SMS/USSD Gateway Procurement

Terms of Reference

1 INTRODUCTION

The objective of this TOR is to describe the functional requirements and specification for an SMS/USSD Gateway that will facilitate a large partner organization of FSDT.

2 Scope of Project

The scope of this project includes:

✓ Supply of two servers one active and the other passive. The consultant should propose the right specifications for the hardware in order to handle the expected load in accordance with the solution design and requirements of the proposed software. The minimum specifications are as shown below:

<table>
<thead>
<tr>
<th>Specifications</th>
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<tbody>
<tr>
<td>Intel Processor 10 core, 2.3 GHz, 25MB, 105W, 128GB RAM, Dual hot plug power</td>
</tr>
<tr>
<td>supply, 3 x 300GB HDD in Raid Configuration, Smart Array, 4 x 1 Gbe Network</td>
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<tr>
<td>Interface, DVD-RW, Warranty 3/3/3, Rack Mountable</td>
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</table>

✓ Installation and configuration of the operating systems and patches on the two servers, and OS hardening.

✓ Installation and configuration of SMS/USSD Gateway or Middleware on the two servers at partner Data center
Developing and configuring software modules that Integrate partner’s SMS/USSD Servers and the Telecom’s SMS/USSD center to allow for messages or queries from the end users with mobile phones to reach partner’s Servers and vice versa.

Developing Software Interfaces to integrate partner’s SMS/USSD Gateway with selected server(s) that expose selected partner information.

Development, testing and deployment of specific software modules that provides for the software logic to handle the fetching and dissemination of the requested data after meeting all the prerequisites to be provided by the partner.

Network Equipment configurations for creating and maintaining stable Virtual Private Network (VPN) links with all the Mobile Network Operators (MNOs) that do offer SMS/USSD services to third party organizations.

Work with partner in obtaining the right connectivity and interfaces from the MNOs.

Integration and commissioning of all system modules to work as one and deliver the intended service.

Performing User Acceptance Testing (UAT) of the whole system

Providing Training to the partner’s IT team comprising of two (2) Systems Administrators and Three (3) Software Developers (3). The training is expected to be for a total of at least 10 working days. It must be comprehensive enough to allow the system administrators to manage and operate the system on their, latest by the end of the three months’ support.

Perform a complete Transfer of Knowledge that allows the trained IT personnel of the partner to efficiently manage all the provisioned services and able to provision new services in the future, as long as they are supported by the system. The contractor should propose a practical and engaging Transfer of Knowledge that includes active shadowing during development, installations, testing and commissioning of the system.

Provide onsite technical Support for a period of not less than 3 months, and ensure that the partner’s team gains enough knowledge and skills to be able to handle the system on their own, at the end of the three months’ support.

NOTE:

1. SMS/USSD short code is already obtained from TCRA

2. We expect transactions during peak hours to be around 200 per second with message size of 25kb maximum.
3. Network equipment like router, firewall and load balancer do exist.

3  Methodology
The firm is free to propose the most appropriate methodology to perform this project and achieve the set objectives in an efficient manner.

4  Expected Deliverables/Specific Outputs
The expected overall deliverable is a comprehensive end to end solution that can integrate well with partner’s existing systems and MNO’s infrastructure to disseminate requested data via SMS / USSD.

The specific expected deliverables are:

- The Server Hardware
- The Server Operating System
- The standard gateway or middleware with open standard interfaces; with relevant licenses and subscriptions, where applicable
- The Custom Developed application to handle the business logic for disseminating requested data
- System setup and configurations
- Integration with partner’s existing systems
- Integration with MNOs
- Training to partners developers and System Administrators
- System Documentations
- 3 Months onsite Support

5  Timing of this consultancy
The assignment is expected to commence on in January 2017 and end in April 2017. The assignment will take a total of 70 working days (Monday - Friday).

6  Management and oversight
Contracting will be done by FSDT. The consultant will be responsible for day to day management of the assignment while the partner organization will have an oversight role on the project. In addition, the partner organization will make available to the consultant all the necessary background documents, staff and any support required.

7  Basis of award (Qualifying and Proposal Scoring Criteria)
The evaluation criteria to be used in evaluating the submitted proposal:

<table>
<thead>
<tr>
<th>No.</th>
<th>TOR</th>
<th>Score</th>
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<tbody>
<tr>
<td>1.</td>
<td>A well-established company in-good standing</td>
<td>10</td>
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<tr>
<td></td>
<td>- Company documentations</td>
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<tr>
<td>2.</td>
<td>General Experience Track Record – ICT</td>
<td>10</td>
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</tbody>
</table>
3. Specific Experience Track Record – Software Development, Customization, Deployments 20

4. Financial Capability 10

5. Comprehensiveness of the Technical Proposal with respect to the Tender requirements:
   - Hardware specification [5]
   - Understanding of the Requirements:
     - Functional [2.5]
     - Technical [2.5]
     - Business [2.5]
     - Knowledge Transfer [2.5]
   - MNO Connectivity / Interfacing [10]
   - Expansion: Flexibility and Scalability [10]
   - Training / Knowledge Transfer Plan [10] 50

## Submission of proposal:

The Consultant should submit a letter indicating their commitment to undertake this assignment. The letter should indicate availability and be supported by a capability statement of similar assignments conducted elsewhere. Company Profile or full CV should be attached. The letter should indicate the daily professional fees in US Dollars and should demonstrate that the daily fee rate quoted is internationally competitive. This consultancy will be subject to local taxes.

**Financial Proposal**

This will be a fixed priced contract. Financial proposals should be quoted in Tanzanian Shillings (TZS) set out in the following format:

<table>
<thead>
<tr>
<th>Component</th>
<th>Units</th>
<th>Rate (TZS)</th>
<th>Total (TZS)</th>
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<tbody>
<tr>
<td>Person days of consultant A</td>
<td></td>
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<tr>
<td>Person days of consultant B …. etc</td>
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<tr>
<td><strong>Total Fees</strong></td>
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<td>Cost of Equipment 2 (attach any specifications)</td>
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### Payment Schedules

The Partner/FSDT will make payments for this assignment as follows:

- 30% of the fees upon agreement of the methodology by all parties and completion of resource mobilisation
- 40% upon completion of the project and testing.
- 30% upon end of knowledge transfer and 3 months support

The Partner/FSDT will reimburse all agreed travel and other expenses upon submission of relevant receipts within ten days of approval of invoices submitted by the consultant.

### Confidentiality Statement

This assignment is rated as highly confidential. All data and information received from client for the purpose of this assignment are to be treated confidentially and are only to be used in connection with the execution of these Terms of Reference. All intellectual property rights arising from the execution of these Terms of Reference are assigned to the client. The contents of written materials obtained and used in this assignment should strictly not be disclosed to any third parties. Where there is necessity to do so, the Consultant shall not do so without the expressed advance written authorization of the client.
10 Conflict of Interest

The Tenderer (and any sub-contractors) must disclose in their tender details of any circumstances, including personal, financial and business activities that will, or might, give rise to a conflict of interest, if they were awarded this contract. Where the Tenderers identify any potential conflicts they should state how they intend to avoid such conflicts. Partner/FSDT reserves the right to reject any tender which, in its opinion, gives rise, or could potentially give rise to, a conflict of interest.