



**TERMS OF REFERENCE**  
**FOR INDIVIDUAL CONTRACT**

<b>POST TITLE:</b>	National Consultant-Climate Information System Developer
<b>AGENCY/PROJECT NAME:</b>	UNDP Thailand/GCF NAP Marine Project
<b>COUNTRY OF ASSIGNMENT:</b>	Bangkok, Thailand
<b>DUTY STATION:</b>	Home-based with potential travels in Bangkok and participate in conducting consultations with institutions and staffs.
<b>EXPECTED DURATION:</b>	Max. of 100 working days from 1 July 2021 to 30 April 2022

### **1)GENERAL BACKGROUND**

The GCF NAP Readiness and Preparatory Support project titled ‘Increasing resilience to climate change impacts in marine and coastal areas along the Gulf of Thailand’ will be an important contribution to the implementation of Thailand’s National Adaptation Plan (NAP), prepared by the Office of Natural Resources and Environmental Policy and Planning (ONEP), which provides an overarching planning framework for addressing climate change adaptation.

This project focuses on advancing climate change adaptation planning in relation to marine and coastal areas in the Gulf of Thailand (“the Gulf”). Anticipated extreme events, sea-level rise, climate induced erosion, drought, and flooding are expected to affect local tourism, agriculture, fisheries, aquaculture, and natural resources as well as create additional stress on land and water resource management.

The project is complementary to other initiatives supporting the NAP implementation in Thailand. Thailand’s NAP identified six key sectors/ thematic areas, namely: (i) water management; (ii) agriculture and food security; (iii) tourism; (iv) public health; (v) natural resource management; and (vi) human settlement and security. This project will focus on addressing gaps of current support programs. The project will work towards improving climate-responsive ‘natural resource management’ (thematic NAP area v) through the integrative approach of enhancing adaptation planning and budgeting in key marine and coastal economic sectors, e.g. targeting agriculture and fisheries (thematic NAP area ii) and tourism (thematic NAP area iii). It will be implemented in close collaboration with the Department of Marine and Coastal Resources, under the Ministry of Natural Resources and Environment (MoNRE). The overall timeline of Thailand’s NAP implementation allows this project to utilise best-practices and information from the other interventions, and to

meaningfully expand the knowledge-base and regulatory framework, particularly for the sub-national level. Also, in perspective to revise and update Thailand's NAP.

In this context, the project objective is to “Integrate climate change adaptation into marine and coastal area related planning and budgeting”. GCF resources will be used to address barriers that hinder information, knowledge, and coordination for adaptation planning; technical capacities for integration of risk informed approaches in planning and budgeting; and a lack of options to attract financing for climate change adaptation, particularly from the private sector.

The project will be nationally executed as per UNDP Direct Implementation Modality (DIM) procedures and adhering with Readiness and Preparatory Support Framework Agreement reached between GCF and UNDP.

The Development of a climate adaptation information management platform and Geographical Information System (GIS) maps covering climate change induced risks for eco-/social systems and economic sectors in marine and coastal areas of Thailand. The generated information will be informed and enable the implementation of the national adaptation plan and frameworks to safeguard, protect, and manage marine and coastal resource along the Gulf of Thailand.

## **2) OBJECTIVES OF THE ASSIGNMENT**

The objectives of the assignment are to develop a climate adaptation information management platform and/or building on the existing online adaptation platform, including content for GIS, and prepare knowledge management and communications workplan for marine and coastal resources sectors management along the Gulf of Thailand. The accessibility of the up-to-date climate information system and dataset are very significant to support decision making and national adaptation plan. The data, information, and visual representation is also useful for those engaged in climate change studies and research in the Gulf of Thailand.

## **3) SCOPE OF WORK**

Key duties and responsibilities include:

Task 1: Prepare the approach to update an existing adaptation platform and building a Geographical Information System mapping interface for marine and coastal resources sectors (e.g. fisheries, agriculture, tourism along the coastal zone):

- Consult with project partners and stakeholders on existing climate adaptation platform and GIS system;
- Scope information management arrangements to assess how different stakeholders and institutions access data and information from the Thailand Climate Change Adaptation Information Platform program or T-PLAT and GIS system, how it is stored, map-put current databases and the ownership structures and maintenance arrangements, and their accessibility;

- Review inception reports and summary of the stocktaking assessment, risk and vulnerability assessment, and downscaled climate change models and projections to identify relevant data and information to enhance the platform and GIS system;
- Based on this assessment, identify gaps and weaknesses in information management that need to be addressed;
- Identify feasible options for developing and/or updating the platform, including built GIS system and procedures including advantages/disadvantages of each option, full costs to run the platform (keeping in mind internet charges, hardware and software purchases and any other associated expenses); and
- Prepare a report on the assessment and gap analysis and PPT both in Thai and English languages.

Task 2: Develop and/or update Climate adaptation information management platform and Geographical Information System:

- Consult and work with relevant government agencies to develop and/or update climate adaptation information platform and GIS system;
- Identify and generate baseline dataset of marine and coastal resources, including socio-economic information about coastal communities and economic sectors, and climate change risks along the Gulf of Thailand that can be of relevance for the implementation and update of Thailand's national adaptation plan, marine and coastal resources management and other activities, such as research activities;
- Collect data and information required and other related materials from relevant government agencies, e.g. data and field surveys, copies of reports, photos, video and other information as inputs to develop platform and GIS system;
- Develop the platform and design GIS system mockup; and
- Provide a progress report of this task and PPT both in Thai and English languages.

Task 3: Develop and operationalize mock-up version of GIS system and organize training workshops for key government agencies and stakeholders:

- Develop mock-up version of the platform and GIS system;
- Develop GIS platform and test its functionality via mock-up version;
- Prepare platform and GIS launching version, based on piloted version;
- Prepare manual of using GIS system (hard copy or online version); and
- Organize training on accessing the GIS system to local government officers and other relevant stakeholders.

Task 4: Launch developed and updated climate adaptation information management platform and final GIS system for user's access to visualized climate impact projections in targeted areas for various marine and coastal resources and/or socio-economic sectors:

- Responsible for providing technical supports to launch developed and updated climate adaptation information management platform and final GIS system.

#### **4) INSTITUTIONAL ARRANGEMENTS**

The Climate Information System Developer will work under the direct supervision of Project Management Unit (PMU), ONEP, and Project Manager and Programme Analyst, UNDP for technical guidance.

## **5) DURATION OF ASSIGNMENT, DUTY STATION AND EXPECTED PLACES OF TRAVEL**

This assignment is anticipated to take place between 1 July 2021 – 30 April 2022 for a maximum of 100 working days.

Duty Station: Home-based with potential travels in Bangkok and participate in conducting consultations with institutions and staffs.

For any unforeseen official mission apart from this TOR mentioned, the Consultant will be requested to submit the concept note of mission for approval by UNDP prior to undertaking any mission. Travels will be authorized by UNDP as and when required.

## **6) EXPECTED OUTPUTS AND DELIVERABLES**

All the outputs/deliverables as stipulated below needs to be reviewed and certified by ONEP/the Project Manager at UNDP prior the payment is released.

Specific deliverables during the assignment are as follows:

No	Deliverables/ Outputs	Estimated Duration to Complete	Review and Approvals Required
1	An Inception Report which includes a summary of the context, the scope of developing/updating an existing adaptation platform and building Geographical Information System for marine and coastal resources sectors with a detailed methodology to be used as agreed by the initial scoping with key sector stakeholders and based on initial review of data (10 working days).	10 July 2021	UNDP
2	Developed and updated Climate adaptation information management platform (35 working days).	10 November 2021	UNDP
3	Mock-up, testing and final version of GIS system for user's access and visualized climate impact projections in targeted areas for various socio-economic sectors (45 working days).	15 April 2022	UNDP

4.	Presentation and summary reports covering all implemented tasks both in Thai and English languages (10 working days).	15 April 2022	UNDP
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## 7) QUALIFICATIONS

### Education:

- At least Master's degree in Remote Sensing and GIS, Engineering, Natural science, Environmental Sciences, Economics, Social Sciences.

### Experience:

- At least 5 years professional experience in developing databases and GIS-based tools or research in natural disasters, disaster risk awareness, risk assessment planning, and policy or related fields;
- Demonstrate strong technical capacity in geospatial information science, ability to coordinate with the project's national and international consultants;
- Substantial experience in marine and coastal resources sectors (or similar) on issues related to the disaster risk awareness, sustainable development, environmental management and infrastructure assessment;
- Proven capability to facilitate interactive and participatory planning workshops with diverse stakeholders across sectors and across national boundaries;
- Prior work experience with the international organizations on natural disasters, disaster risk awareness and assessment or related projects will be an advantage; and
- Proven experience in the management of multi-disciplinary teams and studies of complex technical nature and excellent communication skills.

### Language Requirements:

- Excellent oral and written communication skills in Thai and English

## 8) SCOPE OF PRICE PROPOSAL AND SCHEDULE OF PAYMENT

Consultant must send a financial proposal based on Lump Sum Amount. The total amount quoted shall be all-inclusive and include all costs components required to perform the deliverables identified in the TOR, including professional fee, and any other applicable cost to be incurred by the IC in completing the assignment. The contract price will be fixed output-based price regardless of extension of the herein specified duration. Payments will be done upon completion of the deliverables/outputs and as per below percentages.

The method of payment is an output-based lump-sum scheme. The payments shall be released upon UNDP's satisfaction of the consultant's submission of each deliverable by or before the due dates as agreed with the UNDP Thailand team.

No	Deliverables/ Outputs	Estimated Duration to Complete	Review and Approvals Required	Payment
1	An Inception Report which includes a summary of the context, the scope of developing/updating an existing adaptation platform and building Geographical Information System for marine and coastal resources sectors with a detailed methodology to be used as agreed by the initial scoping with key sector stakeholders and based on initial review of data.	10 July 2021	UNDP	10%
2	Developed and updated Climate adaptation information management platform	10 November 2021	UNDP	60%
3	Mock-up, testing and final version of GIS system for user's access and visualized climate impact projections in targeted areas for various socio-economic sectors;  Presentation and summary reports covering all implemented tasks both in Thai and English languages.	15 April 2022	UNDP	30%

## 9) RECOMMENDED PRESENTATION OF OFFER

Interested candidates must submit the following documents/information to demonstrate their qualifications. Please group them into one (1) single PDF document:

- a) **Personal CV**, indicating all past experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references;

- b) **Letter of Confirmation of Interest and Availability and Financial Proposal** that indicates the daily rate/fee of the candidate, in Thai Baht.
- c) **Supportive documents namely:**
- a. **Brief description** of why the individual considers him/herself as the most suitable for the assignment and a methodology on how they will approach and complete the assignment.
  - b. **Examples of prior** relevant work at least one sample/publications in Thai and one sample in English.

Incomplete proposals may not be considered. The shortlisted candidates may be contacted, and the successful candidate will be notified.

## 10) CRITERIA FOR SELECTION OF THE BEST OFFER

The criteria which shall serve as the basis for evaluating offers is as follows:

Combined Scoring method – where the qualifications and methodology will be weighted 70% and combined with the price offer which will be weighted 30%.

Technical criteria for evaluation (Maximum 100 %)

- Criteria 1: Education - Max 15%;
- Criteria 2 Professional experience in developing databases and GIS-based tools or research in natural disasters, disaster risk awareness, risk assessment planning, and policy or related fields- Max 20%;
- Criteria 3: Experience in demonstrate strong technical capacity in geospatial information science, ability to coordinate with the project's national and international consultants- Max 20%;
- Criteria 4: Substantial experience in marine and coastal resources sectors (or similar) on issues related to the disaster risk awareness, sustainable development, environmental management and infrastructure assessment- Max15%;
- Criteria 5: Experience in facilitate interactive and participatory planning workshops with diverse stakeholders across sectors and across national boundaries- Max 10%;
- Criteria 6: Prior work experience with the international organizations on natural disasters, disaster risk awareness and assessment or related projects will be an advantage- Max 10%; and
- Criteria 7: Proven experience in the management of multi-disciplinary teams and studies of complex technical nature and excellent communication skills- Max 5%;
- Criteria 8: Language requirement- Max 5%;

Only candidates obtaining a minimum of 70% of the total technical points would be considered for the Financial Evaluation.

**This TOR is approved by:**

Signature

Name and Designation: Lovita Ramguttee, Deputy Resident Representative

Date of Signing

