

بِسْمِ اللّٰهِ الرَّحْمٰنِ الرَّحِیْمِ



Ministry of Environment and Energy

Male', Republic of Maldives.

ދިވެހިސަރުކާރުގެ ގެޒެޓް ގައި ބަޔާންކުރި ގަވާއިދުގެ ދަށުން
މާލެ، ދިވެހިރާއްޖެ.

Date: 24th April 2017

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

TERMS OF REFERENCE

Consultancy Services for Web Application Android Application and IOS Application Developer

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 **Individual Consultant** to develop a 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.

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.

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:
 - o An application to monitor water distribution during dry period



Green Building, Handhuvaaree Hingun,
Maafannu, Male', 20392, Republic of Maldives.

+ (960) 301 8300
+ (960) 301 8301
www.environment.gov.mv

Page 1 of 4

މި ސަރުކާރުގެ ގެޒެޓް ގައި ބަޔާންކުރި ގަވާއިދުގެ ދަށުން
މާލެ، ދިވެހިރާއްޖެ، 20392.

secretariat@environment.gov.mv

www.twitter.com/ENVgovMV
www.facebook.com/environment.gov.mv



- 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, analyze, 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:
 - Multiple User Levels of Data Entry
 - Enable Access Levels of Editing, Viewing and Administration
 - Multiple Category Search and Filter
 - Report Generation (Multi Format)
 - Ability to Add additional categories
 - Application should be compatible to all current widely used browsers
 - 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 10 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;

E. 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 throughout 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 technical 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.

F. OUTPUTS

Total Consultancy Fee		MVR 150,000.00
Milestones	Application for Water Distribution during Dry Period	MVR 50,000
1	Concept Design Submission	20%
2	Draft Design Submission	30%
3	Final Design Submission & Testing, Run	30%
4	Training Conduct	10%
5	Source Code (including image files) in SOFT and HARD COPY	10%
Milestones	Application for Water and Sewerage Projects Monitoring	MVR 100,000
1	Concept Design Submission	20%
2	Draft Design Submission	30%
3	Final Design Submission & Testing, Run	30%
4	Training Conduct	10%
5	Source Code (including image files) in SOFT and HARD COPY	10%

G. EVALUATION CRITERIA

Point system for the evaluation of is:

- (1) Educational Qualifications [40%]
- (2) General Experience in the Programming and Web Development related Works [20%]
- (3) Specific Experience in web application development and mobile application development [40%]

Total: 100%

H. 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.

I. CONSULTANCY FEE

The total consultancy fee of the assignment is MVR 150,000. Payment will be made as per completion of the milestones.





J. SERVICES PROVIDED BY THE CLIENT

The Water and Sanitation Department and Information Communication Technology 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.

K. OTHER RELATED INFORMATION

Contract period: (04) Months with Additional six (06) months (bug fixing)

Type of appointment: Short term Consultancy

Whom to report: Project Director and Permanent Secretary

