

# 1 TERMS OF REFERENCE

## *Consultancy Services for the Development of the Environmental Impact Assessment (EIA) Report for the Provision of Desalination Plant and Bore hole in Four (05) islands, Maldives*

### INTRODUCTION

The Ministry of National Planning and Infrastructure intends to procure the services of a consultancy firm to develop the Environmental Impact Assessment (EIA) Report for five (05) islands Provision of Desalination Plants and Borehole.

### SCOPE OF WORKS

The assignment includes the preparation of the Environment Impact Assessment (EIA) works for installation of Desalination Plant Projects in the following Islands.

Project Type	Atoll	Island
Desalination Plant and Borehole	Ga	Dhaandhoo
	Ha	Kelaa
	K	Kaashidhoo
	Lh	Kurendhoo
	R	Alifushi

The overall tasks to be undertaken not necessarily limited to, the following include;

- Undertake the application process for the EIA works of the assignment
- Undertake the scoping or screening wherever applicable for the assignment
- Undertake field data collection survey and develop the EIA report as per the approved Terms of Reference by EPA after the scoping meeting
- Submit the final EIA Report to EPA and get approval/decision statement
- Undertake submission and provide any clarifications where as necessary to the submitted EIA
- Accommodate any request by EPA for any additional information regarding the submitted EIA report
- Review and stamp the Electrical Drawings prepared for this project.
- Assess energy demand of the operation and prepare electrical load calculations.
- Identify any surplus energy needed in addition to power available from island.
- Obtain all MEA approvals needed to setup the plant and commence operation of the plant.
- Design panel board for the operation.

The main components of the Desalination Plant Project in general include the following components;

- Borehole (30m depth)
- Desalination plant with capacity of 200m<sup>3</sup>/day (4.8m<sup>3</sup>/h)
- Storage tank 316L with capacity of 20m<sup>3</sup>
- Filtering and disinfection facility
- Tap bay for water distribution
- Brine discharge (to outer reef)
- Kaashidhoo: 100kW wind turbine+100kW PV+100kW energy storage+200m<sup>3</sup>/day desalination (8.4m<sup>3</sup>/h)
- Other islands: 200kW PV+100kW energy storage+200m<sup>3</sup>/day desalination (8.4m<sup>3</sup>/h)
- Photovoltaic Power Generation System
- 40ft Preamsembled Micro-grid Control Container
- Solar Panels
- O&M office house

The detailed layout of the above facility for each island is shown in Annex A.

## PROJECT TEAM

The following staff members will be required for the assignment

Post	No
EIA Consultant ( Under Permanent EIA Registration)	1
Surveyor	2
Backstopping Team Member	1
MEA licensed Electrical Engineer	1

## SIMILAR ASSIGNMENTS

To be eligible for this assignment, the consultancy firm must demonstrate past experience in performing the services (description of similar assignments, Value of such assignments). The Firm shall have carried out a minimum of Three (03) similar assignments with a minimum contract value of MVR 100,000.00 each and reference letters should be submitted with the proposal.

## **QUALIFICATIONS OF TEAM**

The Consultant should submit full CV's for each of the proposed staff members highlighting the criteria given below. The Client (MNPI) can cancel the proposal based on the qualifications of the team proposed if any member of the team proposed does not fit any of the below criteria.

The lead consultant needs to be identified separately.

### ***a. EIA Consultant***

Bachelor's Degree in Environmental Engineering/Environmental Science/Environmental Management with minimum 05 years' experience in conducting Environmental Impact Assessment (EIA). Tertiary certification will be an added advantage. Experience in conducting EIA for Sewerage Systems will be given preference. The consultant should hold a permanent EIA license and his/her EIA license copy shall be submitted along with a dated letter stating his/her association with the bidding party.

### ***b. Backstopping Team Member***

Minimum O' Level or Diploma in a relevant field. Minimum 2 years working experience in a related field. Excellent oral and written communication in English and Dhivehi.

### ***c. Surveyor***

Diploma in Surveying with minimum 05 years' experience in conducting land surveys or related to the assignment.

### ***d. Electrical Engineer***

Bachelor's Degree in Electrical Engineering with minimum 05 years' experience along with specific experience in designing Electrical components of Water/Sewerage Facilities. Tertiary certification will be an added advantage.

## PAYMENT

Payment will be in accordance with the schedule specified below;

DESCRIPTION	ALLOCATION	REQUIREMENT
Completion of EIA Report	50%	Submission of EIA Report to EPA as per EIA Regulations
Approval of EIA Report	50%	Release of EIA Decision Statement from EPA

## STANDARD OF REPORT

All documentation must be developed according to the guidelines provided in the Environment Impact Assessment Regulations, 2012 and amendments and report writing guidelines provided by EPA. The report shall also fulfil the specific requirements outlined in the project TOR approved by EPA.

## DURATION

- a) The consultant shall complete the EIA assignment by 45 days. ('days' shall mean Calendar days). *This does not include the query/clarification period and EIA document review period.*
- b) A detailed work schedule should be given which demonstrates the commencement and completion date for each island.
- c) Consultant's project duration shall start from the date of contract signing. Please note that the project duration shall NOT commence from the date of TOR approval by EPA. Therefore it is the consultant's responsibility to expedite the process of EIA application submission, follow up on scoping meeting, draft TOR submission, and follow up on TOR approval, obtain and address the queries made by the EIA reviewers and follow up on the EIA review and approval process.
- d) Consultant's project duration shall be completed on the date of EIA approval by EPA, i.e. release of EIA Decision Statement. It is the consultant's responsibility to expedite the process of EIA draft submission to the client, final EIA report submission to EPA, providing additional information to EPA. If required, and follow up with EPA on EIA approval.
- e) The consultants are required to consult with the relevant stakeholders such as but not limited to; Island Council, Island Community members addressing the points of user pay
- f) Any delays in failing to meet the deadlines provided by the consultant's duration will result in Liquidated Damages (LD) calculated below.

The delay rate per day for liquidation damages shall calculated as follows; for a maximum of 15% of the bidder's price. In the case of unapproved time delays

extending beyond 07 days, the Client reserves the right to terminate the Agreement and execute the remainder of the works with another Consultant. Any additional costs resulting from the termination of this agreement shall be paid by the Consultant and may be deducted from any amounts owed to the Consultant.

$$RW / CD \times 0.75$$

*Where;*

*RW = Remaining works ( i.e Total Contract Price Less Value of Certified Works )*

*CD = Total Contract Duration.*

- g) If the delays are due to issues which could not be influenced by the consultant, i.e. delays due to EPA and/or delays due to the client, in order to negate the LD charges; the consultant is to provide sufficient paper work evidence to justify the consultant has done his/her responsibilities to the best of his/her abilities.

## **EVALUATION CRITERIA**

The evaluation will be carried out based on the following criteria. Technical evaluation will be based on the quality and the details of the documents submitted.

- a) Price 60%
- b) Technical capacity (Qualification and Experience) - 40%