

Republic of the Union of Myanmar
Ministry of Transport and Communications
Post and Telecommunications Department
Telecommunication Sector Reform Project
Office #2, Nay Pyi Taw, Myanmar
Credit No.: 5353-MM

March 1, 2017

REQUEST FOR EXPRESSION OF INTEREST (REOI)

Assignment Title : Provision of Consulting Services to Verify the Network Performance of the Mobile Operators Network

Reference No. (as per Procurement Plan): C1.1.17

The Government of the Union of Myanmar (Government) is in the process of planning telecommunications sector reforms in order to: (i) increase by tenfold access to quality telecommunication services; (ii) make services affordable for its citizens; and (iii) develop the required ICT infrastructure in Myanmar that will facilitate inclusive growth and poverty reduction.

With the reform process undertaken in the Telecom Sector, Myanmar Post Telecommunication (MPT)'s long lasting monopoly is being replaced by a competitive market structure consisting of multiple operators. Telenor Myanmar Limited and Ooredoo Myanmar were awarded Nationwide Telecommunications Services Licenses. The Nationwide Telecommunications Services License holder shall fulfill the Minimum Geographic Coverage Commitments for mobile Voice and mobile Data as well as the Quality of Service (QoS) Commitment.

Given that the regulator needs to ensure that the Licensees (three operators) have fulfill the commitments of their licensees, there is need to do the drive test and QoS measurement.

The Government has received support under the World Bank financed Telecommunications Sector Reform Project to procure the required equipment and to hire the consultant for the drive test and QoS measurement. The activity described in these Terms of Reference is to support PTD to analyze whether the licensees meet their Geographic Coverage commitment and QoS commitment.

Objective

The main objective of this assignment is to provide support to Post and Telecommunications Department (PTD) to:

- (i) Consolidate the coverage map for each region of Myanmar in consultation with operators.
- (ii) Conduct the drive test to verify the coverage commitment and QoS commitments on a sample basis.
- (iii) Analyze the test results to PTD and advise PTD officials on how to mainstream such enforcement in their work.
- (iv) Present the test results to the operators and recommend remedial measures if the operators have not met their coverage and quality of services commitments.
- (v) Train at least 5 staff from PTD

Summary of Tasks

The consultant will support PTD to undertake the following tasks as part of the engagement:

Activity (A): Prepare a detailed coverage map of each operator's mobile network (both voice and data over 2G and 3G technologies) based on the data acquired from the operators.

Activity (B): Prepare a training program for PTD staff for them to become fully competent in monitoring and enforcing coverage and QoS commitment of licensees.

Activity (C): Conduct the Drive Test in selected areas across the country (not more than 40 cities or towns and highways between states and regions) to verify the geographic coverage commitment for both voice and data networks of the operators (2G and 3G) networks. When the drive tests and QoS tests are being conducted, at least 5 staff from PTD will accompany the consultants and will be fully involved in the testing. The consultant will provide on the job training and will also be responsible for the costs of travel, accommodation and food for PTD staff. All drive tests will be conducted in coordination with the operators.

Activity (D): QoS Measurements for 2G and 3G Network in cities as indicated in Annex 1.

Activity (E): Conduct Analysis and prepare a detailed report of the Drive Test and QoS measurement. Conduct a discussion with each operator on the findings of the test and agree on remedial measures so that operators can take necessary steps to meet their obligations within a given time frame.

The detail requirement (Test scenarios and KPI for QoS) for the drive test is mentioned in Annex 2.

Deliverables and Proposed Payment Schedule

This consultancy is tightly scheduled to be completed within a 4 weeks from the date of signing the agreement between PTD and the Consultant. The following table provides a summary of the main deliverables required and estimated timing:

| Activity | Date | Deliverable | |
|----------|-----------------------------------|-------------|---|
| | | # | Description |
| B | Contract signing + 2 days | 1 | Inception Report that includes approach for assignment + preparation of detailed training plan. |
| A+C+D | Contract signing + within 10 days | 2 | Consolidate Detailed Coverage map of each state and region for each operator in consultation with operators. Provides reports on the Drive Test (Raw Data Log files) (QoS Index Calculation Results) (Final Reports with analysis) |
| E | Contract signing + 14 days | 4 | Presentation to PTD the Operators and final report on remedial measures and time lines. |

All deliverables will be sent to the PTD. Electronic copies will suffice. All deliverables must be in English. Final approval of all outputs and deliverables, linked to payments to the consultant, is the responsibility of MOTC.

Minimum Qualifications Requirements of the Consulting firm:

- The Consultant's team is expected to be a firm or joint venture of firms and will be selected based on its experience and capacity in carrying out this type of work.
- Its knowledge of, and experience in, Benchmarking of the Mobile Networks, particularly familiar with the use of Nemo Drive Test Tool.
- The Consultant's team at least should consist of 5 personnel with skills and experience in type of work.
- The consultant's team shall perform the test together with engineers and staffs from PTD and shall provide on job training to them.
- The consultant's team shall take responsibility of the test's result and shall reach to resolution with the operator if there are any disputes from operators with the result.

The MOTC now invites eligible firms to indicate their interest in providing the Services. Interested Consultants should provide information demonstrating that they have the required qualifications and relevant experience to perform the Services.

A Consultant will be selected in accordance with the Selection Based on Consultants' Qualification as set out in the Consultant Guidelines.

Further information can be obtained at the address below during office hours 0930 to 1630 hours.

Expression of interest and other supporting documents (such as the experience on the similar tasks, the profile of the team members, company registration) must be delivered in a written form to the address below (in person, or by mail, or by fax or by e-mail) on or before 1630 hours of 8 March 2017.

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