









UNDP-JOINT MANAGEMENT AREA (JMA) DEMONSTRATION PROJECT

Terms of Reference for the Appointment of a MARXAN Expert to Support the JMA Demonstration Project Marine Spatial Planning (MSP) phase II process

SECTOR: Climate and Disaster Resilience (UNDP)

LOCATION: Republic of Mauritius

DUTY STATION: Home Based

DURATION: 30-person-days spread over four months

STARTING DATE: August 2022¹

A. PROJECT TITLE

Demonstrating Innovative Ocean Governance Mechanisms and Delivering Best Practices and Lessons for Extended Continental Shelf Management within the Western Indian Ocean Large Marine Ecosystems (UNDP-Joint Management Area JMA Demonstration Project).

B. OVERVIEW

B (i) Background

On 30 March 2011, the United Nations Commission on the Limits of the Continental Shelf (CLCS) adopted recommendations confirming the outer limits of the continental shelf of the Republic of Mauritius and the Republic of the Seychelles beyond 200 nautical miles in the Mascarene Plateau region. Subsequently, in March 2012 the two coastal States agreed, through the adoption of a bilateral Treaty instrument, to the creation of a Joint Management Area (JMA) where the two States will exercise sovereign rights jointly for the purpose of exploring the continental shelf and exploiting its natural resources (the Joint Zone Treaty). A further bilateral Treaty instrument was also signed which details the administrative and management functions, powers and duties for the JMA (the JMA Management Treaty).

The JMA covers an area of 396,000 sq. km extending seaward to the east beyond the existing EEZs of both coastal States and is the largest joint maritime zone to have been established anywhere in the

Note that this may be subject to change due to the ongoing Coronavirus pandemic.

² Treaty concerning the Joint Exercise of Sovereign Rights over the Continental Shelf in the Mascarene Plateau Region between the Government of the Republic of Seychelles and the Government of the Republic of Mauritius (with annexes), Vacoas, 13 March 2012.

³ Treaty Concerning the Joint Management of the Continental Shelf in the Mascarene Plateau Region between the Government of the Republic of Seychelles and the Government of the Republic of Mauritius (with annexes), Vacoas, 13 March 2012 ('JMA Management Treaty').

world. The creation of the JMA thus represents a ground-breaking precedent for cooperative management of the ocean, placing the JMA in a 'cutting-edge' position to take the lead in piloting new mechanisms and strategies for future management of the extended continental shelf (ECS).

B (ii) Project Description

Recognizing that this represents the first 'transboundary' management agreement for an ECS scenario, UNDP is supporting the GEF-funded "JMA demonstration project" being implemented jointly by the Governments of Mauritius and Seychelles.

The JMA demonstration project is assisting Seychelles and Mauritius in the development and demonstration of new management approaches for such ECS areas, which can provide lessons and management techniques that could be replicated both within the western Indian Ocean and other similar maritime zones globally.

Component 3 of the JMA demonstration project aims to develop a marine spatial planning (MSP) process that can form the basis for an agreed management strategy, with adopted decision-making and adaptive management mechanisms. This will be supported by efforts to: (a) build technical and management capacity that can undertake and maintain a marine spatial planning process; and (b) provide support and assistance in developing an appropriate and effective data storage and management system to support MSP activities.

C. SCOPE OF WORK

While Mauritius and Seychelles exercise joint sovereign rights over the continental shelf, for the purposes of exploring and exploiting its natural resources, these rights do not extend to or affect the legal status of the superjacent waters. These jurisdictional limitations have implications for the scope, content and application of any spatial management framework for the JMA. It is important, therefore, that the spatial management framework recognises these jurisdictional limitations and that all parties fully understand the extent of their rights and obligations under the developing planning framework.

The *Strategic MSP Roadmap*, developed during Phase 1 of the JMA Demonstration Project and adopted by the Project Steering Committee in November 2019, recognizes that ocean zoning is one of the key tools with which MSP seeks to manage and where appropriate separate human activities, and is based on knowledge of the distribution of ocean characteristics and the spatial distribution of all human activities.

For zoning to work well, there needs to be a number of different ocean zones. Each ocean zone will need its own clearly defined objectives and rules governing which human activities are allowed and not allowed. Each zone should also support, in some way, the vision and objectives of the MSP. To this end, a draft zoning framework was developed during Phase 1 of the project. This was reviewed by participants at the Scenario Planning Workshop and amended based on discussions and feedback.

To support the spatial definition of the different zones in the zoning framework, MARXAN conservation planning software has been widely deployed as a decision support tool to help planners to solve complex conservation planning problems. 'Marxan With Zones' has been used extensively during the preparation of the Seychelles MSP project and will likely be used to support MSP in Mauritius. However, its application depends on certain data being available to support its use. At this stage, it is unclear whether the existing data is sufficient for the application of Marxan with Zones to support the JMA demonstration project.

As such, one of the recommendations stemming from the Phase 1 analysis was that the project undertake an initial feasibility study to assess the extent to which Marxan with Zones can be deployed for the project and what, if any, additional data is required to support such an analysis for the JMA.

In this regard, the purpose of this consulting assignment is to undertake such a feasibility study and to provide to both the UNDP Project Coordination Unit and members of the Project Steering Committee a robust analysis of the feasibility of deploying Marxan with Zones to inform the development of the final Zoning Framework for the JMA. In addition, it is expected that the Expert will collaborate with local experts, with Marxan experience, to undertake a preliminary zoning analysis using the available data.

C (i) Duties and Responsibilities

To achieve this objective, the following activities are proposed:

- 1. Deliver an initial training/capacity building workshop, with spatial data and MSP experts in both Seychelles and Mauritius to provide participants with the basic knowledge and skills necessary to use Marxan with Zones to design a multi-zone marine conservation area;
- 2. Work with spatial data, MSP and Marxan experts in both Seychelles and Mauritius to confirm the scope, extent and availability of marine spatial data pertaining to the JMA;
- Prepare a needs and gap analysis report describing the feasibility of using Marxan with Zones
 decision-support software to support the development of a Zoning Framework for the JMA,
 including identifying what, if any, additional data requirements are needed to support such
 an analysis;
- 4. Work with spatial data, MSP and Marxan experts in both Seychelles and Mauritius to undertake a preliminary analysis of the JMA area using Marxan with Zones to define a preliminary zoning framework; and
- 5. Prepare for and deliver a half-day validation workshop, to be delivered to members of the UNDP PCU and the Project Steering Committee to present the findings of the analysis and recommendations going forward.

D. EXPECTED DELIVERABLES/OUTPUTS

Table 1: List of deliverables of the MARXAN Expert and indicative timeframe

S/N	Outputs/Deliverables	Fee (%)	Time Schedule	Means of verification
1	Submission of Inception Report and Assignment Work Plan	10	Aug-22	Approved inception report and work- plan
2	• Submission of a draft "workshop plan" defining inter alia the scope, outline, key questions to be addressed and method of delivery for the workshop	5	Aug-22	Approved Workshop Plan
3	Delivery of a three-day Marxan with Zones training workshop	15	Sept-22	Workshop Delivered

3	Submission of a needs and gap analysis report outlining the requirements for undertaking an analysis of the JMA using 'Marxan with Zones' and providing an assessment on the suitability of existing data sets for such an analysis	30	Oct-22	Approved Report
4	Completion of preliminary zoning analysis using Marxan with Zones	25	Dec-22	Preliminary zoning analysis summary and report
5	Deliver validation workshop	15	Jan-23	Completion of validation workshop
	Total	100		

The Marxan Expert will be expected to work closely with the UNDP Project Coordination Unit, the National Project Director and the JMA Demonstration Project MSP Specialist during the preparation and delivery of the assignment and its deliverables. In addition, the Marxan Expert will be expected to collaborate closely with local experts with Marxan experience to allow for the transfer of experience during the development of the draft zoning analysis. The Marxan expert may identify and propose one local expert as collaborator.

All deliverables shall be submitted in appropriate format, in MS Word, MS PowerPoint, PDF, and any required format as per requirement of UNDP to the address of the UNDP Focal Point, Mr Daniel Omodo-McMondo (daniel.omodo@undp.org) and to the National Project Director Dr. M. Rezah Badal (mrbadal@govmu.org). The UNDP Focal Point in consultation with the National Project Director will be responsible for further distribution. The deliverables should be of high quality in form and substance and with the appropriate professional presentation. The Marxan Expert and collaborator should fully comply with the requirements of UNDP in terms of content and presentation and respect UNDP GEF visibility guidelines, since unsatisfactory performance may result in termination of the contract.

E. INSTITUTIONAL ARRANGEMENT

The selected service provider will provide service to the Joint Commission through Department for Continental Shelf, Marine Zones and Exploration in the Prime Minister's Office, and report to the National Project Director (NPD), Project Manager, and the UNDP Focal Point.

All deliverables shall be approved by the NPD, UNDP and the Project Steering Committee.

F. DURATION OF WORK

The Marxan Expert's work schedule shall be for a maximum duration of 30 person-days, to be spread over four months.

NOTE: Due to the ongoing global Coronavirus pandemic, the dates indicated in this Terms of Reference may change.

G. DUTY STATION

The Marxan Expert will work from their home-base, with regular contact being maintained with the NPD, Project Manager and the MSP Specialist.

In addition, the Marxan Expert will be expected to travel to Mauritius and/or Seychelles to work with local experts and for the delivery of the two workshops as described above.

H. QUALIFICATIONS OF SUCCESSFUL INDIVIDUAL CONTRACTOR

Education:

• Minimum master's degree in Conservation Management, Marine Science, Spatial Analysis or related fields. Preference will be given to holders of a PhD in the relevant field.

Experience:

- At least ten (10) years of proven professional experience in conservation planning, design of spatial management tools and marine spatial planning;
- At least five (5) years of proven professional experience in the collation, analysis and interpretation of marine spatial data;
- Specific experience and expertise in Marxan with Zones analysis and interpretation;
- Demonstrate experience in undertaking and reporting on feasibility studies, gap analysis, user needs analysis or similar;
- Working experience in SIDS particularly in Seychelles and Mauritius would be valuable.

Skills:

- Good interpersonal and communication skill with the ability to effectively interact at senior levels of Government in a multi-disciplinary and multi-cultural environment;
- A good working knowledge of the law of the sea and particularly the regime of the extended continental shelf vis-à-vis conservation, sustainable use, and management of marine biodiversity is desirable;
- Demonstrated ability to take initiative and work independently while also having the skills to work effectively within teams;
- Strong drafting, presentation and reporting skills, excellent written communication skills with specific experience of delivering high quality written advice;
- Fluency in both written and spoken English is required; knowledge of French is an asset;
- Strong computer skills.

I. SCOPE OF PRICE AND SCHEDULE PAYMENT

The financial offer should be quoted as a lump sum amount, all-inclusive (professional fee, insurance, all travel costs, per diem, etc.). In general, UNDP should not accept travel costs exceeding those of an economy class ticket. Should the consultant wish to travel to a higher class he/she should do so using their own resources.

The contract price is fixed regardless of changes in the cost components. In the case of unforeseeable travel (additional mission for example), payment of travel costs including tickets, accommodation, and terminal expenses should be agreed upon prior to travel between UNDP and the Individual Consultant and will be reimbursed.

Payments will be effected based on deliverables as per Table 1 above.

J. RECOMMENDED PRESENTATION OFFER

The following documents are requested:

- a) Duly completed **Letter of Confirmation of Interest and Availability** using the template provided by UNDP;
- b) **Personal CV or P11**, indicating all experience from similar projects, as well as the contact details (email and telephone number) of the Candidate and at least three (3) professional references;
- c) **Financial Proposal** that indicates the all-inclusive fixed total contract price, supported by a breakdown of costs, as per template provided by UNDP.

K. CRITERIA FOR SELECTION OF THE BEST OFFER

Individual consultants will be evaluated based on the following methodology:

Cumulative analysis

When using this weighted scoring method, the award of the contract should be made to the individual consultant whose offer has been evaluated and determined as:

a) Responsive/compliant/acceptable, and

The compliant criteria's is as per Table 2.

Table 2: Compliant criteria

Criteria	Percentage (%) Score
Education	15
Relevant professional experience in conservation planning and management	25
Expertise in marine data management and analysis with demonstrable experience with the use of MARXAN	30
Demonstrable experience in equivalent GEF or other multilateral donor-funded projects	10
Working experience with national stakeholder institutions and agencies as well as international institutions	5
Working experience in SIDS particularly in Mauritius and Seychelles	5
Language (English mandatory)	5
Computer skills	5

L. APPROVAL

This ToR has been prepa	red and submitted by:
Signature:	
Name and Designation: [Dr. Julian Robert, UNDP-JMA MSP Specialist.
This ToR is approved by:	Ongo V.
Signature:	
Name and Designation: I	Daniel Omodo McMondo, Programme Management Support Specialist (a.i.)
Date of signing:	22/07/2022