

Terms of Reference for hiring a firm to design, develop and operate a Web-based Platform to support the implementation of a subsidy scheme under the PRIME Program

Background

German Development Bank (KfW) and **Pakistan Microfinance Investment Company (PMIC)** have been implementing a program called PRIME – PMIC-KfW Renewable Energy Initiative through Microfinance in Pakistan that aims to support the financing of quality certified Solar Systems and Solar Irrigation Pumps for households, microentrepreneurs and small farmers in poor grid and off-grid locations in the rural and peri-urban areas of Pakistan. PRIME includes a Euro 15 million financing facility – on-lent to MFPs by PMIC for purchase of solar systems. The program was launched in August 2019 with 8 Microfinance Providers (MFPs). It has enabled a responsible financing mechanism by lending to its microfinance partners, building their capacity, providing support on sensitizing awareness, and strengthening their assessment of energy needs. KfW has recently approved an additional Euro 5 million subsidy scheme for the program to address the affordability issue among MFP clients and help them in financing high quality solar systems for rural and urban clients in Pakistan.

PMIC is responsible for the coordination of all program activities, including the pre-qualification of solar suppliers and their products; on-going quality control; consumer awareness for demand generation, trainings, and collaboration with all program stakeholders on effective delivery.

Objective of the Assignment

To support the implementation of PRIME program, PMIC aims to hire a firm to design, develop and operate (maintenance & repair) a web-based platform along with mobile app and desktop app to track installation and remote verification (with GPS coordinates) of each solar system under the PRIME Program. The portal will provide reporting on installation of solar systems for all stakeholders, including PMIC, MFPs, Independent Verification Agent (IVA) as well as selected solar vendors. The portal shall store data pertaining to all the installations under the PRIME program – as per the reporting formats shared by PMIC to ensure timely availability of data and effective reimbursement of subsidy amounts to MFPs and then to vendors.

Scope of Work & SDS Details

The firm will design a web-based platform that will cover the following three types of applications.

- Web Application
- Mobile Application
- Desktop Application

The stakeholders include IT Firm, Supplier, IVA (Independent Verification Agents), Microfinance Providers and PMIC.

Microfinance Providers

- Entering data pertaining to approved loans for solar systems under PRIME program with client details (address, GPS coordinates, vendor/supplier information etc.)

- Making revisions to ensure that the installed systems are in line with project scope and to the satisfaction of the IVA.
- Posting receipts for the payments made to vendors against installed and approved solar systems.
- Uploading reports for the systems installed on a monthly and quarterly basis for review of PMIC.

Vendors

- Viewing Microfinance client's information and uploading information pertaining to installed solar systems.

IVA

- Approve/disapprove installed solar systems to allow reimbursement of subsidy.

PMIC

- Reviewing the status of all the systems installed under the PRIME program and allow reimbursement of end user and MFP interest rate subsidy.
- Reviewing monthly/quarterly reports from MFPs
- Posting evidence/data for all the reimbursements made to MFPs under the subsidy scheme.

The mobile app must be able to work in off-line mode like storing local information and pictures as some of the rural areas where PRIME program is being deployed have poor/reduced internet connectivity which will not upload data automatically. The off-line mode will help the credit officers as well as the Independent Verification Agents (IVA) staff to collect data via their phones/tablets and get it automatically uploaded/synchronized with the main server once they get internet access.

Roles and Responsibilities of Stakeholders

Stakeholders	Roles and Actions
IT Firm	• User can modify the records in the system • User can download the data; it will be in excel format • User can give rights to other users, SHS supplier, IVA, PMIC, complaint and not members • User can change role of all existing users • User can check all requests created in the system • User can perform actions on those requests

MFP	• User can create its requests • User can view its requests • User can change its password • User can check its requests branch wise and supplier wise • The system will validate the input data and give alert message if the desired CNIC number entered by the user already exists • The record will only be inserted if the CNIC number is unique and there is no duplication in the data • 1-10 pictures of product installed at location (with GPS coordinates) • For Login Authentication internet connectivity will be required.
Vendor role	• User can create its requests • User can view its requests • User can change its password • User can check its requests district wise and MFP wise • Users can attach files, pictures and documents in the form • The system will validate the input data and give alert message if the desired CNIC number entered by the user already exists • The record will only be inserted if the CNIC number is unique and there is no duplication in the data • 1-10 pictures of product installed at location (with GPS coordinates) • For Login Authentication internet connectivity will be required.
IVA (Independent Verification Agent)	• User will view approval request and approve it • User will fill survey form • User will upload 1-10 pictures of product installed at location (with GPS coordinates) • User can change its password
PMIC	• User can view any request at any stage • User can check all requests created in the system • User can perform actions on those steps • Dash board reports show only for PMIC roles user • User can download reports MFP wise and supplier wise • PMIC user can download the data, it will be in excel format • User can change its password

Application flow

The application flow with actors and their actions along with corresponding outcomes are shown below.

Step	Stakeholders/Actors	Action/Activity	Outcome/Notifications
Step one	MFP and supplier	MFP will enter the details of the client after approving the loan	Notification will be sent to Supplier
Step two	Supplier and MFP client	Supplier will install the system and upload information related to product, client and installation	Product, client and installation information uploaded on web-based platform Notification will be sent to IVA/MFP
Step three	IVA, supplier and MFP client	IVA will physically verify the installation, fill the eligibility criteria form and upload the information about the client and product pictures	Installation will be physically verified and eligibility criteria form will be filled MFP and Supplier will be notified.
Step four	IVA	If the IVA says 'Not approved' or suggests improvement, Then the request will be sent back to supplier and MFP	Approval request will be refused/put on hold Supplier and MFP will be notified
Step five	IVA and supplier	If IVA is satisfied with the revisions made by MFP/Vendor then it approves the system on the SDS	Supplier and MFP will be notified
Step six	MFP, Vendor	Upon receiving the approval notification MFP clears the payment of the vendor	Upon payment – a notification gets issued to vendor about clearing of it's dues. Notification is issued to PMIC about successful deployment of a solar system (with system amount, loan amount and tenure of the loan)

Step seven	Supplier, IVA and MFP	If any information needs updating at any stage, supplier, MFP and IVA need to send request to PMIC. Rights will only be assigned to PMIC.	Requests shall be sent to PMIC whenever any information needs to be update.
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Deliverables

The firm shall be responsible for providing following deliverables:

- An inception report with a design prototype – which explains roles and responsibilities as well as data dashboard for each stakeholder and get it approved from PMIC
- Designed Software Solution along with a detailed manual explaining the design of the solution
- Presentation on the SDS for PMIC PRIME team and management
- Trainings on usage of the Software Solution
 - a. 2 trainings for PMIC team
 - b. 2 trainings at Karachi, Lahore and Multan for MFPs
- Training manual for PMIC team to impart trainings for the MFPs as well as vendors (as and when required)
- Provide trouble shooting (maintenance & repair) services to PMIC and other stakeholders for at least 4 years
- Vendor must deliver a penetration test report for the software solution, demonstrating no exploitable vulnerabilities remain.

Qualification and experience of firm

The firm with the following qualifications is invited to design the Software Database System for the PRIME Program subsidy scheme.

1. A software house/firm which has expertise and experience in designing software solutions.
2. At least 5 Years of experience in software development.
3. At least 2 years of experience architecting cloud-based solutions.
4. The firm must have designed at least 1 similar software solution in last 3 years.
5. The firm must show evidence of annual turnover in any of the last five years of not less than PKR 50 million.
6. Basic understanding about microfinance business and how a loan is sanctioned by Microfinance Providers – MFPs would be considered as an added qualification.