

Ministry of Environment and Energy

Male', Republic of Maldives.

Date: 31 January 2016

No: (IUL)438-HRU/438/2017/24

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Consultancy Services for Web Application Android Application and IOS Application Developer

System Engineer

TERMS OF REFERENCE

A. BACKGROUND

Freshwater sources are scarce in the Maldives and provision of freshwater has become a major challenge in most of the islands. Climate Change is expected to have severe impacts on the limited freshwater sources further aggravating water availability facing the islands. Saltwater intrusion, flooding, changes in rainfall pattern are some of the key impacts which are expected to affect the availability of fresh water in the Maldives. Hence, adaptation to such impacts has been identified as one of the key aspects of National Adaptation Program of Action (NAPA). In response to the adaptation needs, the Ministry of Environment and Energy is implementing a number of projects including the demonstration project; "Increasing climate resilience through an intergraded water resource management program in HA.Ihavandhoo, ADh.Mahibadhoo and GDh.Gadhdhoo islands" in collaboration with UNDP and with the assistance of the Adaptation Fund.

In this regard, the Ministry of Environment and Energy is seeking a qualified consultant/expert to develop a responsive Web Application, Android Application and IOS Application enabling to collect, store and analyse water and sewerage projects implementation progress managed by Ministry of Environment and Energy.

B. OBJECTIVES OF ASSIGNMENT

The objective of this assignment is to, design, develop, and implement responsive Web Application, Android Application and IOS Application to collect, store and analyse and distribute project related information for water distribution during dry period and project monitoring.



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C. SCOPE OF WORK

The scope of works to be undertaken by the individual/expert under this outlined Terms of Reference are to be undertaken in close collaboration with the Water and Sanitation Department, and relevant stakeholders as necessary, and include, but are not necessarily limited to, the following:

- 1. This consultancy consists of developing 2 separate application:
 - An application to monitor water distribution during dry period with a completion date of 31st January 2017.
 - An application to monitor the progress of the projects implemented by Ministry of Environment and Energy
- 2. Using relevant programming languages design, develop, and implement a web based application to collect, store, analyse, and distribute conflict and governance data and information;
- 3. Liaise with project team and collect application development requirements;
- 4. Review output formats to better understand expected outputs from the system;
- 5. Manage changes, bugs, and enhancements for the application, modify the application where necessary and test its applicability to ensure it conforms to the specifications;
- 6. Bug test application to ensure its reliability and stability;
- 7. Prepare the necessary technical documentation for the application;
- 8. Conduct user acceptance testing and report results;
- 9. Provide end-user training and support;
- 10. Perform other related duties as required.
- 11. The application should be able to perform the following task, but not limited to:
 - Multitple User Levels of Data Entry
 - Enable Access Levels of Editing, Viewing and Adminstration
 - Multiple Category Search and Filter
 - Report Generation (Multi Format)
 - Ability to Add additional categories
 - Application should be compatible to all current widely used browers
 - Application should be able to handle large data sets in average internet speed

D. QUALIFICATIONS AND EXPERIENCE

1. Education: University degree in Computer or Information Science or a related field, equivalent experience or specialized training in web application development.





- 2. Work Experience: At least 3-4 years of experience in web application development and mobile application development
- 3. Languages: Excellent knowledge of English
- 4. Good communication in English and Dhivehi Language.

Applicants are required to submit a portfolio of similar work done (reference letters or any documental proof of developed applications for organizations).

Core Competencies

- 1. Systematic and efficient approach to work assignments;
- 2. Good judgment and analytical ability;
- 3. Ability to manipulate large data sets, and excellent attention to detail;
- 4. Employs a proactive approach to foresee road-blocks and resolve them;
- 5. Excellent communication skills, communicates frequently with colleagues and supervisors;

DELIVERABLES

- (a) Presentation of the concept ideas
- (b) Draft Application Design must be submitted within 2 week of contract signing. (Development of the application shall begin once the drafted design is approved from the Ministry of Environment and Energy)
- (c) Timeframe of the project (activities, milestones must be specified with dates).
- (d) Weekly progress
- (e) Detailed Guide through out the project with screen shots
- (f) UML diagrams
- (g) Detailed Documentation of the assignment
- (h) Commented Source Code(including image files) in SOFT and HARD COPY
- (i) Should provide support for six (06) months (bug fixing)
- (j) The developer shall host the application as instructed by the ministry and bring to a functioning state.

7.0 EVALUATION CRITERIA

(1) Financial Proposal		[50%]
(2) Educational Qualifications		[30%]
(3) Experience of working in similar projects		[20%]
	Total:	100%





Point system for the evaluation of is:

8.0 INTELLECTUAL PROPERTY

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

9.0 RENUMERATION

Successful individual will be paid an monthly renumeration of MVR 45,00.00 depending on their qualifications and experience.

10.0 SERVICES PROVIDED BY THE CLIENT

The Water and Sanitation Department and Information Communication Technolgy Unit of MEE will provide necessary information/materials and support available at the Ministry for fulfillment of tasks and will facilitate the necessary meetings if any.

The Ministry will provide a workstation if the consultant desires to work in the Ministry during the assignment.

11.0 OTHER RELATED INFORMATION

(k) Contract period: (04) Months with Additonal six (03) months (bug fixing)
➤ Type of appointment: Short term Consultancy

Whom to report: Project Director and Permanent Secretary



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