

MINISTRY OF ENVIRONMENT AND ENERGY

Male’ Republic of Maldives

REQUEST FOR PROPOSALS

***Consultancy Services for Technical & Financial Feasibility Study for the Regional Solid Waste Management Facility in Zone One – Ha. HDh. & Sh. Atolls, Maldives***

**AUGUST 2015**

**Issued By:**

Tender Evaluation Section

Ministry of Finance and Treasury

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# **Letter of Invitation**

**Subject: Consultancy Services for Technical & Financial Feasibility Study for the Regional Solid Waste Management Facility in Zone One – Ha. HDh. & Sh. Atolls, Maldives**

1. The Government of the Republic of Maldives has allocated funds in the Annual Budget 2015 towards the provision of a Regional Solid Waste Management Facility in Zone One, which includes the atolls of Ha. HDh. And Sh. and intends to apply part of the proceeds towards procuring the services of technical and financial feasibility consultancy of the project.

2. The services include preparation of Concept Design Options and Detailed Engineering Drawings for Regional Waste Management Facility (RWMF) and carry-out associated studies specified in the TOR.

3. Ministry of Finance and Treasury on behalf of Ministry of Environment and Energy (MEE), now invites interested eligible consultants to submit their proposals according to the Request for Proposals (RFP). Interested parties must provide information indicating that they are qualified to perform the services (brochures, description of similar assignment, experience in similar conditions, availability of appropriate skills among staff, etc.). Parties may associate to enhance their qualifications.

4. Locally registered firms **shall submit documentary evidence (Tax Clearance Report)** of no due payment to the Government of Maldives, obtained from Maldives Inland Revenue Authority along with the proposal. This document shall be dated no earlier than 10 (Ten) days prior to the proposal submission date.

5. Interested proponents shall be registered to submit proposals upon submission of a written application to the address in clause 08 of this Request for Proposals between **0830hrs and 1330hrs Maldives Time** on all working days from **1st November 2015 to 22nd November 2015.** The RFP document, in the English language maybe available by interested proponents on the submission of a written application to the address mentioned in paragraph 7 of this request for proposal. The RFP document in English will be available for download from [www.finance.gov.mv](http://www.finance.gov.mv)

6. Any **clarifications** to the proposal may be sent to the email addresses given below no later than 1400hrs of **15th November 2015**, **Sunday**.

7. The proposals are expected to be submitted to the address by 1200hrs local time on 23rd November 2015, Monday.

**Mr. Ahmed Mujuthaba**

Director General

Tender Evaluation Section

Ministry of Finance and Treasury

Ameenee Magu, Male’

Republic of Maldives

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Copy to: [tender@finance.gov.mv](mailto:tender@finance.gov.mv)

# **Instruction to Consultants**

## 2.1 Introduction

1. The Client named in the **Data Sheet** will select a consultancy firm from those issued with the Letter of Invitation.
2. The Consultants are invited to submit Technical Proposal and a Financial Proposal for the contract named in the **Data Sheet**. The Proposal will be the basis for contract negotiations and ultimately for a signed Contract with the selected Party.
3. The Client will select a consultancy firm (the Consultants) from those who show interest to this call for proposals, in accordance with the method of selection specified in the **Data Sheet**.
4. As a direct response to this document, interested parties must provide their detailed proposals for the ***“Request for Proposals – Consultancy Services for Technical and Financial Feasibility Study for the Regional Waste Management Project in Zone One – Ha. HDh. & Sh. Atolls, Maldives”.*** The standards and other statements on such provision and legislative compliance made by the parties as part of their proposals will form a binding part of the final contract document.
5. The Consultants shall bear all costs associated with the preparation and submission of their proposals and contract negotiation. The Client is not bound to accept any proposal, and reserves the right to annul the selection process at any time prior to Contract award, without thereby incurring any liability to the Consultants
6. The Client reserves the right to accept or reject any Proposal and to terminate the tendering process without awarding a contract. The parties should be aware that it is unlikely that the Client will be in a position to go forward with any proposals that fails to meet the statutory and essential requirements, set out in the Terms of Reference.

## 2.2 Conflict of Interest

1. A Party (including its Personnel) that has a business or family relationship with a member of the Client’s staff who is directly or indirectly involved in any part of (i) the preparation of the Schedule of requirements, (ii) the selection process, or (iii) supervision of the Contract, may not be awarded a Contract, unless the conflict stemming from this relationship has been resolved in a manner acceptable to the Government throughout the selection process and the execution of the Contract.
2. The Consultants have an obligation to disclose any situation of actual or potential conflict that impacts their capacity to serve the best interest of their Client, or that may reasonably be perceived as having this effect. Failure to disclose said situations may lead to the disqualification of the Consultants or the termination of its Contract.

## Fraud and Corruption

The Client requires that all parties including Consultants and their agents (whether declared or not), personnel, sub-contractors, sub-Consultants, service providers and suppliers, observe the highest standard of ethics during the selection and execution its contracts. In pursuance of this policy, the Client:

1. defines, for the purposes of this provision, the terms set forth below as follows:
2. “corrupt practice” is the offering, giving, receiving or soliciting, directly or indirectly, of anything of value to influence improperly the actions of another party;
3. “fraudulent practice” is any act or omission, including misrepresentation, that knowingly or recklessly misleads, or attempts to mislead, a party to obtain financial or other benefit or to avoid an obligation;
4. “collusive practices” is an arrangement between two or more parties designed to achieve an improper purpose, including to influence improperly the actions of another party;
5. “coercive practices” is impairing or harming, or threatening to impair or harm, directly or indirectly, any party or the property of the party to influence improperly the actions of a party.
6. “obstructive practice” is

* deliberately destroying, falsifying, altering or concealing of evidence material to the investigation or making false statements to investigators in order to materially impede an investigation into allegations of a corrupt, fraudulent, coercive, or collusive practice; and/or threatening, harassing, or intimidating any party to prevent it from disclosing its knowledge of matters relevant to the investigation or from pursuing the investigation, or
* acts intended to materially impede the exercise of the relevant government authorities’ inspection and audit rights.

1. will reject a proposal for award if it determines that the recommended for award has, directly or through an agent, engaged in corrupt, fraudulent, collusive, coercive, or obstructive practices in competing for the contract in question;
2. will cancel the portion of the contract if it determines at any time that representatives of the Client or of a beneficiary were engaged in corrupt, fraudulent, collusive, or coercive practices during the selection process or the execution of that contract, without the Consultants having taken timely and appropriate action satisfactory to the Client to address such practices when they occur; and
3. will take action against any Party or an individual at any time, in accordance with rules and regulations including by publicly declaring such Parties or individual ineligible, either indefinitely or for a stated period of time.

## 2.4 Proposal Validity

The Data Sheet indicates how long the Proposals must remain valid after the submission date. The Client will make its best effort to complete negotiations within this period. Should the need arise; however, the Client may request to extend the validity period of proposals. The Parties who agree to such extension shall confirm that they maintain the availability of the Professional staff nominated in the Proposal, or in their confirmation of extension of validity of the Proposal, The Consultants could submit new staff in replacement, who would be considered in the final evaluation for contract award. Consultants who do not agree have the right to refuse to extend the validity of their Proposals.

## 2.5 Language of Proposal

The proposal documents must be written in English

## 2.6 Preparation of Proposals

1. The Proposal, as well as all related correspondence exchanged by the Consultants and the Client, shall be written in the language (s) specified in the RFP.
2. In preparing their Proposal, Consultants are expected to examine in detail the documents comprising the RFP. Material deficiencies in providing the information requested may result in rejection of a Proposal.
3. Alternative professional staff shall not be proposed, and only one curriculum vitae (CV) may be submitted for each position.

## 2.7 Technical Proposal Format and Content

The Technical Proposal shall provide the information indicated in the following paras from (a) to (f) using the attached Standard Forms (4. Technical Proposal). A Technical Proposal shall not include any financial information. Technical Proposal containing material financial information shall be declared non-responsive.

1. A brief description of the Consultants’ organization and an outline of recent experience of the Consultants and, in the case of joint venture, for each partner, on assignments of a similar nature are required in **Form TECH-2**. For each assignment, the outline should indicate the names of Sub-Consultants/ Professional staff who participated, duration of the assignment, contract amount, and Consultant’s involvement. Information should be provided only for those assignments for which the Consultants was legally contracted by the client as a corporation or as one of the major consultancy firm/organization within a joint venture. Assignments completed by individual Professional staff working privately or through other organisations cannot be claimed as the experience of the Consultants, or that of the Consultant’s associates, but can be claimed by the Professional staff themselves in their CVs. Consultants should be prepared to substantiate the claimed experience if so requested by the Client.
2. Comments and suggestions on the Terms of Reference including workable suggestions that could improve the quality/effectiveness of the assignment.
3. A description of the approach, methodology and work plan for performing the assignment covering the following subjects: technical approach and methodology, work plan, and organization and staffing schedule. Guidance on the content of this section of the Technical Proposals is provided under **Form TECH-3**. The work plan should be consistent with the Work Schedule (**Form TECH-6**) which will show in the form of a bar chart the timing proposed for each activity.
4. The list of the proposed professional staff team by area of expertise, the position that would be assigned to each staff team member, and their tasks (**Form TECH-4**).
5. CV’s of the professional staff signed by the staff themselves or by the authorized representative of the professional staff (**Form TECH-5**).
6. The Technical Proposal shall not include any financial information. A Technical Proposal containing financial information may be declared non responsive.

## 2.8 Financial Proposal

The Financial Proposal shall be prepared using Standard Forms provided in FORM FIN -1 of the RFP. It shall list all costs associated with the assignment, including remuneration for Key Experts and Non-Key Experts, and reimbursable expenses.

## 2.9 Taxes

The Consultant and its Sub-consultant and Experts are responsible for meeting all tax liabilities arising out the Contract unless stated otherwise in the **Data Sheet**.

2.10 Currency of Proposal and Payment

1. The currency(ies) of the bid shall be as specified in the **Data Sheet**.
2. Bidders may be required by the Client to justify, to the Client’s satisfaction, their local and foreign currency requirements, and to substantiate that the amounts included in the prices shown in the appropriate form(s) of Section IV, in which case a detailed breakdown of the foreign currency requirements shall be provided by Bidders.

## 2.10 Clarification and Amendment of RFP Documents

1. During the RFP process, questions or clarifications regarding this RFP document must be requested in writing to the person and address stated in the **Data Sheet**.
2. Any additional documentation issued by the Client during the tender process shall be deemed to form part of this RFP and shall supersede any part of the RFP where indicated. The Client may also exercise the option to extend the tendering period and/or postpone the proposal submission date in the event that subsequent documentation is issued.

## 2.11 Communication

Except as provided in the preceding section relating to questions about this RFP, No parties shall contact any officers, employees, or team members of Client with respect to this RFP. Any oral communication with a Client employee concerning this RFP is not binding on the Client and shall in no way alter any specifications, term or condition of this RFP or any contract documents.

## 2.10 Submission, Request, and Opening of Proposals

1. The original proposal (Technical Proposal and Financial Proposal) shall contain no interlineations or overwriting, except as necessary to correct errors made by the Consultants themselves. The person who signed the proposal must initial such corrections.
2. An authorized representative of the Consultants shall initial all pages of the original Technical and Financial Proposals. The authorization shall be in the form of a written power of attorney accompanying the Proposal or in any other form demonstrating that the representative has been duly authorized to sign. The signed Technical and Financial Proposals shall be marked “Original”.
3. Consultants shall submit a “Compliance Statement” stating that the offer is made in accordance with the Request for Proposal. Consultants who offer additional or alternative conditions shall clearly state those in their proposals.
4. The technical proposal and financial proposal must be submitted in two separate sealed envelopes to the address indicated in the **Data Sheet**. The original and all copies of the Technical Proposal shall be placed in a sealed envelope clearly marked “Technical Proposal” Similarly, the original Financial Proposal shall be placed in a sealed envelope clearly marked “Financial Proposal” followed by the name of the assignment, and with a warning “Do Not Open With The Technical Proposal.” The envelopes containing the Technical and Financial Proposals shall be placed into an outer envelope and sealed. This outer envelope shall bear the submission address, reference number and be clearly marked “Do Not Open, except in the Presence of the Official Appointed”. The Client shall not be responsible for misplacement, losing or premature opening if the outer envelope is not sealed and/or marked as stipulated. This circumstance may be case for Proposal rejection. If the Financial Proposal is not submitted in a separate sealed envelope duly marked as indicated above, this will constitute grounds for declaring the Proposal non-responsive
5. The Proposals must be sent to the address indicated in the Data Sheet and received by the Client no later than the date specified in the **Data Sheet**, or any extension to this date. Any proposal received by the Client after the deadline for submission shall be returned unopened.
6. The Client shall open the Technical Proposal immediately after the deadline for their submission. The envelopes with the Financial Proposal shall remain sealed and securely stored.

## 2.11 Evaluation of Proposals

1. From the time the Proposals are opened to the time the Contract is awarded, the Consultants should not contact the Client on any matter related to its Technical and/or Financial Proposal. Any effort by Consultants to influence the Client in the examination, evaluation, ranking of Proposals, and recommendation for award of Contract may result in the rejection of the Consultants’ Proposal.
2. The evaluation committee shall evaluate the Technical Proposals on the basis of their responsiveness to the Technical Requirements, applying the evaluation criteria, sub-criteria, and point system specified in the **Data Sheet**. Each responsive Proposal will be given a technical score (St). A Proposal shall be rejected at this stage if it does not respond to important aspects of the RFP, and particularly the Technical Requirements or if it fails to achieve the minimum technical score indicated in the evaluation criteria specified in the **Data Sheet**.
3. After the technical evaluation is completed, the Client shall inform the Consultants who have submitted proposals the technical scores obtained by their Technical Proposals, and shall notify those Consultants whose Proposals did not meet the minimum qualifying mark or were considered non responsive to the RFP and Schedule of Requirements, that their Financial Proposals will be returned unopened after completing the selection process. The Client shall simultaneously notify in writing Consultants that have secured the minimum qualifying mark, the date, time and location for opening the Financial Proposals. The opening date should allow Consultants sufficient time to make arrangements for attending the opening. Consultants’ attendance at the opening of Financial Proposals is optional.
4. Financial Proposals shall be opened publicly in the presence of the Consultants’ representatives who choose to attend. The name of the Consultants and the technical scores of the Consultants shall be read aloud. The Client shall prepare a record of the opening of Price Proposals that shall include, as a minimum: the name of the Bidder, the Price Proposal, any discounts, and alternative offers. The Financial Proposal of the Consultants who met the minimum qualifying mark will then be inspected to confirm that they have remained sealed and unopened. These Financial Proposals shall be then opened, and the total prices read aloud and recorded. Copy of the record shall be sent to all Consultants.
5. The consultant is **REQUIRED** to submit Financial Proposal using the Financial Proposal Submission Forms in FIN-1.
6. The Evaluation Committee will correct any computational errors. When correcting computational errors, in case of discrepancy between a partial amount and the total amount, or between word and figures the formers will prevail.
7. The **highest** evaluated Financial Proposal (Fm) will be given the maximum financial score (Sf) of 100 points. The financial scores (Sf) of the other Financial Proposals will be computed as indicated in the **Data Sheet**. Proposals will be ranked according to their combined technical (St) and financial (Sf) scores using the weights (T = the weight given to the Technical Proposal; P = the weight given to the Financial Proposal; T + P = 1) indicated in the Evaluation Criteria: S = St x T% + Sf x P%. The Party achieving the highest combined technical and financial score will be invited for negotiations.

# **DATA SHEET**

|  |  |
| --- | --- |
| **2.1.a** | Name of the Client:  Ministry of Environment and Energy  Green Building, Handhuvaree Hingun,  Maafannu, Male’, 20392,  Republic of Maldives  www.environment.gov.mv |
| **2.1.b** | Financial Proposal to be submitted together with Technical Proposal in two different envelopes on the same day and time specified.  *Please write name of the Consultancy assignment and indicate whether it is Financial Proposal or Technical Proposal on the envelopes.*  Name of the assignment is: **“Request for Proposals – Consultancy Services for Technical and Financial Feasibility Study for the Regional Waste Management Project in Zone One – Ha. HDh. & Sh. Atolls, Maldives”.** |
| **2.1.c** | The method of selection would be in accordance to the procedures set out in the National Procurement Regulations issued by the Ministry of Finance and Treasury |
| **2.4 Validity** | Proposals must remain valid up to 90 days after the submission date. |
| **3.8 Clarifications and Amendments of RFP Documents** | Interested consultants may obtain further information on request by writing to the address below no later than *1400hrs* on *November 15, 2015*, Sunday.    **Tender Evaluation Section**  Ministry of Finance and Treasury  Ameenee Magu, Male’  Republic of Maldives  Tel: (960) 3349104, (960) 3349106  Fax: (960) 3332706  [tender@finance.gov.mv](mailto:tender@finance.gov.mv)  [ahmed.jinah@finance.gov.mv](mailto:ahmed.jinah@finance.gov.mv) |
| **3.1****0 Submission, Receipt, and Opening of Proposals** | The Proposals are to be submitted to the following address by 1200 hours local time on **November 23rd 2015, Monday**.  **Tender Evaluation Section**  Ministry of Finance and Treasury  Ameenee Magu, Male’  Republic of Maldives  Tel: (960) 3349104, (960) 3349106  Fax: (960) 3320706  tender@finance.gov.mv |
| **3.11 Evaluation of Proposals** | Criteria, sub-criteria, and point system for the evaluation of Full Technical Proposals are:  Points   |  |  | | --- | --- | | **(A) Company Profile:** | **[100]** | | 1. No. of similar projects | [50] | | 1. Value of previous assignments | [30] | | 1. Organisational structure | [20] |     Total A = [ ]     |  |  | | --- | --- | | **(B) Project Team:** | **[100]** | | 1. Project Manager | [30] | | 1. Geotechnical / Civil Engineer | [20] | | 1. Environmental Specialist | [10] | | 1. Economist | [20] | | 1. Social and Poverty Specialist 2. Surveyors | [10]  [10] |     Total B = [ ]  The number of points to be assigned to each of the above positions or disciplines shall be determined considering the following three sub-criteria and relevant percentage weights:   |  |  | | --- | --- | | 1. Education and qualifications | [40%] | | 1. Experience 2. Experience in the region and language | [50%]  [10%] |      |  |  | | --- | --- | | **(C) Approach, Methodology &Work plan** | **[100]** | | 1. Approach & Methodology 2. Work plan of the Assignment | [60]  [40] |     Total C = [ ]    Technical Score (St) = A/100\*[W1] + B/100\*[W2] + C/100\*[W3]  Weights Distribution   |  |  |  | | --- | --- | --- | | W1 | Company Profile | **[10]** | | W2 | Project Team | **[60]** | | W3 | Approach & Methodology | **[30]** |   The minimum technical score (St) required to pass is: **70** Points  The formula for determining the financial scores is the following:  Sf = 100 x Fm / F, in where Sf is the financial score, Fm is the lowest price and F the price of the proposal under consideration.  The weights given to the Technical and Financial Proposals are:  T = [0.6], and  P = [0.4] |

# **Standard Forms**

## **4.1 Technical Proposal**

## FORM TECH-1: Technical Proposal Submission Form

[*Location, Date*]

To: [*Name and address of Client*]

Dear Sirs:

We, the undersigned, offer to provide the consultancy service for “Technical & Financial Feasibility Study for the RSWMF in Zone One” in accordance with your Request for Proposal dated [Insert Date] and our Proposal. We hereby submit our Proposal, which includes this Technical Proposal, and our Financial Proposal sealed under a separate envelope.

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

If negotiations are held during the period of validity of the Proposal, we undertake to negotiate on the basis of the proposed staff. Our Proposal is binding upon us and subject to the modifications resulting from Contract negotiations.

We undertake, if our Proposal is accepted, to initiate the services and fulfill the terms and conditions related this contract.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [In full and initials]: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name and Title of Signatory: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Name of Firm: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## FORM TECH-2: Consultant’s Organization and Experience

### A – Consultant’s Organization

[*Provide here a brief description/background (Include Organizational chart) of your organization and each associate for this assignment.*]

### B – Consultant’s Experience

[*Using the format below, provide information on each contract/assignment for which your Organisation, individually as a corporate entity or as one of the major companies within an association, for carrying out similar consultancy Services*.]

|  |  |
| --- | --- |
| Contract/Activity Name: | Contract Value (in MVR): |
| Country:  Location within country: | Duration of assignment/activity (months): |
| Name of Client: | Total no. of staff-months of the assignment: |
| Address: | Start date (month/year):  Completion date (month/year): |
| Name of associated Parties, if any: | NO of professional staff-months provided by associated Consultants: |
| Narrative description of Activities/Project: | |
| Description of actual services provided by your staff within the Activities: | |

Firm’s Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

## FORM TECH-3: Description of Approach, Methodology and Work Plan for Performing the Assignment

[*Technical approach, methodology and work plan are key components of the Technical Proposal*]*. You are suggested to present your Technical Proposal divided into the following three chapters:*

1. *Technical Approach and Methodology,*
2. *Work Plan, and*
3. *Organization and Staffing,*
4. *Technical Approach and Methodology. In this chapter you should explain your understanding of the objectives of the assignment, approach to carry out the design services for the two islands and obtaining the expected output. You should highlight the problems being addressed and their importance, and explain the technical approach you would adopt to address them. You should also explain the methodologies you propose to adopt and highlight the compatibility of those methodologies with the proposed approach.*
5. *Work Plan. In this chapter you should propose the main activities of the assignment, their content and duration, phasing and interrelations, milestones (including interim approvals by the Client), and delivery dates of the reports. The proposed work plan should be consistent with the technical approach and methodology, showing understanding of the TOR and ability to translate them into a feasible working plan.*
6. *Organization and Staffing. In this chapter you should propose the structure and composition of your team. You should list the main disciplines of the assignment, the key expert responsible, and proposed technical and support staff.]*

## FORM TECH-4: Team Composition and Task Assignment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Professional Staff* | | | | |
| Name of Staff | Organisation | Area of Expertise | Position Assigned | Task Assigned |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |

## FORM TECH-5: Curriculum Vitae (CV) for Proposed Professional Staff

1. **Proposed Position** [*only one candidate shall be nominated for each position*]:
2. **Name of Firm** [*Insert name of firm proposing the staff*]:
3. **Name of Staff** [*Insert full name*]:
4. **Date of Birth:**  **Nationality**:
5. **Education** [*Indicate college/university and other specialized education of staff member, giving names of institutions, degrees obtained, and dates of obtainment*]:

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Membership of Professional Associations**: \_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. **Other Training** [*Indicate significant trainings since degrees under 5 - Education were obtained*]:
2. **Countries of Work Experience:** [*List countries where staff has worked in the last ten years*]:
3. **Languages** [*For each language indicate proficiency: good, fair, or poor in speaking, reading, and writing*]:
4. **Employment Record** [*Starting with present position, list in reverse order every employment held by staff member since graduation, giving for each employment (see format here below): dates of employment, name of employing organization, positions held.*]:

From [*Year*]: To [*Year*]:

Client:

Positions held:

## FORM TECH-6: Work Schedule

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | | | | | | | | | | | | |
|  | 1st | 2nd | 3rd | 4th | 5th | 6th | 7th | 8th | 9th | 10th | 11th | 12th | … |
| Activity (Work) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |  |  |  |  |  |  |  |  |  |  |  |  |  |

## 4.2 Financial Proposal

## FORM FIN-1: Financial Proposal Submission Form

[*Location, Date*]

To: [*Name and address of Client*]

Dear Sirs,

We, the undersigned, offer to provide consultancy services for **“*Consultancy Services for Technical and Financial Feasibility Study for the Regional Waste Management Project in Zone One – Ha. HDh. & Sh. Atolls, Maldives*"** in accordance with your Request for Proposal dated [*Insert Date*] and our Technical Proposal. Our attached Financial Proposal is for the sum of [*Insert amount(s) in words and figures*1] which is inclusive of the local taxes.

Our Financial Proposal shall be binding upon us subject to the modifications resulting from Contract negotiations, up to expiration of the validity period of the Proposal.

We understand you are not bound to accept any Proposal you receive.

We remain,

Yours sincerely,

Authorized Signature [*In full and initials*]:

Name and Title of Signatory:

Name of Firm:

Address:

1 Amounts must coincide with the ones indicated under financial proposal in Form FIN-2.

## FORM FIN-2: Financial Proposal

Bidders are to quote separately as a lump sum price for each component of the assignment as in the table 1. The methodology to determine the lowest evaluated price of the bid, including any discounts offered in the Financial Proposal Submission Form, is specified in 2.11 (*Evaluation of Proposals*).

Table 1: Cost Breakdown

|  |  |  |
| --- | --- | --- |
| S. No | Description | Cost (Maldivian Rufiyaa) |
| 01 | Inception |  |
| 02 | Scoping study of the islands for RWMF |  |
| 03 | Economic evaluation for the preffered option and Financial analysis of the RWMF design options. |  |
| 04 | Concept design options for RWMF |  |
| 05 | Environmental Impact Assessment and Social Assessment |  |
| 06 | Detailed engineering drawings, materials, equipment and civil works specification for RWMF |  |
| 07 | Preparation of tender documents (construction works cost estimates) for RWMF |  |
| 08 | Design a monitoring and evaluation framework |  |
|  | **Total** |  |
|  | **GST** |  |
|  | **Grand Total** |  |

* *This form highlights the major areas of the assignment. The consultancy firm may provide a more detailed proposal elaborating the different components.*
* *The consultancy firm is to submit copy of the GST registration certificate along with the financial proposal.*

# **Terms of Reference**

**Consultancy Services for a Technical & Financial Feasibility Study for the Zone One Regional Waste Management Facility, Ha. Hdh. And Sh. Atolls, Maldives**

**5.1 Introduction**

Ministry of Environment and Energy (MEE) on behalf of the Government of Maldives is seeking the assistance of a qualified and competent consulting firm for undertaking a technical and financial feasibility of zone one regional waste management facility for Ha. Hdh. And Sh. Atolls, Maldives.

**5.2 Background**

The small size of the islands, the rapid growth in the population and changing life style has increased the problem of solid waste management in the islands of the Maldives in the recent years. Without adequate treatment and disposal provision for wastes, the risk of polluting the environment is becoming ever greater.

The Maldives has a population of 341,256 and has a growth rate of 1.56% per annum (Census 2014). Almost 39% of the total population residing in the capital, Male’. Economic performance of the Maldives has been impressive with positive growth in per capita output increasing per capita income. The economy relies predominantly on the tourism and fisheries sectors and almost everything consumed is imported. The economy is therefore, susceptible to external shocks.

The Maldives has achieved impressive improvements in social indicators over the past several decades. Despite the positive national figures, however, large disparities in economic and social development opportunities exist between Male’ and the outer atolls. The estimated income ratio between Male’ and the rest of the country is bout 2:1. The disparities in access to social infrastructure and services are estimated at 4:1.

This socioeconomic imbalance results in strong rural-to-urban migratory pressure from the subsistence economies of the outer atolls to the public sector-dominated cash economy of Male, simultaneously retarding growth in the outer atolls and straining Male’s infrastructure and environment. In recent years a consistent policy and program approach to outer-atoll development has involved increasing local government capacity, investing in atoll infrastructure and social services, and encouraging cash-generating enterprises.

The economic and social welfare of the Maldives population largely depends on maintaining a high level of environmental integrity. Sound environmental management is fundamental to the future of both the tourism and fisheries industries.

Due to a lack of an integrated solid waste management system at the atoll level, the waste disposal methods at the islands are causing server environmental degradation at the atoll ecosystem. This has become a barrier to achieve the goals of sustainable development at island level. Improvement of the solid waste management at island level is important for the development of an effective national solid waste management for the Maldives, the government has recognized the need to improve the solid waste management at the island levels.

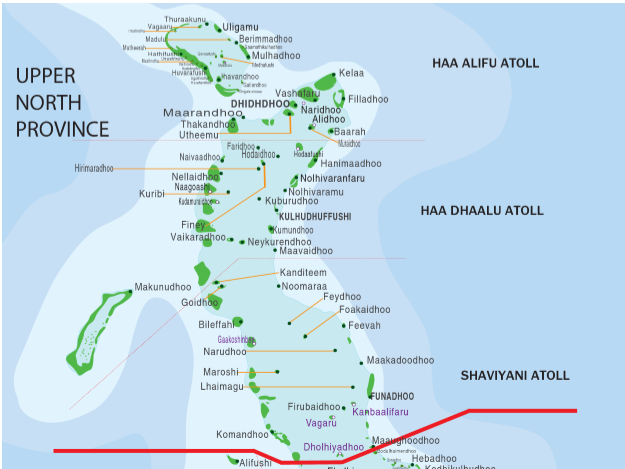
The Maldives currently hosts 106 tourist resorts in operation. Waste management activities on tourist resorts falls under the jurisdiction of the Ministry of Tourism (MOT). The tourism regulation “*Regulation on Disposal of Garbage*” requires all tourist resorts to burn their combustible wastes (including plastic bags) in on-site incinerators, and to crush cans and bottles. Food wastes may be ground up and disposed of in deep water. In theory resort islands may only remove processed recyclable wastes and other non-combustible/ non-putrescible residual wastes for disposal elsewhere. In practice, however, mixed solid wastes from resorts are often backloaded on resort service dhonis traveling between Male and the resort and disposed of at Thilafushi.

The new waste management policy emphasizes to establish community based waste management systems on inhabited islands and the residual waste be transported to a regional facility. Thus the MEE, with a financial assistance from the World Bank, has being implemented a regional waste management project targeting four atolls in the North Province that includes Noonu, Raa, Baa and Lhaviyani atolls. The facility is expected to become fully operational as early in 2016. Similarly, the MEE has applied for funding to The OPEC Fund for International Development (OFID) to establish environmental infrastructures and therefore wishes to utilize a part of this funding to establish another regional waste management facility. The project is focused to Zone One that includes the atolls of Ha. Hdh. And Sh.

**5.3 Scope of the Work**

**5.3.1 General**

The project area covers the inhabited island, tourist resorts and industrial islands in the atolls of Haa Alifu, Haa Dhaalu and Shaviyani (Figure 1). The project area has approximately 45,288 residents 41 inhabited islands 4 operational tourist resorts with 712 beds and 8 proposed resorts, two city hotels with 2,232 beds together with industrial and institutional waste producers expectedly generates approximately 20,000 tons of mixed solid waste annually.



**Figure 1**: Map depicting the catchment area for the RWM in Upper North Province

The project of establishing a regional waste management facility (RWMF) under the OFID assistance is presumed a three year completion circle. Therefore, by the end of 2019 or as early as the year 2020 it is expected 100% of solid waste generated on the islands will be collected at Island Waste Management Centres (IWMCs). All waste collected at the IWMC is separated into a minimum of 4 categories with recyclables (metals & plastics) 3%, compostable organics 70%, residuals at 26% and hazardous wastes at 1%.

Although, an IWMC has a storage capacity of up to three months, residual wastes that remain mixed (may include a portion of putrescible organic waste), recyclables and hazardous waste will need to be removed from the islands and transferred to the RWMF for treatment. However, compostable organic wastes will remain on the islands and hence the Island Councils will make efforts to convert these wastes into sellable composts.

**5.3.2 Regional waste management facility (RWMF)**

It is proposed that a regional waste management facility will be constructed Upper North Province. The RWMF will operate both as a disposal site for residual wastes and a storage/processing site for recyclables. The recurrent costs associated with the operation and maintenance of this facility will either be totally or partially funded through a public-private partnership with tourist resorts within the project area.

The selection of an island to host the RWMF may be limited. If considering an uninhabited island, the selection will be through the consultation with the Ministry of Fisheries and Agriculture.

**5.3.3 Island waste management centers (IWMC)**

In addition to being a long overdue investment in solid waste management infrastructure, the island waste management centers are the focal point for waste management activities on inhabited islands. Separated wastes are safely stored at these centers for periods of up to 3 months, which allows sufficient flexibility to enable viable waste collection and transportation scenarios to be developed. It is proposed that IWMCs will either be constructed or upgraded on the islands to complete the catchment area for the RWMF.

It should be noted that the IWMCs will be completed and community based waste management systems be established in advance of construction of the RWMF.

**5.3.4 Sea transportation**

It is proposed that residual and recyclable wastes stored at the IWMC will be collected and transported by boat or barge to the RWMF. The collection schedule may be weekly, fortnightly or monthly. It is proposed that waste collection and transportation operations will occur under a contractual arrangement with a private sector operator with cost recovery provided on a fee for service basis.

In order to create the economy of scale required to make the collection and transportation system affordable and viable it is proposed that the service be made available to industrial, commercial and institutional waste generators on the island. Additional opportunities may also be available for public private partnerships between islands and tourist resorts.

Workable institutional and financial arrangements will need to be established to support a fee for service cost recovery system.

**5.3.5 Public awareness program**

It is proposed that the Project will include an in-depth environmental awareness program delivered at community and household level that focuses on waste generation rate reduction (reduce, reuse, recycle, 3R’s), sustainability issues for the management of island wastes, and community responsibility for good environmental and waste management practice.

**5.4 General Provision of the Study**

The Consultant will be expected to evaluate and recommend best available option for the regional waste management system.

More specifically the consultant will;

1. Undertake a scoping exercise of the islands on which the RWMF maybe located in order to identify significant potential impacts, record any pertinent baseline data and investigate possible waste collection, transfer and disposal operating scenarios;
2. Prepare conceptual design options for RWMF
3. Prepare construction works cost estimates for RWMF design options, and prepare recurrent costs estimates for waste collection, transfer and disposal operating scenarios;
4. Undertake a financial analysis of the construction of the RWMF design options for all identified solid waste collection, transfer and disposal operating scenarios
5. Carry out a full Environmental and Social Impact Assessment
6. Conduct an economic evaluation for the preferred option
7. Design a monitoring and evaluation framework,
8. Prepare detailed engineering drawings, and materials, equipment and civil works specification for the RWMF

The Consultant’s services shall follow sound engineering and economic practice and shall encompass the tasks described below, which may be changed to meet the developing scope of the study.

The MEE shall make available to the Consultant all the necessary existing data, reports and proposals including those in electronic format prepared by the MEE and third parties so far.

The tasks described below are in sequential order, with the exception of task 6.5, which should run in parallel with the other tasks.

**5.4.1 Data analysis**

The main emphasis of this task will be to focus on the estimation of construction works and recurrent costs associated with RWMC design options and with waste collection, transfer and disposal operating scenarios. The Consultant will carefully examine existing predictive waste generation data, data generated from any waste transport trial, existing transport financial and cost recovery models, recent local tenders and relevant willingness & capacity to pay studies. Where verification of data is necessary and it is practical to do so, the Consultants must be prepared to carry out their own field investigations.

**5.4.2 Engineering design**

The main emphasis of this task will be to focus on the estimated construction cost of RWMF design options. Conceptual designs for the RWMF shall be developed in sufficient detail to support realistic cost estimations.

The Consultant should discuss and seek agreement on the inclusion of any constructional detail that is likely to have a significant and disproportionate effect on overall cost estimations.

Where a constructional detail that does have a significant and disproportionate effect on cost estimations is proposed, then cross sectional and/ or longitudinal drawings with sufficient narrative to describe the detail, its necessity and its overall impact on the costings should be provided.

**5.4.3 Geotechnical and materials investigations**

The main emphasis of this task will be to focus on the estimated cost of construction works for RWMF design options. The Consultant will carefully examine all existing data on geological conditions and will study the results of previous geotechnical investigations. Where verification of data is necessary and it is practical to do so the Consultants must be prepared to carry out their own field investigations.

The scoping exercise of the islands for RWMF will clearly identify the assumptions regarding geotechnical conditions and the Consultant will develop recommendations and Terms of Reference for any further investigations that may be necessary.

**5.4.4 Cost estimates**

Based on the results of the work carried out under sections 6.1 to 6.3, the Consultant shall estimate costs of construction works for RWMF design options and IWMC, and recurrent cost estimates for all identified waste collection, transfer and disposal operating scenarios.

In estimating recurrent costs the Consultant will work closely with Ministry of Housing and Infrastructure to ensure compatibility with local practice and the costs of all construction works shall, as far as possible, be related to recent local tenders.

The costs of land expropriation and compensation shall be estimated and estimates of costs of environmental or social mitigation works will be made.

**5.4.5 Financial analysis**

The Consultant shall conduct a comprehensive financial analysis of all identified solid waste collection, transfer and disposal operating scenarios. The analysis shall investigate the financial viability of the identified operating scenarios.

The Consultant shall calculate net present values (NPV's) and financial internal rates of return (FIRR's) for each identified solid waste collection, transfer and disposal operating scenario based on a discounted cash flows of 12% over the first five year period and which takes account of vessel operating costs (VOC's), and RWMF and IWMC operating costs derived from contemporary local data. The replacement cost of infrastructure, plant and equipment will be those specified in section 6.4. Sensitivity analyses shall be provided for variation of all significant and underlying variables.

The Consultant shall consider, (i) the relevance and appropriateness of implementing the waste collection, transfer and disposal system under concessions as build, operate and own or transfer (BOO or BOT), (ii) whether components of the waste collection, transfer and disposal system should be implemented as a whole or sub-divided, and (iii) whether contestable and competitive solid waste collection and/or transfer services should be provided through multi-year service contracts or franchises with private companies.

The Consultant shall recommend an implementation scenario which will optimise delivery of solid waste collection, transfer, and disposal services. The recommendation should be made with reference to the main beneficiary groups identified, and an analysis of distribution effects of financial benefits and costs on these groups.

**5.4.6 Environmental impact assessment and public consultation**

The Environmental Protection and Preservation Act (No. 4/93) requires environmental impact assessment for any development project undertake in the Maldives. Therefore, the Consultant, working closely with MEE, shall undertake the investigations at the level of an environmental analysis, based on a scoping exercise that would identify significant potential impacts and record any pertinent baseline data, but would not involve an assessment of the data and impact at this time. The environmental analysis will cover ecological, archaeological, water quality, visual & noise amenity, air quality and social considerations.

The EIA shall be scheduled and completed in advance of the Final Report of the Study, so that the findings of the EIA (including consultation) are available as input into the decision making matrix. The Feasibility Study Final Report shall include an Environmental Management Plan incorporating monitoring and reporting procedures.

**5.4.7 Economic evaluation**

The consultant shall review the cost estimates and financial analysis for the construction of the preferred RWMF design option, the IWMC and recurrent costs estimates for the preferred collection, transfer, disposal operating scenario (the Proposal).

The Consultant shall assess the economic viability of the Project by estimating and valuing economic benefits and costs, taking into account all significant project effects (such as scarcity of labour) and calculating the Projects economic net present value (ENPV) and economic internal rate of return (EIRR) using the most likely values of the variables estimated in the cost and benefit streams and a discount rate of 12 percent. The Consultant will then compare the Projects net benefits in present value with an alternative (substitute) project.

The Consultant shall undertake sensitivity analysis of the Project by appropriately varying benefits and costs, and a combination of these factors. The Consultant shall calculate switching values and compare with evidence from existing projects. The sensitivity analysis of economic rate of return (ERR) and financial internal rate of return (FIRR) to changes in tariff should cover sufficiently wide range to indicate the tariff at which, (i) the ERR falls to the cut-off rate of 12 percent, and (ii) the FIRR reaches the maximum value. The cost conversion factor (financial to economic) shall be analysed carefully and the result of the sensitivity analysis will be presented graphically.

The Consultant should also carry out risk analysis by considering the likely probability distributions of key variables and recommend ways in which project risks can be reduced.

Working closely with the Ministry of Finance and Treasury, the Consultant shall prepare a financial plan, at constant financial prices, for the Project to ensure:

* capital funds are available to cover investment and working capital requirements; and
* sufficient funds are available to cover operating expenditures.

The revenue generated through public private partnership agreements and/or service charges to users will be the main source of funds during the operating period.

The average incremental unit economic costs of supply (that is the marginal cost of supplying the service plus the additional investment and operating costs required to expand the service in the future) should be calculated and taken as the appropriate target for charging users (the tariff). The average incremental unit cost of supply should be calculated at future costs of supply and use the economic discount rate of 12 percent.

The Government of the Republic of Maldives may decide to regulate or set the tariff such that the average incremental unit costs of supplying waste management services are not fully met by users. If so, the grounds upon which this implicit subsidy is given should be stated. The extent of the effective subsidy (that is the difference between actual user charges and the average incremental cost of supply) should also be calculated over the life of the Project. Any subsidy implicit in the level of the tariff will have to be met from funds or resources elsewhere in the economy through the budget system.

If revenues are not sufficient to cover operating expenditures or Government of the Republic of Maldives sets tariff below the average incremental cost of supply, the full fiscal impact of the project for each year of its life should be calculated. Where additional funds to cover operating costs are to be sourced from public sector expenditure any the effect of extra taxation or government borrowing on the groups who are the principal project beneficiaries, especially the poor, should be considered.

Where the Project provides for a range of services on the basis of joint costs (for example public private partnership agreements) it may not be possible to identify the average incremental unit cost of supply for providing each service. In this case, an overall financial internal rate of return should be calculated for the activities as a whole. Where the financial internal rate of return at constant prices falls below the chosen discount rate of 12 percent, the extent of the financial subsidy shall be stated by calculating the extent to which the tariff would have to be increased to provide a financial internal rate of return at least equal to the discount rate.

With the assistance of the social and poverty specialist, the Consultant shall carry out distribution analysis of economic benefits and costs over and above the financial benefits and costs, calculate the poverty impact ratio, and undertake a cause-and-effect analysis. Where possible, the proportion of benefits going to the poor and the non-poor based on income should be stated. The distribution analysis shall also be undertaken on a gender basis, to identify, in particular, the flow of additional costs and benefits to women.

The consultant shall consider the impact of the introduction of a tariff for waste collection, transfer and disposal (i) on the poor and non-poor, and (ii) on the scale of investment. The consultant should review any elasticity analysis or willingness and capacity to pay studies conducted to determine the maximum tariff level consumers could theoretically bear. If such analysis is not available discuss the issue with key stakeholders to estimate the highest practicable level of tariff and feasible time schedule for increasing tariffs as necessary to cover the average incremental unit cost of supply. The Consultant shall recommend a tariff structure that ensures those who use the service more and those who are better off pay more and that the scale of investment is consistent with the demand for the services.

In consultation with the Small Medium Enterprises (SME) Unit of the Ministry of Economic Development (MED), the Consultant should consider the impact of the following institutional problems on small to medium sized businesses providing waste management services:

1. labor redundancy;
2. low labor productivity;
3. lack of revenue generation capacity;
4. lack of enforcement capacity;
5. poor cash flow for recurrent expenditures; and
6. lack of capital.

The Consultant should express an opinion about the linkages between calculated fiscal impact of the Project and policy discussions over the extent and scale of tariffs, operator fees, institutional problems, and tax revenues.

**5.4.8 Monitoring and Evaluation Framework**

Together with other specialists, the Consultant shall prepare a results based monitoring and evaluation framework that includes, (i) baseline and target values for the selected indicators covering economic and financial performance, and (ii) monitoring indicators that can be used to assess socioeconomic and sustainability aspects of the Project.

The monitoring and evaluation framework shall be prepared so as to:

1. provide sufficient information about progress with and/or the outcomes of the Project;
2. enable an assessment of the relationship between activities undertaken and the specific objectives of the Project;
3. enable an assessment of the impact, effectiveness and success of activities undertaken in achieving the specific objectives of the Project;
4. where problems are encountered in achieving the specific objectives, an assessment of the impact, effectiveness and success of the response made (if any) to overcome them; and
5. Provide lessons learned for future project design.

**5.4.9 Preparation of detailed engineering design drawings and specifications for RWMF**

The Consultant shall prepare detailed engineering design drawings, and materials, equipment and civil works specifications for the construction of the RWMF. The detailed engineering design drawings, and materials, equipment and civil works specifications must be prepared to a standard and in a format:

1. Suitable for international "open" tendering; and
2. Compatible with Practical Guide or FIDIC Conditions of Contract for works of civil engineering construction and the Civil Engineering Standard Method of Measurement (CESMM3).

Where additional engineering, materials or geotechnical services are required to enable the preparation of detailed engineering design drawings, and materials, equipment and civil works specifications the Consultant shall prepare the Terms of Reference and all necessary documentation in support of the procurement of the required services.

**5.5 Deliverables**

The consultants’ reporting requirements will include (i) an inception report submitted within 3 weeks of commencement, (ii) monthly progress reports at the end of each month during implementation, (iii) Feasibility Study final reports for the Regional Solid Waste Management Project – Zone One.

**5.6 Reports**

The following reports must be considered during the information collection

**Table 2**: Reports for the literature review as part of the information collection

|  |  |  |
| --- | --- | --- |
| No. | Name of the Report | Year of the Report |
| 1 | The Study on the Solid Waste Management for Male City in the Republic of Maldives – final and supporting report | 1999 |
| 2 | Health Care Waste Management | 2005 |
| 3 | Identification of Existing Barriers to the Provision of Effective Waste Management Services with the Maldives and Recommendations for their Removal | 2004 |
| 4 | Conservation and Sustainable use of Biodiversity associated with Coral Reefs of Maldives - Strategy for Solid Waste Management in Vaavu and Baa Atolls, Maldives | 2002 |
| 5 | Report on the Willingness to Pay for Waste Management in Baa Atoll | 2006 |
| 6 | Technical & Financial Feasibility Report for North Province Regional Waste Management | 2011 |
| 7 | Environmental and Social Management Framework | 2011 |
| 8 | User Pays Framework for Island Waste Management Services | 2010 |

**5.7 REQUIREMENTS**

**5.7.1 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) either by the firm or the individual consultants in the consultant team.

**5.7.2 Consultant Team**

The following staff members in the core team will be required for the assignment.

|  |  |
| --- | --- |
| **Post** | **No.** |
| Project Manager (Team Leader) | 1 |
| Geotechnical / Civil Engineer | 1 |
| Environmental Specialist | 1 |
| Economist | 1 |
| Social and Poverty Specialist | 1 |
| Surveyor | 3 |

## 

**5.7.3 Qualification of the Design and Consultancy Team**

The Consultant should submit full CV’s for each of the proposed staff members highlighting the criteria given below.

1. Project Manager

A tertiary qualification in Project Management or Environment Management/Science or Conservation or in a related field with minimum 07 years’ experience in project management, along with experience in the field of waste management projects. Having studied waste management during tertiary education is an added advantage.

1. Geotechnical / Civil Engineer

Tertiary qualification in Geotechnical / Civil, and or Environmental Engineering with minimum of 05 years’ experience along with specific experience in municipal solid waste treatment systems, including engineered landfills.

1. Environmental Specialist

Tertiary qualification in Environmental Management, or in a related field with minimum of 05 years’ experience along with specific experience in environmental assessment, evaluation and monitoring.

1. Economist

Tertiary qualification in Economics with minimum of 05 years’ experience. A qualification in environmental economics is an added advantage.

1. Social and Poverty Specialist

Tertiary education in Social Science or related field with minimum of 05 years’ experience.

1. Surveyors

Diploma in Surveying with minimum of 05 years’ experience in conducting land and marine surveys.

**5.8 Payment**

The Consultant may request the Payment either as a lump sum amount at the completion of the report, subjected to the acceptance of the report by the Client, or will be in accordance with the schedule specified below;

|  |  |  |
| --- | --- | --- |
| **Description** | **Allocation** | **Requirement** |
| Advance Payment | 10% | Advance Payment Bank Guarantee – submitted within 30 days of receiving the Letter of Acceptance (15% of the value of the agreed Contract Price) |
| Completion of Inception and Scoping Study of the islands for RWMF | 10% | Subject to the acceptance of the reports by the Client |
| Completion of Concept Design options for RWMF | 15% | Subject to the acceptance of the reports by the Client |
| Completion of Environmental Impact Assessment | 15% | Subject to approval and EIA Decision Statement from EPA |
| Detailed engineering drawings, materials, equipment and civil works specification for RWMF | 30% | Subject to the acceptance of the reports by the Client |
| Completion of Tender Documents for RWMF and a monitoring and evaluation framework | 20% | Subject to the acceptance of the reports by the Client |

**5.9 Technology & Knowledge Transfer**

The Consultant shall consider the technology and knowledge transfer as an important aspect of this project. The Consultant shall provide the opportunity to the staffs of the Client to be involved in the working team of Consultants during the concept designing and detailed engineering design of RWMF. If requested by Client’s staff, the Consultant shall brief and demonstrate the survey and design procedures.

**5.10 Association of Consultants**

Consultants may associate with each other in the form of a joint venture or of a sub-consultancy agreement to complement their respective areas of expertise, strengthen the technical responsiveness of their proposals and make available bigger pools of experts, provide better approaches and methodologies, and, in some cases, to offer lower prices. The association must, however, appoint one of the firms to represent the association; all members of the joint venture shall sign the contract and shall be jointly and severally liable for the entire assignment.

**5.11 Duration of the Assignment**

All the activities from inception to the completion of tender documents and monitoring and evaluation framework shall be completed within 6 months. Tender assistance should be given to Client and NTB during tender, evaluation and award stage.

**5.12 TASK IDENTIFICATION**

**Table 3**: Breakdown of activities to be undertaken

|  |  |  |
| --- | --- | --- |
| No. | Tasks | Activities |
| 1 | Information Collection | Review Existing data and Documentation |
| 2 | Site Visit | 1. Investigate possible waste collection, transfer and disposal operating scenarios 2. Environmental scoping and analysis |
| 3 | Engineering Study | 1. Geotechnical and Materials Analysis 2. Develop Concept Design |
| 4 | Financial Viability Study | 1. Calculate construction and recurrent costs 2. Undertake financial analysis 3. Analysis of distribution effects of financial benefits and costs on beneficiary groups |
| 5 | Economic Viability Study | 1. Estimate and value economic costs and benefits 2. Undertake Economic Analysis 3. Undertake sensitivity analysis 4. Prepare a financial plan 5. Calculate user charge 6. If necessary calculate full fiscal impact 7. Undertake distribution analysis, poverty impact ratio, and a cause-and-effect analysis. 8. Recommend a tariff structure 9. Identify linkages between the fiscal impact of the Project and policy issues. |
| 6 | Environmental Impact Assessment | 1. Conduct community consultation 2. Undertake EIA – Scoping analysis 3. Undertake full EIA assessment |
| 7 | Feasibility Reporting | Submit feasibility study report. |
| 8 | Monitoring & Evaluation | Prepare a monitoring and evaluation framework for the Project. |
| 9 | RWMF Design | 1. Prepare Terms of Reference and supporting documentation for procurement of additional engineering and/or geotechnical services. 2. Provide advice and/or assistance to the Ministry of Finance and Treasury throughout the procurement process as required. 3. Prepare detailed engineering design drawings, and materials, equipment and civil works specifications for the construction of the RWMF. |
| 10 | Terms of Reference | 1. Prepare Terms of Reference for the production of tender documents for implementation of waste collection, transfer and/ or disposal services. 2. Provide advice and/or assistance to the Ministry of Finance and Treasury throughout the procurement process as required. |