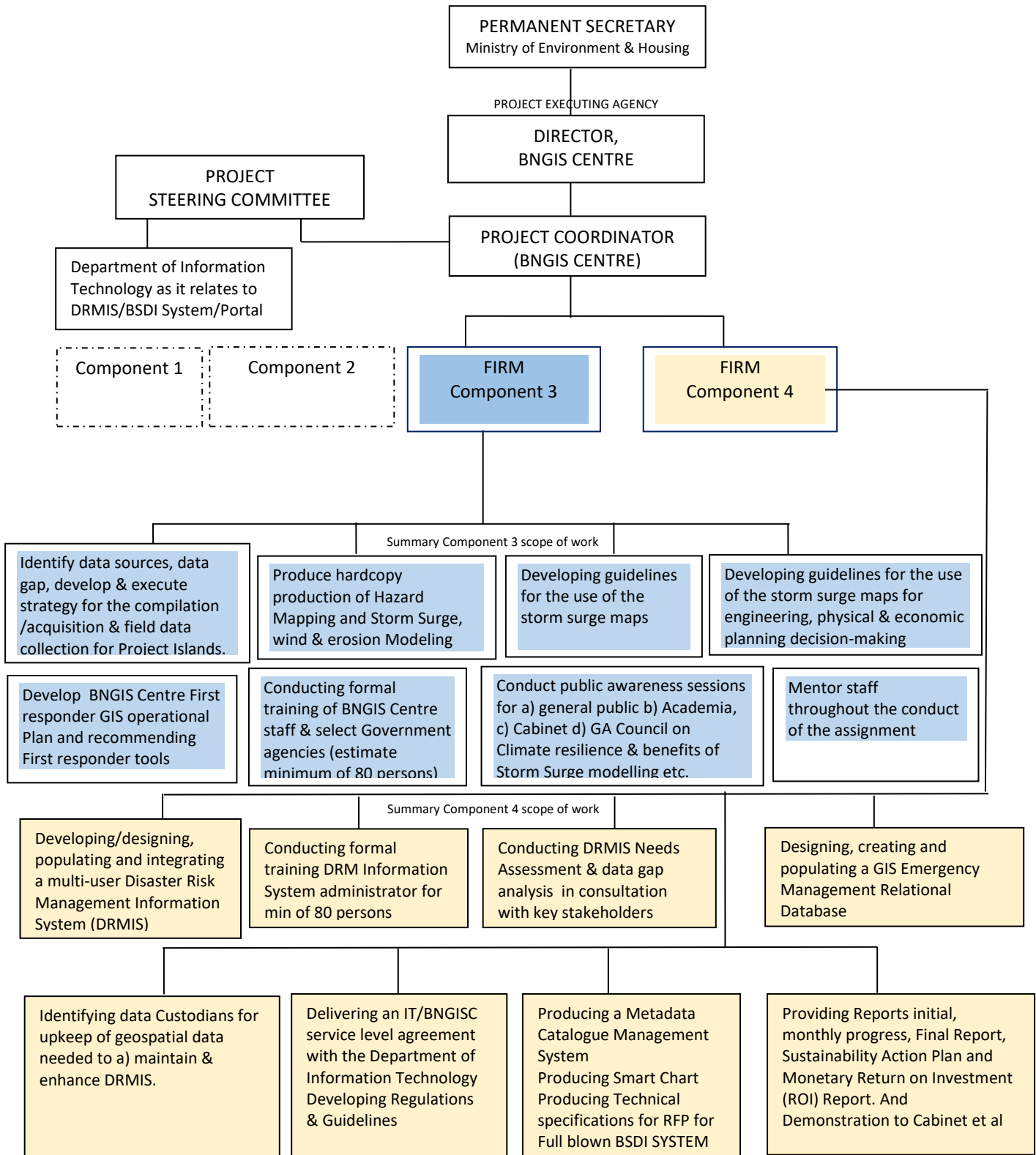
New Providence	Long Island
Cat Island	Bimini
Eleuthera	Exuma

#### ANNEX 4: LOCATION DETAILS OF PROJECT ISLANDS

Ref #	Island Name	Population 2010 Published by: Dept. of Statistics	Geographic Coordinate	Location Description
1	Cat Island	1,503	2423N07530W	Cat Island, located in the central Bahamas, is approximately 176 km (110 miles) southeast of New Providence. Its closest neighbors are Eleuthera Island to the northwest and San Salvador Island to the southeast
2	Eleuthera	7,826 (main Is. Only)	2510N07614W	Eleuthera is 90 km (60 miles) east of New Providence and 360 km (240 miles) southeast of Florida. Eleuthera's closest island neighbors include Abaco Island to the northwest and Cat Island to the southeast.
3	Long Island	3,024	2315N07504W	Long Island is 242 km (150 miles) southeast of Nassau (New Providence). Its closest neighbors are the Exuma Islands to the northwest and Crooked Island to the southeast
4	New Providence (Capital)	248948	2505N07733W	New Providence, the most densely populated island, is the capital city, Nassau. It is also one of the smallest Bahamian Islands. New Providence is 276 km (183 miles) southeast of Miami, Florida, U.S.A
5	Bimini	2008	2542N07915W	Bimini is the westernmost district of the Bahamas and comprises a chain of islands located about 80 kilometres (50 mi) due east of Miami, Florida, U.S.A. Bimini is the closest point in the Bahamas to the mainland U.S.A. and approximately 210 km (130 mi) west-northwest of Nassau. Bimini has three islands, North Bimini, South Bimini, and East Bimini.[2
6	Exuma	7314	2330N07545W	Great Exuma and Little Exuma form the largest island chain in The Bahamas that includes 365 cays (islands) stretching southeast end of New Providence to northwest Long Island. The Exumas are 188 km (125 miles) southeast of New Providence and about 528 km (350 miles) from Miami, Florida, U.S.A.



## ANNEX 5: GCE-DRM PROJECT COMPONENT 3 AND 4 ORGANIZATIONAL STRUCTURE



## ANNEX 6: DRMIS NEEDS ASSESSMENT OF KEY STAKEHOLDERS/BENEFICIARIES

Ref #	GEOSPATIAL ADVISORY COUNCIL	Recommended for DRMIS needs assessment & Gap analysis
1*	Financial Secretary, Ministry of Finance	•
2*	Ministry of the Environment & Housing	•
3*	Bahamas National Geographic Information Systems (BNGIS) Centre	•
4*	Department of Physical Planning	•
5*	Department of Lands & Survey	•
6*	Department of Civil Aviation	•
7*	Department of Marine Resources	•
8*	National Emergency Management Agency	•
9*	Department of Statistics	•
10*	Office of The Prime Minister	•
11*	Ministry of Public Works	•
12*	Ministry of Education,	•
13*	Bahamas Environment Science and Technology Commission	•
14*	Legal Affairs, Office of the Attorney General	
15*	Ministry of National Security	•
16*	Registrar General's Department	
17*	Inland Revenue, Ministry of Finance	
18*	Bahamas Power and Light	•
19*	Bahamas Telecommunication Company	•
20*	Water and Sewerage Corporation	•
21*	Cable Bahamas Ltd	•
22*	Grand Bahama Port Authority	•
	Tourism	•
	Port Department	•
	Royal Bahamas Defense Force	•
	Social Services	•
	Ministry of Health	•
23	NGO's	TBD
24	Local Government	• Long, Cat, Exuma, Bimini, Eleuthera, NP
25	Ministry of Health, Social Services, Department of Environmental Health	
26	Other Groups	TBD

\* Member Agency of the Geospatial Advisory Council

## ANNEX 7: SAMPLE NEEDS ASSESSMENT SURVEY CONTENT

- Assess relevant institutional infrastructure/administrative protocols etc. This would include, but is not limited to, assessing agencies, staffing, structure, GIS budgets etc.;
- Identify data and information products needed to support business functions;
- Identify agency data custodianship capabilities and updating procedures;
- Identify or recommend policies, procedures, standards etc. for spatial data management;
- Identify software and hardware required to support the agency business functions as well as the BNGISC central repository/clearinghouse functions;
- Identify hardware and network communications components necessary for performing the tasks or processes, as well as assessment of compatibility among existing hardware and additional required graphics hardware;
- Recommend organizational structure needed to operate and support GIS implementation at agency level;
- Identify training requirements and other capacity building activities needed to enable integration of GIS into agency works flows and to sustain the productive use of the technology;
- Conduct review of national GIS implementation thus far including strengths and weaknesses;
- Assess relevant human resource capacities and training needs related to GIS;
- Conduct a workshops on "the national framework", including preparation of agenda, identification of participants, facilitating discussions, recording of inputs;
- Present findings of assessment to participating agencies and draft National Framework;
- Facilitate discussions at workshops and prepare workshop;
- Conduct presentation to Senior Officials;
- Prepare National Framework for GIS Implementation Plan and any projected cost for each participating agency.
- Develop DRMIS based on needs input.

## APPENDIX 8 : GEOSPATIAL DATA (AUTHORITATIVE DATA) THEMES FOR DEPOSIT IN BSDI PORTAL

\* Harmonization with United Nations Global Geospatial Information Management (UN-GGIM) fundamental data themes

Ref #	Spatial Data Theme
1	Utility Infrastructure & Government services*
2	Buildings and Facilities *
3	Biological Resources
4	Cadastral parcels*
5	Addresses*
6	Climate & Meteorological geographical features
7	Coastal & marine sensitivity mapping
8	Cultural Resources
9	Ortho Imagery*
10	Surface /Land Cover/Soils/Earth*
11	Elevation Bathymetric & Terrestrial
12	Flood Hazards & Natural Risk Zones
13	Geodetic Control
14	Geographical Names*
15	Geology*
16	Electoral boundaries
17	Housing:
18	Hydrography*
19	Law Enforcement Statistics
20	Shoreline
21	Transportation Network (Terrestrial)
22	Transportation Network (Marine)
23	Transportation Network (Air) & Aviation infrastructure
24	Vegetation
25	Watershed Boundaries
26	Wetlands
27	Offshore Mineral Resources:
28	Public Health:
29	Public Land Conveyance records
30	State Owned Lands
31	Land Ownership Status
32	CENSUS & Statistical Units, Demography/population distribution. socio-economic statistics*
33	International Boundaries
34	Land use (existing and proposed) & Zoning
35	Scientific research
36	Geographic GRID Systems
37	Government Units
38	Settlement Boundaries*
39	Energy Resources
40	Species Distribution
41	Agricultural & aquaculture facilities
42	Oceanographic geographical features
43	Bio-geographical regions
44	Protected Areas (Marine and Terrestrial)
45	Any other themes as may be required

## ANNEX 9: PROJECT COMPLETION GUIDELINES FOR DECLARATION OF DESTRUCTION

The data and any copies (including data in user-restricted network/server folders, all backup and historical copies of the data) must be destroyed using a method of destruction that will render the data unreadable through the use of an appropriate mechanical, physical or electronic process and converted into such a form that cannot be reconstructed in whole or in part.

A. Electronic Copies of the Data from Component 1 and Derived Information Electronic copies of Data include all Data and related materials containing Data from the Client or from SANI ITA INC. or linked records generated with Data from SANI ITA INC. may include but not limited to the following:

- Derived data;
- Duplicated data;
- Analysis tables;
- Working files;
- Backup files;
- Data on server/cloud;
- Temporary files;
- Information generated by linking other information to the data;
- Data located in files such as word processing documents, spreadsheet workbooks, presentation slides.

i. Magnetic Media (e.g., Hard Drives, Magnetic Tape) Magnetic media are storage mediums on which digital or analog information is recorded as magnetic signals, such as computer hard drives, magnetic tapes, and floppy disks. For magnetic media and read-write media, either physical destruction or over-writing may be used.

Over-writing is a method used to clear Data from magnetic media that utilizes a program to write (1s, 0s, or a combination of both) onto the location of the media where the file to be sanitized is located. To ensure that the original Data is rendered irrecoverable, the areas of the disk holding the Data must be over-written, several times, with random data. The number of overwrites required depends on a number of factors, including the drive type and file system format, but typically, in order to defeat all but the most sophisticated of forensic recoveries, three passes is usually sufficient.

Physical destruction is the preferred sanitization method because this ensures that Data can never be recovered. Mechanical shredding and incineration are such measures used for disposition of sensitive data.

Please note that "regular" deletion of files is not adequate (including the "Empty Trash" feature) - the data still exists on the disk; it is merely the index pointers to the data which are removed in such an operation.

The following is an example of a security tool which is effective and readily available. • MS Windows, MacOS, Linux – BC Wipe ([www.jetico.com](http://www.jetico.com))

ii. Optical Media (e.g., CD, DVD) Optical media are storage mediums that hold content in digital form, written and read by laser technology. If there are copies of Data on optical media such as CDs and DVDs, the best approach to destroy the media is physical destruction such as use of a mechanical

shredder. Optical media are not magnetic and the Data cannot be overwritten, thus physical destruction is the only choice.

B. Paper Records Paper records should be destroyed in a manner that leaves no possibility for reconstruction of information. The appropriate method for destroying paper records is cross-cut shredding.

**ANNEX 10: GCE-DRM PROJECT DECLARATION OF DISTRUCTION FORM**

PLEASE COMPILE A FULL LISTING OF ALL DATA PROVIDED TO BSF SWISSPHOTO AG AND COMPLETE THE FOLLOWING DECLARATION OF DISTRUCTION FORM CONFIRMING DISTRUCTION OF IMAGERY, SPATIAL DATA/VECTOR DATA/TOPOGRAPHIC MAPPING, DIGITAL TERRAIN MODELS AND ANY OTHER RELEVANT DATA/INFORMATION/PLANS/MAPS PROVIDE TO BSF SWISSPHOTO AG AND IT AGENTS ETC. RELATING TO THE EXECUTION OF GCE-DRM PROJECT COMPONENT 2 AND STIPULATED IN CONTRACT DOCUMENT

THE INFORMATION DESCRIBED BELOW WAS DESTROYED IN THE NORMAL COURSE OF BUSINESS PURSUANT TO A PROPER RETENTION SCHEDULE AND DESTRUCTION GUIDELINES/PROCEDURES OUTLINED IN THIS CONTRACT.

Record by Island			ISLAND NAME						Date of Destruction
Ref #	Digital File Name	DESCRIPTION OF GEOSPATIAL DATASET/ INFORMATION	Please indicate Method of Destruction (Please Tick)					OTHER (State)	
			Burning	Shredding	Overwriting/ Formating	Pulping			
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									
15									
16									
17									
18									
19									
		Destroyed By:							
		Department Manager							
		Name of Firm:							
		Address of Firm							
		Date:							

## ANNEX 11: GCE-DRMIS AND BSDI SMART ORGANISATIONAL CHART REQUIREMENTS

Smart Chart Development and population - (Firm expected to research online examples (i.e. <http://www.netage.com/pub/whpapers/NARports/NARpt01-org.html>), Design and populate fields.

Ref #	Agency Name located in New Providence, Bahamas	Location	Family Island Branch location
1	Office of The Prime Minister Including Cabinet Office etc.	West Bay Street	NP, Abaco
2	<a href="#">Agriculture, Marine Resources and Local Government, Ministry of</a>	Island Traders Building, East Bay St <a href="http://www.bahamas.gov.bs/agriculturemarine">http://www.bahamas.gov.bs/agriculturemarine</a>	All inhabited Islands
3	<a href="#">Education, Ministry of And associated schools</a>	Thompson Boulevard <a href="http://www.bahamaseducation.com">http://www.bahamaseducation.com</a>	All inhabited Islands
4	<a href="#">Finance, Ministry of</a>	Cecil Wallace-Whitfield Centre, West Bay Street <a href="http://www.bahamas.gov.bs/finance">http://www.bahamas.gov.bs/finance</a>	All inhabited Islands
5	<a href="#">Foreign Affairs and Immigration, Ministry of</a> Including <b>Embassies And High Commissions,</b> International Representatives In The Bahamas Resident Ambassadors & Organizations	Goodmans Bay Corporate Center, West Bay St. <a href="http://www.bahamas.gov.bs/foreignaffairs">http://www.bahamas.gov.bs/foreignaffairs</a>	NP and countries around the World
6	<a href="#">Health, Ministry of Including Clinics</a>	Poinciana Building Meeting & Augusta Street <a href="http://www.bahamas.gov.bs/health">http://www.bahamas.gov.bs/health</a>	All inhabited Islands
7	Local Government		
8	<a href="#">National Security, Ministry of Including RBPF &amp; RBDF</a>	Churchill Building, Rawson Square <a href="http://www.bahamas.gov.bs/nationalsecurity">http://www.bahamas.gov.bs/nationalsecurity</a>	All inhabited Islands
9	<a href="#">Office of the Attorney General &amp; Ministry of Legal Affairs Including Department of Legal Affairs and Magistrate Courts</a>	John F. Kennedy Drive Immediately West of Ministry of Public Works <a href="http://www.bahamas.gov.bs/attorneygeneral">http://www.bahamas.gov.bs/attorneygeneral</a>	Administrator Offices See Annex
10	<a href="#">Public Service, Ministry of</a>	Poinciana Hill, Meeting Street <a href="http://www.bahamas.gov.bs/publicservice">http://www.bahamas.gov.bs/publicservice</a>	
11	<a href="#">Social Services and Community Development, Ministry of</a>	Aventura Plaza, John F. Kennedy Dr. & Bethel Ave. <a href="http://www.bahamas.gov.bs/socialservices">www.bahamas.gov.bs/socialservices</a>	
12	<a href="#">Tourism, Ministry of Including Offices located in Countries around the World</a>	George St, Bolam House <a href="http://www.bahamas.com">http://www.bahamas.com</a>	Most inhabited Islands
13	<a href="#">Works, Ministry of Including Department of Works</a>	John F Kennedy Drive <a href="http://www.bahamas.gov.bs/publicworks">http://www.bahamas.gov.bs/publicworks</a>	All inhabited Islands
14	<a href="#">Youth, Sports and Culture, Ministry of</a>	Thompson Blvd <a href="http://www.bahamas.gov.bs/mysc">http://www.bahamas.gov.bs/mysc</a>	Abaco
15	Transport and Aviation Ministry of	Manx, Dockendale Centre West Bay Street	All inhabited Islands
16	Labor and National Insurance	Meeting and Augusta Street	Most All inhabited Islands
17	Financial Services Ministry of	Goodmans Bay Corporate Centre West Bay	



		Street	
18	Grand Bahama Ministry of	East Mall Drive , Freeport Grand Bahamas	Grand Bahama
19	Environment and Housing Ministry of	Shirley and Charlotte Streets	

Ref #	Department/Unit Name located in New Providence, Bahamas	Ministry	Family Island Branch
1	<a href="#">Bahamas National Geographic Information Systems (BNGIS) Centre</a> , East Bay Streets, (242) – 604-2026	Ministry of The Environment and Housing	New Providence Only
2	<a href="#">Agriculture, Department of</a> Gladstone Business Complex Gladstone & Munnings Rd. (242) 325-7509, (242) 325-7413, (242) 325-7438, (242) 325-3898, (242) 322-2067	Ministry of Agriculture & Marine Resources	
3	<a href="#">Archives, Department of</a> Mackey St., (242)393-2175, (242)394-8205		New Providence Only
4	<a href="#">Auditor General, Department of The</a> 1st Fl. Norfolk House, Frederick Street, (242)322-2521. (242)323-8939		
5	Bahamas Power & Light		Various Islands
6	Bahamas Agricultural & Industrial Corporation		
7	Bahamas Environment, Science & Technology Commission	Ministry of The Environment & Housing	New Providence Only
8	<a href="#">Bahamas Information Services</a> Monarch Building, Bay Street, (242)326-5803		<a href="#">Bahamas Information Services Grand Bahama</a> Mall Drive (242) - 352-8525
9	Bahamas Investment Authority		New Providence Only
10	Bahamas Maritime Authority		
11	Bahamas Mortgage Corporation		
12	<a href="#">Bahamas National Drug Council</a> Royal Victoria Gardens, (242)325-4633, (242) 326-5355		New Providence Only
13	Bahamas Telecommunications Company		
14	Botanic Gardens	Ministry of The Environment & Housing	New Providence Only
15	<a href="#">Bureau of Womens Affairs</a> Frederick House, Frederick St, (242)356-0244. (242)356-0246		New Providence Only
16	<a href="#">Business Licence - Valuation Unit</a> Ground Floor Charlotte House, North Charlotte & Shirley Streets, (242) 325-2233/325-1171/325-2126	Ministry of Finance	
17	Broadcasting Corporation of The Bahamas		

18	Central Bank of The Bahamas		
19	<a href="#">National Emergency Management Agency (NEMA)</a> Gladstone Road, (242) - 322-6081/5		New Providence Only
20	<a href="#">Cabinet Office</a> 1st Floor Churchill Building, Rawson Square (242)322-3220/8, (242)322-2805/8		New Providence Only
21	<a href="#">Civil Aviation, Department of</a> Teacher & Salaried Workers Cooperative Credit Union Ltd. (TSWCCUL), Business Complex East Street & Independence Drive (242)326-0339. (242)326-0345. (242)326-0347 (242)326-3590. (242)326-0319	Ministry of Transport and Aviation	
22	Compliance Commission Charlotte House, Charlotte & Shirley Street		New Providence Only
23	<a href="#">Consular Division</a> East Hill Street, (242)323-5565/78 or (242)397-9300		
24	<a href="#">Consumer Affairs</a> National Insurance Board Building, Wulff Road (242) 3569391		
25	<a href="#">Cooperatives Development, Department of</a> Levy Building, East Bay St. , (242) - 323-6601 or 5/ 356-3152/ 325-7503 /325-7509		
26	<a href="#">Court of Appeal</a> 3rd & 4th Fl Cloughton House, Shirley & Charlotte Streets, (242) 328-5400. (242) 328-5401. (242) 323-4388, (242) 323-4481		
27	<a href="#">Culture, Department Of</a> Thompson Blvd. , (242) - 356-2691/2	Ministry of Youth Sports and Culture	
28	<a href="#">Customs Department</a> Customs House, Thompson Blvd., (242) - 325-6550. 326-4401/6		
29	<a href="#">Education, Department of</a> Thompson Boulevard, (242)502-2700/4	Ministry of Education, Science and Technology	
30	<a href="#">Environmental Health Services, Department of</a> Farrington Road, (242) 322-8037. (242) 323-2295	Ministry of The Environment & Housing	
31	<a href="#">Fire Services</a> East Street,(242) - 322-1225/302-8404		
32	Forestry Unit,	Ministry of The Environment and Housing	
33	Gaming Board		
34	<a href="#">Government Printing, Department of</a> Old Trail Road, (242) 393-1902. (242)393-1903. (242)394-2377		
35	<a href="#">Government Publications</a> Bay Street,(242) - 322-2410		
36	Health Statistics & Research Unit	Ministry of Health	

37	<a href="#">HIV-AIDS Centre</a> Royal Victoria Gardens, (242) - 323-5968. 325-2281. 322-6373		
38	<a href="#">House of Assembly</a> Parliament Square,(242) - 322-2041-2		
39	<a href="#">Housing, Department of</a> Charlotte House, Charlotte Street 242-323-3333/4 242 -302-5816	Ministry of The Environment & Housing	<a href="#">Housing, Department of - Abaco</a> Marsh Harbour (242) - 367-2157 225-0528  <a href="#">Housing, Department of - Grand Bahama</a> National Insurance Building (242) - 352-3630 352-3893
40	Hotel Corporation of The Bahamas		
41	<a href="#">Immigration, Department of</a> Hawkins Hill, (242) - 322-8504, 322-7530		
42	<a href="#">Information Technology, Department of</a> Cecil Wallace Whitfield Centre , West Bay Street (242) 322-4151	Ministry of Finance	
43	<a href="#">Judiciary, Office of the</a> Supreme Court, Bank Lane, (242)-356-5516, 356- 5515		
44	<a href="#">Labour, Department of</a> Clarence A. Bain Building, Thompson Boulevard (242) - 302-2550 thru to 302-2562		
45	<a href="#">Lands and Surveys, Department ,</a> Bay & Armstrong Sts , (242) - 502-1200, 322-2329	Office of The Prime Minister	
46	<a href="#">Law Reform and Revision Commission</a> 3rd Floor British American Building Navy Lion Road and Marlborough Street (242) - 502-0400		New Providence Only
47	<a href="#">Marine Resources, Department of</a> East Bay, (242) - 393-1777. 393-1014/5, 393-1096/7		
48	<a href="#">Meteorology, Department of</a> Bahamas Department of Meteorology Teachers & Salaried Workers Co-operative Credit Union's BusinessComplex, East Street Administration or Climate Section (242) 356-3734 or 36 or 38 Forecast Officer (242)377-7178, (242)377-7040		Freeport Administration (242) 225-3602 Freeport International Airport (242) 351-2019

	Upper Air Section (242)377-7461, (242)377-1752		
49	Nassau Flight Services		
50	Office of the Governor General, Mount FitzWilliams Government House		New Providence Only
51	Oil Exploration Unit	Ministry of The Environment	New Providence Only
52	<a href="#">Parliamentary Commissioner, Office of the</a> Farrington Road,(242) - 397-2000/1		
53	<a href="#">Passport Office</a> Basden Building, Thompson Blvd.,(242)325-2814/8		
54	<a href="#">Physical Planning, Department of</a> J F K Drive , (242) - 322-7550/2		New Providence Only
55	<a href="#">Port Department</a> Prince George Dock, (242)326-7354, (242)322-1596, (242)322-8832, (242)322-2049		
56	<a href="#">Post Office Department</a> East Hill Street , (242) - 322-3344, 322-1112/3 323-5543		<a href="#">Post Office Department - Grand Bahama</a> (242) 348-2770 Eight Mile Rock (242) 352-9371 Freeport (242) 353-7007 Hunters (242) 346-6130 West End (242) 353-4058 High Rock
57	<a href="#">Princess Margaret Hospital</a> Shirley Street, (242)322-2861		New Providence Only
58	<a href="#">Prisons Department</a> Fox Hill, (242) - 324-6404, (242)-324-6177, (242)-364-9800		New Providence Only
59	<a href="#">Public Health, Department of</a> Royal Victoria Gardens, (242) - 328-1149 328-2260		
60	Public Hospital Authority Collins Av., Nassau, Bah		
61	<a href="#">Public Prosecutions, Department of</a> 3rd Floor Post Office Building, (242) - 322-1141		
62	<a href="#">Public Works, Department of</a> John F Kennedy Drive, (242) - 322-4830/1		
63	<a href="#">Registrar General's Department</a> Shirley House, #50 Shirley Street, (242) - 397-9143-58, 397-8959. 397-9107, 397-8953 397-9178		
64	<a href="#">Rehabilitative/Welfare Services, Department of</a> Thompson Blvd. , (242) - 322-6317/8		

65	<a href="#">Road Traffic, Department Of</a> Clarence Bain Building, (242) - 325-3323. 325-6511. 325-6519		
66	<a href="#">Royal Bahamas Defence Force</a> Coral Harbour Base, (242) - 362-1818		
67	<a href="#">Royal Bahamas Police Force</a> East Hill Street (242) - 322-4444		<a href="#">Royal Bahamas Police Force - Grand Bahama</a> Gerald Bartlette Police Headquarters Mall Road, Freeport (242) - 352-5048, 350-3021
68	<a href="#">Sandilands Rehabilitation Centre</a> Fox Hill, (242) - 364-9600, 324-1246/7/8/9		New Providence Only
69	Securities Commission of The Bahamas		New Providence Only
70	<a href="#">Social Services, Department of</a> Thompson Blvd, (242) 326-0526		
71	<a href="#">Sports, Department of</a> Thompson Blvd, (242) 502-0605		
72	<a href="#">Statistics, Department of</a> Clarence Bain Building,(242) - 302-2400, 302-2467	Ministry of Finance	Freeport Grand Bahama
73	<a href="#">Supreme Court</a> Bank Lane ,(242) - 322-3315		
74	The Insurance Commission of The Bahamas		
75	The Senate		
76	<a href="#">Treasury Department</a> East and North Streets, Opposite Police Headquarters, (242) - 322-4561, 352-351(Freeport)		
77	<a href="#">VAT Bahamas</a> Value Added Tax Unit, Gladstone Freight Terminal (242) 461-8050, (242) 225-7280 (VAT Hotline)		
78	<a href="#">Youth, Department of</a> Thompson Blvd, (242)-502-0605		
79	Utilities Regulations and Competition Authority		
80	Water & Sewerage Corporation		
81	Geospatial Advisory Council	Ministry of The Environment & Housing	
82	Grand Bahama Port Authority		Grand Bahama

**ANNEX 12: GCE-DRMIS PROJECT EVALUATION WEIGHTING SCHEME**

<b>Written Proposal Assessment Score Sheet</b>			
<b>Evaluation Committee Member:</b>		<b>Signature:</b>	
<b>Ministry/Department:</b>		<b>Date:</b>	
<b>Evaluation Committee :</b>			
<b>FIRM Evaluated:</b>			
<b>GCE-DRM PROJECT COMPONENT # 3 &amp; 4:</b>			
<b>Ref #</b>	<b>MAX. PTS</b>	<b>POINTS</b>	<b>Written Proposal Assessment - Compliance with RFP</b>
1	2		Cover Page - Correctly Labeled
2	2		Transmittal Letter provided 28 December 2018
3	2		Table of Content - Consistency with RFP
4	2		Proposal Form - Completed/provided
5	5		Executive Summary
6	5		Introduction
7	12		Approach and Methodology
8	12		Response to Table of Requirements - Present/completed
9	10		Deliverables
10	10		Risk Management Plan
11	10		Quality Control Program
12	4		Scheduled of Critical / Milestone Dates
13	10		Cost Estimate
14	5		Financial Information
15	5		Supplemental Team Qualifications
16	5		Value Engineering Proposal
17	2		Other Information (at Discretion of Vendor)
18	20		Technical Proposal
19	5		Data delivery Requirements
20	5		Appendix: References
21	5		Appendix: Team Members
22	2		Appendix: Other (at Discretion of Vendor)
<b>Total Score</b>	<b>140</b>		