

TERMS OF REFERENCE

NATIONAL TRANSMISSION CORPORATION AUTOMATION OF THE FIT-ALL FUND MANAGEMENT SYSTEM

1.0 BACKGROUND

The proposed FIT-All Fund Management System (FITMS) will allow TransCo's customers – the Renewable Energy Developers (REDs) and Distribution Utilities (DUs) – to access and monitor their respective FIT-All accounts and transaction history, similar to how bank clients manage their accounts.

The system will help accelerate the processing of FIT-All Fund transactions and, more importantly, will provide a more secure and reliable platform for report generation.

The automated system for FIT-ALL Fund Management System will address the following challenges:

1. The TransCo customers – RE Developers and Distribution Utilities – have to submit their receivable and collection reports to the TransCo FIT-All Fund Administration Division through email.
2. TransCo customers have to manually prepare the required report format.
3. TransCo customers have to go back to their emails to retrieve their report submissions and trace back their historical submissions.
4. The processing for FIT-ALL payments is currently done in “manu-matic.” TransCo FFAD stores the customer's profile, receivable, collection, and payment processing information in MS Excel, which is progressively unable to produce results faster.

The FITMS will supplement TransCo's FIT-All Fund operations to render more efficient services to its concerned stakeholders.

The in-house development team of TransCo has already started the system development of FITMS. The services needed for this project is for the development and integration of the succeeding phases of FITMS.

2.0 OBJECTIVES

- 2.1 To provide TransCo's customers a secure online platform to file their receivable and collection reports based on TransCo's required format
- 2.2 To provide TransCo's customers the facility to automatically compute their receivables based on the applicable rates
- 2.3 To allow TransCo's customers monitor and manage their respective FIT-All accounts and transaction history
- 2.4 To help accelerate the processing of FIT-All Fund transactions
- 2.5 To provide an efficient way to generate and retrieve reports

3.0 PROJECT APPROACH

This project is divided into four phases to ensure a quality automated system and a timely delivery of results. These phases may overlap each other in terms of project activities to achieve the targets per quarter. The quarterly targets are discussed in the Project Duration section of this document.

The recommended project approach is a hybrid of the agile methodology and the software development life cycle.

4.0 SYSTEM MODULES

Here are the main system modules of the entire FIT-ALL FUND MANAGEMENT system. To ensure quality delivery of the system, the system is divided into modules and will be delivered by Phases:

- 4.1 Phase 1: System Libraries
- 4.2 Phase 1: User Access Management
- 4.3 Phase 2: External pages for our customers
- 4.4 Phase 2: Receivable, Remittance, & Payable Monitoring
- 4.5 Phase 3: Fund and Transfer Allocation
- 4.6 Phase 3: Disbursements
- 4.7 Phase 4: Financial Reporting

5.0 SCOPE OF WORK

The SERVICE PROVIDER shall ensure an optimized architectural structure on the codes and the interaction of the objects and/or actors.

The scope of this project is the integration and go-live of Phases 1 and 2 items in Section 4.

5.1 General Requirements

- 5.1.1 The system is a web-based application system that should be responsive in any device screen width – ipad, laptop, desktop.
- 5.1.2 The system shall have the ability to sort data in ascending or descending order.
- 5.1.3 The system shall have the ability to add, edit, search in keywords, and activate and inactivate records.
- 5.1.4 The system shall deliver optimal system performance.
- 5.1.5 The system shall have the security measures to protect it and shall comply to the following metrics:

5.1.5.1 Access Control

- 5.1.5.1.1 No multiple concurrent logins of the same authentication credentials
- 5.1.5.1.2 Configurable access and permissions using user roles
- 5.1.5.1.3 System administration to add, change access and user roles
- 5.1.5.1.4 Attestation document that unauthorized devices are not installed (keyloggers, etc)
- 5.1.5.1.5 Provide a method for protecting against unauthorized privilege escalation.
- 5.1.5.1.6 Provide an audit log of the access, timestamp, module or table accessed, what was added or changed

5.1.5.2 Account Management

- 5.1.5.2.1 Provide configuration settings for the history of the login account including unsuccessful and successful attempts, login and logout timestamp, modules allowed access.
- 5.1.5.2.2 Provide facility for account maintenance
- 5.1.5.2.3 Provide a configurable password management system that allows to set change in password, denial of repeated or recycled password, length of password required, frequency of change, login attempts lockout, inactive session logout

5.1.5.3 Session Management

- 5.1.5.3.1 Do not retain login information between sessions
- 5.1.5.3.2 No provision of auto-fill functionality during login nor allow anonymous logins
- 5.1.5.3.3 Encrypt or securely transmit user-login credentials
- 5.1.5.3.4 Configuration files shall not store passwords that are stored in clear text, hardcoded into scripts

5.1.5.4 Provide a documentation and a walkthrough or discussion regarding the configuration files set for the system. The documentation shall include ports and services, if any.

5.2 System development of the following modules:

5.2.1 External pages for our customers

5.2.1.1 Registration page of the customers based on the Information Sheet format of RE Developer and Collection Agent

5.2.1.2 Registration is routed for TransCo approval

5.2.1.3 Collection Agent Page

5.2.1.3.1 Ability to enter kwh Sales per month, which the system automatically computes for the Receivable Amount based on the rates provided

5.2.1.3.2 Ability to upload documents as attachments

5.2.1.3.3 Ability to update the Information Sheet and its signatories

5.2.1.3.4 Ability to generate/print in PDF the updated information sheet

5.2.1.3.5 Routing of updates on the information sheet and submission of kwh Sales per month for TransCo approval

5.2.1.3.6 Ability to view and search the previous and current transactions/submissions

5.2.1.3.7 Access to all FIT-ALL issuances

5.2.1.3.8 Ability to view in dashboard the summary/total balance and collection efficiency

5.2.1.3.9 Ability to view the TransCo posted Remittance Amount

5.2.1.3.10 Ability to generate/print in PDF the Monthly FIT Receivable, Collection, and Remittance Report (MFRCCR)

5.2.1.4 RE Developer Page

5.2.1.4.1 Ability to input, prepare, and submit FIT Statement of Account (SOA)

5.2.1.4.2 Ability to upload documents as attachments

5.2.1.4.3 Ability to update the Information Sheet and its signatories

5.2.1.4.4 Ability to generate/print in PDF updated RE Information Sheet

5.2.1.4.5 Routing of updates on the information sheet and submission of FIT SOA per month for TransCo evaluation and approval

5.2.1.4.6 Ability to view and search the previous and current transactions/submissions

- 5.2.1.4.7 Ability to view in dashboard the outstanding balance of TransCo to RE Developer
 - 5.2.1.4.8 Access to all FIT-ALL issuances
 - 5.2.1.4.9 Ability to generate/print in PDF the Monthly FIT SOA
- 5.2.2 Information Sheet Approval Module
- 5.2.2.1 Ability to retrieve, review, and approve or disapprove the new or modified Information Sheets
 - 5.2.2.2 Ability to view and search the list of items pending for approval, approved, or disapproved new or modified information sheets of the RE Developer and Collection Agent
 - 5.2.2.3 Ability to generate/print in PDF the approved Information Sheets of the RE Developer and Collection Agent
- 5.2.3 Receivable, Remittance, & Payable Monitoring
- 5.2.3.1 FIT-ALL Receivable Monitoring
 - 5.2.3.1.1 Ability to easily retrieve and view the submitted FIT-ALL Receivable and Collection Report of the Collection Agent
 - 5.2.3.1.2 Ability of the system to automatically distribute the FIT-ALL Receivable to its different components – AA, DA, FD, WCA – using the rates of each component
 - 5.2.3.1.3 Ability to retrieve, review, and approve or disapprove the submission of the FIT-ALL Receivable and Collection Report
 - 5.2.3.1.4 Ability to view and search the list of items pending for approval, approved, or disapproved FIT-ALL Receivable and Collection Report
 - 5.2.3.1.5 Ability to generate and print in PDF the transaction accounting entries based on the proforma entries upon approval of the FIT-ALL Receivable and Collection Report
 - 5.2.3.1.6 Ability to view in the dashboard the number of pending items for approval, number of approved items, and number of disapproved items
 - 5.2.3.1.7 Ability to generate and print report in PDF the list of Collection Agents by “approval” status and/or depending by a certain date range
 - 5.2.3.1.8 Ability to generate/print in PDF the Monthly FIT Receivable, Collection, and Remittance Report (MFRCCR)
 - 5.2.3.2 CRR Receivable Monitoring

- 5.2.3.2.1 Ability to easily retrieve and view the submitted FIT SOA of the RE Developers
- 5.2.3.2.2 Ability to retrieve, review/evaluate, and approve or disapprove the submission of the FIT SOA
- 5.2.3.2.3 Ability of the system to send notification to parties involved in the approval
- 5.2.3.2.4 Ability to view and search the list of items pending for approval, approved, or disapproved FIT SOA
- 5.2.3.2.5 Ability to generate and print in PDF transaction accounting entries based on the proforma entries upon approval of the FIT SOA of the RE Developer
- 5.2.3.2.6 Ability to view in the dashboard the number of pending items for approval, number of approved items, and number of disapproved items
- 5.2.3.2.7 Ability to generate/print report in PDF the list of RE Developers by “approval” status and/or depending by a certain date range
- 5.2.3.2.8 Ability to generate/print in PDF the Monthly FIT SOA

5.2.3.3 FIT-ALL Remittance Monitoring

- 5.2.3.3.1 Ability to upload the remittance file from the bank by period
- 5.2.3.3.2 Ability to easily retrieve and view the uploaded remittances
- 5.2.3.3.3 Ability of the system to automatically apply all the remittances to the subsidiary ledger of each Collection Agent account
- 5.2.3.3.4 Ability to post accounting entries once reviewed
- 5.2.3.3.5 Ability to print in PDF the accounting entries once posted.
- 5.2.3.3.6 Ability to generate and print in PDF the Remittance Report by period or by account

5.2.3.4 CRR Remittance Monitoring

- 5.2.3.4.1 Ability to monitor the PEMC/Host DUs balances per RE Developer
- 5.2.3.4.2 Ability to upload the daily remittance report from PEMC and Host DUs
- 5.2.3.4.3 Ability to generate and print in PDF the summary remittance report per collection agent (PEMC, Host DUs) based on a date range
- 5.2.3.4.4 Ability to easily retrieve and view the uploaded remittances

5.2.3.4.5 Ability to post accounting entries once reviewed (posting to PEMC/Host DUs only)

5.2.3.4.6 Ability to print in PDF the accounting entries once posted.

5.2.3.5 Payable Monitoring

5.2.3.5.1 Ability to generate the summary of disbursements for the month

5.2.3.5.2 Ability to generate/print in PDF DUE TO RE Subsidiary Ledger (SL)

5.2.3.5.3 Ability to view, search, retrieve, and print in PDF the SL per RE Developer

5.3 Integration of all the 4 modules (4.1 – 4.4)

5.4 IT Training & Documentation

5.4.1 Conduct training to TransCo IT on the developed modules as well as the integration of all the 4 modules

5.4.2 Provide TransCo the following documentation:

5.4.2.1 System Architecture

5.4.2.2 Documentation of the System Security Features

5.4.2.3 Technical Specifications

5.4.2.4 User Manual

5.4.2.5 Test Scripts Documentation

5.4.2.6 Deployment Procedure

6.0 TECHNICAL SOFTWARE SPECIFICATIONS

A secure web application system that can be accessed via desktop browser where it allows access for files to be uploaded to the system.

Since this is an engagement that will complete the succeeding phases of the project, the SERVICE PROVIDER shall be knowledgeable on the following platforms the system is initially written:

Backend (API): PHP, Phalcon Framework 4, REST API, Proper ORM, Oracle Database

Frontend (Portal): PHP, Javascript, CSS, HTML, Laravel Framework 8, Vue.js 2, Bootstrap 4

The production environment is running on Linux, Docker, and NGINX.

However, if the SERVICE PROVIDER presents a solution that fits with the existing System Libraries and User Access Management modules, TransCo may consider working with it.

7.0 RESPONSIBILITIES OF THE SERVICE PROVIDER AND TRANSCO

7.1 Responsibilities of Service Provider

- 7.1.1 TransCo hereby engages the SERVICE PROVIDER and the SERVICE PROVIDER hereby agrees to be engaged by TransCo to develop the Software in accordance with the system requirements of the FIT-ALL FUND MANAGEMENT SYSTEM (FITMS).
- 7.1.2 The SERVICE PROVIDER shall provide the curriculum vitae of all the project team members to the Bidding and Awards Committee (BAC) and to the TransCo project team should there be any change in the Service Provider Project team during the project implementation.
- 7.1.3 The SERVICE PROVIDER shall assign well-trained, licensed, and competent software developers and project team/s during project implementation that will ensure the on-time delivery of quality quarterly deliverables.
- 7.1.4 The SERVICE PROVIDER shall assign at least three(3) software developers onsite the TransCo Head Office during the development of the system for easy coordination.
- 7.1.5 The SERVICE PROVIDER shall diligently serve the interest of TransCo in rendering its services and shall ensure exclusive use of software for the purpose of TransCo.
- 7.1.6 The SERVICE PROVIDER shall provide a summary of documentation of security features, instructions, reconfiguration of settings, if applicable.
- 7.1.7 The SERVICE PROVIDER shall resolve any problems with regard to the operation of the Software, respond to any reasonable request for assistance regarding the Software within the period of one (1) year, as stated under the Warranty.
- 7.1.8 The SERVICE PROVIDER shall conduct trainings on how to use the software, including, but not limited to, installation, usage, data management, and basic troubleshooting.
- 7.1.9 The SERVICE PROVIDER shall not charge TransCo for any trainings/orientations required for the operation of the software.

7.1.10 The SERVICE PROVIDER shall complete the development of the Software according to the milestones and quarterly target deliverables.

7.1.11 The SERVICE PROVIDER shall develop a system with optimal performance to achieve efficiency in the processing of FIT-ALL Fund transactions.

7.2 Responsibilities of TransCo

7.2.1 TransCo shall provide a project team for easy coordination on the requirements of the system.

7.2.2 The TransCoproject team shall make themselves available on the agreed activities identified on the project timeline.

7.2.3 TransCoshall inform the SERVICE PROVIDER or the designated authorized representative for each activity through email/telephone/mobile communications.

7.2.4 TransCo shall be responsible in the creation of the Test Scenarios of the proposed system.

7.2.5 TransCo may request that reasonable changes be made to the specifications and functionalities associated under the scope of work. Should TransCo request such a change, the SERVICE PROVIDER shall apply its best effort to implement the requested change at no additional expense to TransCo, and without delaying delivery of the Software.

8.0 PROJECT DURATION

The project shall be completed within the year of 2021. The Q4 production deployment shall be in the 1st week of November 2021. Soft launch to the customers shall be in the 2nd week of November 2021.

DELIVERABLES/ACTIVITIES	Q1	Q2	Q3	Q4
SYSTEM LIBRARIES		★		
USER ACCESS MANAGEMENT			★	
EXTERNAL PAGES			★	
RECEIVABLE, REMITTANCE, & PAYABLE MONITORING				★

9.0 WARRANTY/SUPPORT

The warranty shall be guaranteed to TransCo for a period of one (1) year. The warranty shall begin after the system is on go-live/production. The scope of the warranty and support is troubleshooting, bug fixing, and fixes on the production environment should there be any malfunction to the system.

The SERVICE PROVIDER shall designate a primary contact person to support TransCo in the event of any system issue or downtime encountered in the delivered system. The support hours shall be on a 10am – 7pm window.

The SERVICE PROVIDER shall ensure the deployment of an optimized and quality system with functionality based on the agreed scope of work.

The SERVICE PROVIDER agrees to indemnify, defend, and protect TransCo from and against all lawsuits and costs of every kind pertaining to the software including reasonable legal fees due to the Developer's infringement of the intellectual rights of any third party.

10.0 PAYMENT MILESTONES

- 10.1 Billing Statement/Service Invoice by the SERVICE PROVIDER shall be done after the SERVICE PROVIDER has secured a milestone sign-off and a submission of all necessary documents required by TransCo on a particular payment milestone.
- 10.2 TransCo shall pay the SERVICE PROVIDER the amount indicated in the ABC inclusive of the twelve percent (12%) VAT.
- 10.3 The SERVICE PROVIDER shall issue a corresponding BIR compliant Official Receipt to the National Transmission Corporation (TransCo) as a pre-requisite for the release of check payment.
- 10.4 All payments shall be subject to the standard accounting and auditing procedures of TransCo.

Terms of payment shall be as follows:

STAGE	DELIVERABLES/PARTICULARS	PERCENT WORK COMPLETED
1	<p>Project preliminary activities:</p> <ul style="list-style-type: none"> • Project kick-off • Signed-off High Level Project Timeline • System Architecture Design Documentation • System Security Features Documentation <p>External Pages (EP)</p> <ul style="list-style-type: none"> • Signed-off User Interface Prototype • Technical Specifications Documentation 	10%
2	<p>External Pages (EP)</p> <ul style="list-style-type: none"> • Adjustment/integration of the System Libraries(SL) and User Access Management (UAM) • Completion of Functional User Interface of External Pages • Completion of Approval workflow of External Pages • Completion of the Quality Assurance Testing of TransCo with no open issues • Test Scenarios & Test Scripts Documentation of EP • Test Scenarios for the General Requirements on Security • Signed-off User Acceptance Testing 	30%
3	<p>Receivable, Remittance, Payable Monitoring (RRPM)</p> <ul style="list-style-type: none"> • Signed-off User Interface Prototype • Technical Specifications Document of RRPM • Sign off of the Integration Testing of SL & UAM • Completion of Functional User Interface • Completion of the Approval workflow of RRPM • Completion of the Quality Assurance Testing of TransCo with no open issues • Test Scenarios & Test Scripts Documentation • Signed-off User Acceptance Testing of RRPM 	30%
4	<ul style="list-style-type: none"> • Signed-off of end-to-end integration of modules • Deployment of Phases 1 and 2 • Training • User Manual Documentation • Deployment Procedure Documentation 	30%

11.0CONFIDENTIALITY

All data, information, and documents produced/secured by the SERVICE PROVIDER shall be strictly kept confidential. Such confidentiality shall extend to all officers and employees, agents, and representatives of the SERVICE PROVIDER assigned to this project.

The SERVICE PROVIDER shall not disclose to any third party (i) the business of TransCo, including details regarding the Software, the Specifications, or TransCo's confidential information, or (ii) make copies of any confidential information for personal use or for distribution unless requested to do so by TransCo.

12.0 INTELLECTUAL PROPERTY RIGHTS IN THE SOFTWARE

The Parties acknowledge and agree that TransCo shall hold all intellectual property rights in the Software including, but not limited to, copyright, trademark, and source code rights. The SERVICE PROVIDER agrees not to claim any such ownership in the Software's intellectual property at any time prior to or after the completion and delivery of the Software to TransCo.