



MINISTRY OF ENVIROMENT AND ENERGY MALE', REPUBLIC OF MALDIVES



TERMS OF REFERENCE

Design, Development and maintenance of a Database for Solid Waste Management Facility audit and Waste generation audit

With reference to Iulaan Number: (IUL)438-PPS/438/2016/279

1. INTRODUCTION

Presently Waste Management and Pollution Control (WMPC) Department of the Ministry of Environment and Energy is carrying out surveys to evaluate the current situation of waste management and available waste management facilities as well as developing a mechanism for auditing the waste generated on a daily basis in each island of the Maldives.

Thus Ministry intends to procure the services of a software developer to design and develop a database in which the information collected can be easily inputted and reviewed.

2. SCOPE OF WORKS

- 1. Design and develop a database (both web-based and stand-alone) for solid waste management facility audit and waste generation audit of all islands of the Maldives,
- 2. Ensure accurate inputting of data received from the survey forms into the database.
- 3. Design a user-friendly graphical user interface (GUI) for users to easily interact with data management tools, such as queries, data extraction and data manipulation.
 - a. The GUI design must be consistent and the data must be managed and accessed securely

- 4. Develop digital forms in such a way so that it can automatically include date and time, location of data collection and option to add information of data collector.
 - a. Digital forms must have data validation rules to enhance data quality.
- 5. Perform database analysis by producing graphs, charts, generating reports etc., as directed by the Ministry.
- 6. Maintain and further develop the structure or format of the database as required, incorporating ideas and amendments in collaboration with the Ministry.
- 7. Train Ministry staff and a database manager for the use of the database.
- 8. Develop and maintain documentation database/design operating manual on how to use the database.
- 9. Work with the Ministry's relevant department, to develop and maintain a web interface for the database in consultation with the WMPC department
 - a. Should be able to submit new entries securely to the database through the web interface.
- 10. Maintain strict confidentiality in all aspects of the work
 - a. User accessible levels must be defined.
- 11. Undertake any other tasks assigned by the Ministry in relation to the project.

3. DELIVERABLES

- 1. The developer is expected to provide a Work Plan for the database development within 3 days from Contract signing.
- 2. The selected developer is expected to come up with detailed Requirement Analysis for the database after discussion with the Ministry. The developer is expected to present the Requirement Analysis within 10 days from the award of contract.
- 3. The selected developer is expected to provide a Design Template for the database within 20 days from the approval of Requirement Analysis from the Ministry.
- 4. Development shall start immediately on the approval of Design Template.
- 5. Weekly progress presentations shall be conducted with the WMPC department after commencement of development.
- 6. User testing shall be carried out in collaboration with the WMPC department after development.
- 7. The developer shall hand over to the Ministry;

- a. A fully functional database
- b. A technical documentation with diagrams
- c. A User Guide with screenshot at the time of database handover.
- 8. The developer shall conduct a training session for users and database administrator.
- 9. The developer shall provide full maintenance service for a period of one (1) year from the time the database is handed over to the Ministry.

4. SERVICES PROVIDED BY THE CLIENT

- 1. The Ministry will provide a workstation and required hardware and software for the developer within the Ministry premises.
- 2. The Ministry shall provide the developer with editable content required at the beginning of testing stage of the database.

5. INTELLECTUAL PROPERTY

The developer must agree explicitly that all components of the works submitted are indeed original creations of the developer. Any intellectual property infringement, misuse or plagiarism of another's work in any form or state will result in immediate termination of the contract. The Ministry will not bear any responsibility for the contractor's illegal or inappropriate use of copyrighted material and the contractor agrees to bear full responsibility for any consequences for such actions.

The database developed shall remain sole property of the Ministry of Environment and Energy.

6. EVALUATION CRITERIA

6.1. Technical Evaluation

- Technical Evaluation is a preliminary evaluation done based on the Technical Proposal before moving on to the Financial Evaluation
- The Technical Proposal provided by the bidder will be compared to the specifications provided in this TOR

6.2. Financial Evaluation

- All proposals that are considered qualified by the Technical Evaluation will be subject to the Financial Evaluation

Point system for the evaluation is:

a. Price of Quotation for Total Works [60]

b. Propose duration of Completion of Assignment [20]

c. Experience [20].

7. QUOTATION OF SERVICE CHARGES

Interested parties should submit their quotations (inclusive of GST price quoted separately with the GST registration certificate and business/company registration for verification) **and all the documents described in the advertisement** to the address below on 19tht December 2016 (Monday) at 10:00 hours. Late bids will be rejected. If there is any further question shall be communicated via email only on or before 15th December 2016, Thursday.

Waste Management and Pollution Control Department, Ministry of Environment and Energy, Handhuvaree Hingun, Maafannu Male', Republic of Maldives

Tel: +960 3018434, Fax: +960 3018301

Email: mohamed.hamdhan@environment.gov.mv, waste@environment.gov.mv

Website: http://www.environment.gov.mv