

## **THE BAHAMAS**

### **NATURAL RISK PREVENTIVE MANAGEMENT PROGRAM (BH-L1008)**

#### **TERMS OF REFERENCE FOR THE TECHNICAL WORK REQUIRED FOR THE IDENTIFICATION OF PRIORITY ACTIVITIES AND DESIGN OF THE PROGRAM**

##### **I. BACKGROUND**

###### **A. Disaster Risk Management**

- 1.1 Natural disasters are a development challenge. The Caribbean is a region particularly prone to natural hazards, which, depending on the vulnerability of the country, can result in natural disasters. The consequences are on several fronts - in addition to the loss of human lives, there are economic, social and environmental impacts affecting many sectors, including productive sectors such as agriculture, infrastructure and tourism. Comprehensive attention to the challenge is a long term process that needs to be built around Disaster Risk Management (DRM). The key elements of DRM are: (i) risk identification (ii) mitigation (iii) risk transfer (iv) preparedness (v) emergency response and (vi) rehabilitation and reconstruction. The first four constitute the pre-disaster phases and the last two the post-disaster phases and usually governments have centered their attention to the last phase.
- 1.2 The Bahamas is exposed to the effect of wind storms regularly and, during the hurricane season of 2004, The Bahamas was hit by two hurricanes. Although the effect on the different islands varied in intensity and type of damage, the overall effect reflected the need to strengthen The Bahamas' ability to cope with such events. Hurricane Frances first hit The Bahamas on 2<sup>nd</sup> September, 2004 moving east-west along the archipelago. The effects were felt in Mayaguana, Long Island, San Salvador, Rum Cay, Cat Island, Eleuthera, New Providence, the Berry Islands, Abaco and Grand Bahama. A month had not passed when Hurricane Jeanne made landfall in The Bahamas on 25<sup>th</sup> September, 2004. Jeanne impacted the north-western Bahamas, including Abaco, Grand Bahama, Andros, the Berry Islands, Bimini, Eleuthera, Exuma, and New Providence. In some communities floodwaters rose to more than six feet resulting in severe damage. For example, in the Eight Mile Rock Community of Grand Bahama, over 75% of the homes suffered significant structural damage.
- 1.3 An assessment done by the Economic Commission for Latin America and the Caribbean (ECLAC), at the request of the Government of The Bahamas and with the support of the IDB, showed several areas that are in need of improvement in order to increase the resilience of the country in the face of existing and well known hazards. There is a need for more systematic approach regarding disaster

management, including the enhancement of the country's response mechanism and the emergency management institutional arrangement, namely the National Emergency Management Agency (NEMA).

- 1.4 The Government of The Bahamas is committed to taking a pro-active, comprehensive and sustained approach to disaster management. The strategy focuses on reducing risks and vulnerability – the loss of life, economic disruption and damage to the environment and property. The approach is to fully integrate comprehensive disaster management into sustainable development planning. One of the pillars is the National Disaster Preparedness and Response Plan [NDP]. The purpose of the NDP is "*to establish a process and structure for the systematic, coordinated and effective delivery of national assistance to address the consequences of any major disaster or emergency*". It is built around two sections, one deals with the policies and concepts of operations that guide assistance to disaster-stricken areas and the second summarizes planning assumptions, response and recovery actions.
- 1.5 As part of this effort, the Government recently enacted an “Act to Provide for a More Effective Organisation of the Mitigation of, Preparedness for, Response to and Recovery from Emergencies and Disasters (Act No. 4 of 2006)”<sup>1</sup>. The Act creates the National Emergency Management Agency (NEMA) as a Department of Government charged with responsibility for disaster relief management. This includes the coordination and implementation of government policies for Disaster Risk Management. Among several provisions, there is a National Emergency Management Advisory Committee with participation of several agencies (including civil society as needed), a mandate for the establishment of a national emergency operation center under NEMA's purview and a mandate to maintain a list of shelters. This legislation constitutes a positive step towards comprehensive disaster risk management and needs to be advanced with proper regulations and capacity building.
- 1.6 The Government of the Bahamas has requested IDB's assistance in financing a Program whose goal is to contribute to sound disaster risk management by establishing a well functioning system for disaster management to provide appropriate planning for, response to, and recovery efforts following a disaster. The program focuses on the aspect of preparedness. A secondary objective of the program is to develop a Country Risk Profile to orient actions in other areas of disaster risk management that would be helpful to launch larger programs shown to be beneficial to The Bahamas when it comes to meet risk reduction objectives. The operation, Natural Risk Preventive Management Program (BH-L1008), is strongly grounded on the plan because preparedness improvement (communication, community work and shelters) is strongly linked to the first area, the component on legal and institutional issues relates to both areas, and the Country Risk Profile relates mainly to the second area of the plan.

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<sup>1</sup> The date of assent of the Act is 6 February, 2006. The date of commencement of the Act is 1 March, 2006.

- 1.7 Recent assessments done by UNDP, CDERA and ECLAC (this last one financed by the Bank) show that The Bahamas has made good progress with respect to its capability to respond to natural disasters but that this progress needs to be consolidated with actions in specific areas. In particular there is a need to work on the following five components around which this project is designed:
- a. **Legal and Institutional Framework:** This component will finance technical assistance to build up the institutional capacity of the principal agencies participating in the National Disaster Preparedness and Response Plan where NEMA is the core agency but sector ministries and local governments also participate. The project will focus on equipping NEMA's facilities (including the national emergency operation center), technical assistance to improve and structure the legal framework to support NEMA, and capacity building around disaster risk management. Resources for the building of the facility may be considered for local counterpart funding depending on the cost dimension of the components of the project.
  - b. **Communications:** The emphasis of this component will be on (i) communication protocols between local emergency command centers and the national emergency operation center; and (ii) communication between the chief commander of local emergency command centers and relevant parties such as shelter managers. This component may also include equipment and training. Compatibility with current operating systems will be a selection criterion.
  - c. **Shelters:** The project will include support to provide shelters with necessary supplies to meet the needs of the population during emergencies. Additionally, part of the project will be retrofitting of shelters based on the development of a national shelter policy and needs assessment that will take place as part of the project. Notwithstanding this, a set of critical shelters will be identified during analysis for retrofitting and upgrading early in the project.
  - d. **Community Preparedness:** This component will emphasize effective partnerships with civil society and local governments in aspects of public education and training, and protocols for the transmission of information prior to, during and ex-post disaster events. This component will also complement the shelter component with adequate training of shelter managers and public awareness related to shelter use. It also includes an awareness campaign and education programs.
  - e. **Country Risk Profile:** This component will finance a comprehensive analysis based on catastrophe modeling and loss estimates on natural disasters, taking into account all aspects of Disaster Risk Management in Bahamas, to identify actions that would reduce risk to acceptable levels.

## **II. CONSULTANCY OBJECTIVES**

- 2.1 The main objective of the consultancy services needed is to support the preparation of the Natural Risk Preventive Management Program (BH-L1008). The specific objectives are the **design and costing of each component and its activities**, needed to achieve the goal and specific objectives of the Program. For each component, the activities should be detailed enough to establish financing needs. The analytical work will also identify if special execution arrangements will be needed regarding each component. The component and its related activities shall be adequately dimensioned (costing and execution timeline). The outputs of the consultancy will serve as input for the preparation of the program by identifying priority activities that will be financed with the operation.

### **III. ACTIVITIES (GENERAL AND BROKEN UP BY COMPONENTS) THE CONSULTANT WILL BE REQUIRED TO UNDERTAKE**

#### **A. For the program in general.**

- 3.1 Work directly with NEMA and other relevant agencies for each component and the program as a whole.
- 3.2 Become knowledgeable with the recently enacted legislation and other policy documents in The Bahamas related to disaster risk management including emergency response (see background). Examine in detail the Act (see 1.5) to identify regulations that need to be developed and capacity building measures needed to meet the institutional mandate of the Act.
- 3.3 Conduct a fact finding mission to perform site visits, perform interviews and collect documentation needed to perform the consultancy tasks. The team will also accompany the Bank's technical mission leading to the preparation of the project report.

#### **B. Component on Legal and Institutional Framework**

- 3.4 Review the legal and institutional analysis done for NEMA and DRM in The Bahamas and evaluate management needs.
- 3.5 Evaluate The Bahamas' current capacity regarding DRM including human resources, training, inter-government coordination and relationship with the private and public sector.
- 3.6 Based on the Act, identify NEMA's specific needs regarding staffing, working facilities, training, technical equipment including the emergency operation centers. The consultant shall review the budget allocation of NEMA to ensure that the financing of the Program (BH-L1008) is targeted to the most critical and unfunded aspects of the required institutional strengthening.

- 3.7 Identify the activities that need to take place to assist NEMA in the preparation of the “*Disaster Preparedness and Response Policy Review*” following the provisions of the Act. This task implies identification of consultancies that will need to be contracted, workshops that will be needed and procurement of other services.
- 3.8 Identify the activities that need to take place to assist NEMA in the preparation of the “*National Disaster Preparedness and Response Plan*” following the provisions of the Act. This task implies identification of consultancies that will need to be contracted (e.g. for the development of the procedures that the Plan should contain), workshops that will be needed and procurement of other services. The information about these activities should include estimation of the costs needed to implement the Plan after formulation and approval and for annual update as called for in the Act.

### **C. Component on Communications**

- 3.9 Assist the National Emergency Management Agency (NEMA) with the evaluation of its existing communication systems and review NEMA’s capacity regarding communication systems to perform the mandates established in the Act.
- 3.10 Examine the emergency communication systems that are in place for the following actors: (i) the Royal Bahamas Police Force; (ii) the Royal Bahamas Defence Force; (iii) the Bahamas Electricity Corporation; (iv) the Bahamas Telecommunications Company; (v) the Ministry of Public Works; (vi) the Ministry of Health; (vii) the Department of Meteorology; (viii) the Ministry of Education, (ix) the Bahamas Information Services and all radio and television stations (but with emphasis on those of official capacity such as the Bahamas Broadcasting Corporation); (x) the Ministry of Tourism; and (xi) all other actors identified as being of relevance. This assessment will include equipment currently in place, capacity, activation controls and contacts. It will form the basis of a communications database (communications contact and in-place-communications equipment).
- 3.11 Determine the need and usefulness of the establishment of a small team comprised of representatives of each of the entities mentioned above to function as NEMA’s key communications (institutional) network through which all communications arrangements will be made during emergencies.
- 3.12 Analyze current communication equipment and recommend possible actions such as replacement, update or purchase of equipment taking into account criteria related to obsolescence, frequencies, accessibility, compatibility and routine maintenance. For recommendations regarding the purchase of new equipment, the equipment should conform with frequency requirements that allow for a maximum reach (given the archipelagic nature of The Bahamas) and possess adequate capacity to effectively function during a Response and

Recovery mode of operation - e.g. consideration of geographical location, shelter level ranking, and community responsibility. Recommendations about the communications network should factor in the, soon to be installed, Mobile Trunking System (MTR) of the Royal Bahamas Police Force, which intends to reach all police offices in the network in all of the islands (the main objective is to obtain a channel for emergency management on the system just for NEMA).

- 3.13 To assist NEMA in the dimensioning of its new telecommunications system (recommendations about PABX switchboard (trunks, extensions, functionality such as voicemail, draft RFP); staff requirements; definition of specific roles for Cable Bahamas, BTC, Comsat, Marisat, and any other relevant actors, which have the capacity to provide internal and external telecommunication linkages.

#### **D. Component on Shelter Management**

- 3.14 Request from NEMA and review all available reports, such as built drawings, and technical specifications used for the construction of existing shelter facilities. These reports shall include the Draft of the Shelter Program Model and the National Disaster Preparedness and Response Plan for The Bahamas as well as other similar regional studies that the Consultant may obtain by itself. After the study of the available documents the Consultant will carry out interviews with technical and other personnel of NEMA and other government and private entities to supplement the information obtained.
- 3.15 Perform a shelter inventory by undertaking the following:
- a. Evaluation of existing shelter inspection checklists, comparison to procedures developed, definition of adjustments to be made if necessary.
  - b. If necessary, proposal for additional shelters.
  - c. Selection of shelter sample for physical inspection.
  - d. Identification of shelters in need of retrofitting following the provision of the Act.
  - e. Coordination with NEMA in order to identify list of Critical Shelters.
  - f. Coordination with NEMA for the selection of a shelter sample to be retrofitted.
  - g. Coordination with NEMA regarding the location of shelters within a hazard mapping area and evacuation route planning.
  - h. Coordination with NEMA in order to identify specially vulnerable populations, hazardous or toxic materials storage, and critical facilities in vulnerable areas.
  - i. Coordination with NEMA regarding distribution/storage of food and supplies for use in shelters during emergencies.
- 3.16 Based on the results of point f. above, identify 2 or 3 shelters that could be retrofitted with financing from the Program and could serve as pilot for feedback to the update the Shelter Program Model. This task includes identification of works and procurement of goods and services as needed. This should be accompanied with cost estimates and execution timelines.

- 3.17 In coordination with NEMA, analyze The Bahamas' current capacity regarding shelter management and review the execution of the Shelter Management Training Program to identify complementary needs.
- 3.18 Develop a roadmap for the update of the Shelter Program Model. The Consultant will submit a proposal for adjustments that shall comprise international standards and best practices on this matter. The proposed Program Model shall be coordinated with NEMA officials and contain as minimum the following:
- a. Shelter Management at the National and District levels;
  - b. Shelters Selection Guide: sites for shelters, building selection - vulnerability of buildings, structure, considerations for long term sheltering;
  - c. Categories of Shelters (according to facilities, location, structural responsiveness to specific disaster events, special care, etc.);
  - d. Inventory of vulnerable persons or families;
  - e. Inspection of Shelters;
  - f. Retrofitting, Maintenance, and Repair of Shelters;
  - g. Training Programs;
  - h. Procedure for revising the Shelter Program Model identifying resources to keep the program updated;
  - i. Shelter Operations and Management: pre-activation, opening of shelters, closure of shelters, post-activation; responsibility chart; guidelines for shelter capacity; shelter entry and registration procedures; orientation of occupants; disasters and mental health;
  - j. Shelter support services, medical service and first-aid, shelter supplies, communication, feeding, water purification.

#### **E. Component on Community Preparedness**

- 3.19 The objective of this component is to prepare communities for the impacts of natural disasters. This component will emphasize effective partnerships with civil society and local governments in aspects of public education and training, and protocols for the transmission of information prior to, during and ex-post disaster events. This component will also complement the shelter component with adequate training of shelter managers and public awareness related to shelter use. It also includes an awareness campaign and education programs. The design of this component requires the following:
- 3.20 Revision of current elements of disaster preparedness that are in place such as outreach programs, work by NGOs and government, knowledge by local governments on disaster risk management including budget allocation.
- 3.21 Review the recently enacted legislation, especially with regards to the mandate to the elaboration of the National Disaster Preparedness and Response Plan (NDPRN) and the provisions included in the Act (Section 8).

- 3.22 Identify activities for the formulation of the NDPRN and subsequent implementation. For each activity, there shall be an objective description, a brief description of the scope of the activity, the modality of execution (purchase of goods, hiring of consultancies, workshops, etc) and the cost associated.

#### **IV. REPORTS**

- 4.1 Inception Report. After completion of the document review and supplementary interviews the Consultant will prepare an Inception Report including:
- a. the Consultant's understanding and interpretation of the terms of reference;
  - b. changes to the terms of reference since the start of the assignment; and
  - c. an appraisal of the available information and an outline of the consequential field investigations to be conducted so as to complement the information already obtained, including any special investigations which may be required.
- 4.2 The final report will be a technical document that will serve as the basis to NEMA and the IDB's project team for the preparation of the project document and the loan proposal that will be examined by IDB's internal review committees. The report shall be structured in a way that reflects the activities of the consultancy and will include an executive summary, an introduction, description of the Program detailing each component and activities, cost charts and tables and execution chronograms. For each component, there shall be one or more measurable indicators to track the Program's execution.
- 4.3 Annexes to the Report should include, as minimum, the following:
- a. Complete report of the consultancy tasks performed including the list of institutions and individuals contacted. All consulted documentation should also be listed.
  - b. A summary table of the Program
  - c. Execution Gantt charts and cost tables; and
  - d. Draft versions of memorandum of understanding or other documents that may be needed for the execution of the Program.