



## TERMS OF REFERENCE

*Papua New Guinea*

**Position:** National Consultancy –Disaster Risk Management

**Closing date:** 25 May 2017

### I. Details

**Title:** Project Consultant - Disaster Loss and Damage Information System

**Department/Unit:** Environment

**Reports to:** Project Manager (UNDP Disaster Risk Management Project)

**Duty Station:** Port Moresby

**Expected Places of Travel (if applicable):** DRM Project Pilot Provinces (Western Highlands, Simbu, Madang, Bougainville and Central).

**Duration of Assignment:** 105 working days from June to October 2017

#### ***Need for presence of IC consultant in office:***

☐ Partial (explain)

☐ Intermittent (explain)

☒ Full time/office based (needs justification from the Requesting Unit)

#### **Provision of Support Services:**

**Office space:** ☒ Yes ☐ No

**Equipment (laptop etc):** ☒ Yes ☐ No

**Logistic Services:** ☒ Yes ☐ No

If yes has been checked, indicate here who will be responsible for providing the support services:

**UNDP Country Office and DRM Project Team**

Signature of the Budget Owner: 

### II. Project Description

The UNDP Disaster Risk Management (DRM) Project is tailored to provide strategic support to the Government of Papua New Guinea (PNG) in reducing vulnerability and increasing resilience to disasters. Within the framework of this project, UNDP is providing technical support to National Disaster Centre (NDC) with the development of the National Disaster Loss Database. The project will contribute to the strengthening of disaster response preparedness mechanisms and procedures at the national and sub-national levels. Implementation of the project is done at the national level as well as in 5 pilot provinces of Central, Western Highlands, Simbu, Madang and Autonomous Region of Bougainville, working closely with the Provincial Disaster Coordinators (PDCs) in developing Disaster Risk Management Plans, damage assessment and reporting, establishing co-ordination mechanisms and building capacities for early warning, developing Standard Operating Procedures (SOPs), providing essential training support and equipment and developing the National Disaster Loss Database to be managed by the National Disaster Centre. The project provides essential interface between the UN system, members of the Disaster Management Team (DMT) and Government Disaster Management Authorities and envisage enhancing the capacities within the country for better response and early recovery planning.

The development of PNG National Disaster Loss Database supports the work of the National

Disaster Centre with the updated hazard and risk information to better visualise, analyse and interpret data to understand relationships, patterns and trends of disasters for better decision making, improved communication, better record keeping and cost savings. This analyses is expected to support longer-term risk reduction work at the provincial and local levels.

UNDP is seeking to recruit a Project Consultant to establish the national disaster and damage information system in PNG. The goal is to provide useful information and analysis based on the occurrences and impacts of the past disaster events to support policy and decision-making for preparedness, mitigation, response, and risk reduction. Appropriate linkages among existing institutions will be strengthened to ensure that data sharing across institutions is facilitated by the disaster management information system and the database provides inputs to integrate risk reduction into development work, therefore supporting sustainable development in the country.

The Project Consultant will work under the direct supervision of DRM Project Manager in close coordination and consultation with a senior official at National Disaster Center (NDC). NDC will facilitate in the coordination and contact with relevant stakeholders in the country. The Consultant will be based at NDC and will work in close collaboration with UNDP Country Office in Port Moresby, and will seek technical guidance from UNDP Bangkok Regional Hub (BRH), Thailand for planning and implementation of the activities. Within UNDP Country Office, the DRM Technical Specialist will provide the overall supervision and monitoring of the Project Consultant's performance. The Consultant will also be supported by NDC GIS Interns to develop the GIS interface of the database.

### III. Objectives of Assignment

The overall objectives of the assignment is to establish the national disaster loss and damage information system in PNG as well as developing the capacity of relevant agencies in managing disaster data.

### IV. Scope of work

The scope of work will be largely around the following key functions:

1. Assess the availability of disaster related data (source, format, data holder, consistency) and prepare a work plan for the establishment of a disaster loss and damage information system;
2. Collect historical disaster data from identified national, provincial, and local agencies and establish disaster loss and damage information system at the designated agency;
3. Support development of the GIS interface of the database;
4. Organize learning and knowledge sharing events on the information system for key stakeholders in close collaboration with UNDP and with guidance from the designated government agency;
5. Lead the analysis of disaster data to assist in identifying vulnerable areas to various disasters in the country to inform policy and to support decision-making.

### V. Expected Results

1. The National Disaster loss and damage information system is established;
2. The capacity of relevant agencies in managing disaster data is developed.

1. Assess the availability of disaster related data and prepare a work plan for the establishment of a disaster loss and damage information system

- Familiarize with the DesInventar Tool (a disaster information management system open

source software);

- Support the government in the assessment of the technical capability, requirements and needs regarding the setup of a disaster loss and damage information system;
- Consult with the government on standard data collection formats and data collection procedures. Hold bilateral consultations with stakeholder and key line ministries who are involved in the collection and compilation of disaster related data;
- Based on the consultation and information collected from stakeholders, develop a report which includes a detailed work plan for building the disaster loss and damage information system.

2. Collect historical disaster data from identified national, provincial, and local agencies and establish disaster loss and damage information system at the designated agency

- Based on the consultation with the government and inputs from key stakeholders, develop disaster loss and damage information system to meet the needs and disaster context of the country;
- Establish the information system using appropriate data hosting infrastructure and services;
- Undertake pilot collection of disaster data and develop a strategy for collection of disaster data from various agencies for the entire country;
- Lead and supervise collection and entry of disaster data in the newly established information system as per agreed protocols and procedures with appropriate quality control and data validation system.

3. Support development of the GIS interface of the database;

- Support NDC with the collection of all GIS related data available within different departments and existing databases into one platform (preferably NDC website);
- Together with GIS Interns, and in close consultation with NDC Senior Management and technical staff develop the GIS interface of the Disaster Loss Database;
- Support development of a GIS reporting system for disaster events;

4. Organize learning and knowledge sharing events on the information system for key stakeholders in close collaboration with UNDP and with guidance from the designated government agency

- Support organization of technical training workshop under the direct guidance of UNDP BRH for key stakeholders on the disaster loss and damage information system;
- Lead the technical training for various stakeholder groups at national and sub-national levels;
- Develop necessary knowledge products (such as manuals, how-to guides, data collection formats) to promote learning.

5. Lead the analysis of disaster data to assist in identifying vulnerable areas to various disasters in the country to inform policy and to support decision-making

- Support the analysis of data to help identify the most disaster prone areas in the country;
- Plan launch of the findings of the analysis with wider group of stakeholders to ensure its usage by all;
- Retrieve and provide user specific data from the information system and make it available to those who need it at national and sub-national levels;
- Institutionalize the information system within the designated host government agency with adequate staff capacity and skills for maintaining and updating the system.

## VI. Competencies

### Corporate Competencies:

- Demonstrates commitment to the UN's mission, vision and values;
- Displays cultural, gender, religion, race, nationality and age sensitivity and adaptability;
- Ability to maintain effective rapport with people.

### Functional Competencies:

#### *Knowledge Management and Learning*

- Shares knowledge and experience;
- Actively works towards continuing personal learning, acts on learning plan and applies newly acquired skills.

#### *Development and Operational Effectiveness*

- Strong analytical skills and the ability to master new material quickly;
- Ability to manage priorities in order to meet tight deadlines; and
- Good communications, interpersonal and report writing skills.
- Creativity and innovation abilities

#### *Leadership and Self-Management*

- Focuses on result for the client and responds positively to feedback;
- Consistently approaches work with energy and a positive, constructive attitude;
- Remains calm, in control and good humored even under pressure;
- Ability to manage the work of teams, subordinates and consultants;
- Proven ability to work flexibly and independently as part of an interdisciplinary and/or multi-cultural team; and delivery quality results against tight deadlines;

## VII. Deliverables/Final Products Expected

Deliverables/ Outputs	Estimated Duration to Complete	Target Due Dates	Number of working days	Percentage of lumpsum payments
1. Work Plan for Disaster loss and damage information system.	05 – 20 June	20 June	12	10%
2. Demo version of Disaster Loss Database	21-30 June	30 June	8	10%
3. Disaster loss and damage information system is established at NDC (including GIS interface).	03 July – 31 August	31 August	42	40%
4. Capacity Building (Training, workshops) for relevant agencies in managing disaster data.	01 September – 29 September	29 September	21	30%
5. Final Report with recommendation on future disaster data collection and data management.	02 October – 31 October	31 October	22	10%

## VIII. Required Qualifications

### Education

Bachelor or equivalent degree in information Technology or Informatics is preferred. Knowledge on Disaster Management and Statistics is an asset.

### Experience

At least 3 years of experience in setting up and maintaining information management systems. Knowledge of Java, web based applications and relational database will be an advantage.

Experience of working with government institutions is desirable.


**Language Requirements**

Excellent written and spoken English with knowledge of Pidgin/Motu would be an asset.

**IX. Approval**

This TOR is approved by:

Signature

\_\_\_\_\_

Name and Designation

MICHAEL SEMBENDIMBO - PROJECT MANAGER

Date of Signing

19/05/17.

