

1. INTRODUCTION

This document provides the requirements for the functionality of the desired Loan Management Solution application software for the Fund. The functional requirements are aimed at ensuring that processes and procedures are automated to the extent possible by the application. Legal and regulatory requirements are considered in the functional requirements.

Specifications are denoted as mandatory or desirable. The definitions of the corresponding priorities are indicated in the table below.

2. PURPOSE OF THE DOCUMENT

The purpose of this paper is to document the functional and non-functional requirements specifications of the proposed loan management IT solution in accordance with the Business, Information Systems and Technology Architecture design. The requirements include the following areas:

- a) Legal and regulatory requirements to be met by the system.
- b) Business functional requirements to be met by the proposed system.
- c) Architectural requirements to be met by the system.
- d) System administration and management functions required to be met by the proposed system.
- e) Performance requirements of the system.
- f) Description of services required to be supplied by the vendor. These services include:
 - i Project management.
 - ii System analysis and design.
 - iii Software customization/ development.
 - iv System integration.
 - v Training and capacity building.
 - vi Data conversion and migration
 - vii Documentation.
- g) Minimum requirements of the vendor's management and technical team.
- h) ICT goods and standard software required to be supplied and installed.
- i) Inspections and tests required to be carried out.
- j) Warranty, support, and maintenance services required to be provided

3. DISCLAIMER

This document is intended for use by EDF and any parties they may expressly authorize. The circulation and use of the contents of this report is therefore limited and any analysis and interpretation of the contents must be made within the context of the assignment, and the TOR's.

4. BACKGROUND

A business process review of EDF was conducted. Several challenges with existing processes and systems were identified. A target system was designed, and its constituent business processes was recommended. Below is a summary of EDF challenges and

needs, business objectives of the proposed system and scope of the system implementation work.

4.1. Current challenges and needs of EDF

The current challenges faced by EDF are indicated below:

- i. The loan application process is manual. This is a challenge in the case of clients who wish to apply for loans but whose geographical location is far from EDF's office.
- ii. Follow-up on applications stages, especially when the application has been passed to other departments is a challenge due to lack of automation.
- iii. Reports are key aspects in business development, but in the case of EDF's business development department, report generation is a challenge since there is no system used for data storage and retrieval.
- iv. Lack of an appropriate tool or system to carry out client surveys and analyze clients' feedback has a potential negative impact on client relationship management.
- v. Poor record keeping system sometimes leads to loss of loans applications or client's documents
- vi. Loan applications always have many documents attached to them and there is no specific checklist for documents to review when checking if all needed documents have been submitted and:
- vii. Clients' documents sometimes get lost or are misplaced due to poor storage systems and processes.
- viii. Keeping track of all records at the warehouses is a challenge since the process is manual. This results in delays in receiving data or incomplete data from the aggregator or the warehouse clerk.
- ix. The manual loan management system breeds inefficiencies in the loans disbursements and repayments operations.
- x. Power blackouts always disrupt the ICT systems functioning.

Based on the above challenges, the following needs can be deduced:

- 1. There is need for a system that supports online loan applications
- 2. There is a need for a system that supports collateral and guarantor registration.
- 3. There is a need to have an application that supports recording of loan application, vetting, verification, and approval details.
- 4. There is a need for flexibility and robustness in interest rate calculations.
- 5. There is a need to have loan repayment schedules prepared in accordance with the different loan products and to also calculate loan repayment amounts automatically.
- 6. There is a need to have standard offer letters generated from the application in English.
- 7. A system that enables capturing of KYC requirements as well as other details which can be used in analysis during reporting.
- 8. There is need for an application that facilitates enquiries, client feedback and follow-up.
- 9. There is need for a system that supports lead tracking, potential client registration, campaigns, and marketing activities.
- 10. There is need for a system that supports clients feedback surveys

11. There is need for a reliable system which is secure and 100% available.

4.2. Business Objectives of the Proposed IT solution

EDF aims to ensure that Malawi's vast export potential and business opportunities are exploited to generate foreign exchange for the country. The main objective of the proposed loan management IT Solution is to improve operational efficiency and serve EDF stakeholders better.

Furthermore, the loan management IT Solution will reduce related infrastructure costs, facilitate timely and accurate reporting to the regulator, financiers and other stakeholders and data security will be guaranteed. The successful implementation of the IT Solution will provide the following benefits:

- I. Streamline EDFs credit and lending operations.
- II. Improved operational efficiency and effectiveness.
- III. Improved data security and integrity.
- IV. Integrated analytical and reporting tools to generate timely and accurate operational, management, regulatory and financial reports for use by the key stakeholders.
- V. Enhanced document management; vi. Improved client relationship management.
- VI. Systems Audit trail with time stamps and access control.
- VII. Reduced fraud perpetuated due to enhanced internal system controls; and
- VIII. Enhanced availability and reliability of both historical and real-time data to facilitate regular data-driven decision-making.

5. SCOPE OF SPECIFICATIONS

The specifications document includes detailed specifications for the following:

- a) Supply, installation, implementation, testing, commissioning, and support of application software with the following broad functionality:
 - i Client Relationship Management
 - ii Loan management.
 - iii Credit Scoring and Pricing
 - iv Activity management.
 - v Self-service web portal.
 - vi Social media plugin.
 - vii Document management.
 - viii Business Intelligence module
- b) Installation, implementation, testing, commissioning, and support of integration interfaces with the following systems:
 - i. Loan management system.
 - ii. Credit Reference Bureau
- c) Training of system administrators, super users, and functional users.
- d) Installation, testing, commissioning, and support of ICT infrastructure, which include the following:

- i. Database Management system.
- ii. Data center infrastructure.

6. TECHNICAL SPECIFICATIONS AND COMPLIANCE SHEET

Table 1: Specifications prioritization

#	Priority	Explanation
i.	Mandatory (denoted as M)	Mandatory requirements are key to meeting user needs and design objectives. They are assigned the highest priority. They must be met.
ii.	Desirable (denoted as D)	Desirable requirements are "nice to have" but not mandatory. A system which meets desirable requirements in a cost-effective manner will be preferred over one which does not meet them at all.

6.1. Bidder's Qualifications

Bidders are expected to submit, together with information required in other parts of this document, the following information:

- 6.1.1. Evidence of the bidder's financial standing in form of audited financial statements for the past three years
- 6.1.2. Qualification and competence of key staff in form of brief curriculum vitae for key staff. Bidders must provide a structure of the project team responsible for implementing this project, in case they win this bid.
- 6.1.3. Evidence of previous projects successfully completed through a profile of similar projects successfully completed, the name of their customers and estimated project value. This information should be limited to projects completed within the past five years.

6.2. Loan Management Solution Functional Requirements

Below are the detailed functional system requirements specifications for the Loan Management Solution.

Column B states the minimum technical specification of the item(s) required by the Procuring Entity. Column C states whether the specification is mandatory (M) or desirable (D) The Bidder is to complete column D with the technical specification of the item(s) offered and to state whether the offered items "comply" or do "not comply" giving details of the areas of non-compliance.

6.2.1. Loan product definition

The key requirements under loan product definition include the following:

- a) To define loan products with varying characteristics targeted at EDF's clients; and
- b) To quickly define new products required to meet client requirements.

No.	Requirement description	Priority	Bidders'
		•	Specifications
A	В	C	D
1.	The application should enable users to define loan products that are appropriate, unique, and disparate such as: • Working capital financing • Project financing • Guarantee facility • Export credit • Equity participation • Hybrid facility • Project preparation • Any other	M	
2.	The application should allow users to easily create new loan products by defining, as a minimum, the following features: • Product unique code and name • Category (The application should enable users to define categories such as: > Short term loans (Working capital financing) > Project financing > Guarantee facility > Export credit > Loan Repayment Schedule	M	
	 Minimum loan size Maximum loan repayment period Grace period for repayment Repayment frequency Interest rate according to client loan cycle Basis for interest rate calculation; Specifically, among several methods, the application must support interest calculation on reducing balance method as it is a requirement by the Regulator. Interest calculation formula for instalment Fees charged and basis e.g., service fee, admin fee, processing fee, arrangement fee, insurance fees, commissions, etc. Penalty fees and category to which they apply. Fees collection method (i.e., upfront, on disbursement, at collection) Monthly installment amount formula 		

	 Disbursement form i.e., cash, cheque, transfer or supply of materials or a combination of the different forms Collection method i.e., loan repayment method 		
3.	For each feature indicated above, the application should allow the user to dictate whether the value set is compulsory or not to allow for both rigidity and flexibility of values during loan application and loan account creation. System should have multiple options	M	
4.	The application should enable verification and approval of new products by authorized users	M	
5.	The application should allow changes to be made to loan product characteristics and parameters by authorized users. However, the application must keep an audit trail to indicate the changes made and maker of the changes. > System be able to modify PAST, CURRENT and FUTURE EVENTS	M	
6.	The application must support export of data to external applications like Excel, PDF, and Word	M	
7.	The application must support import of data from file formats like Excel and CSV	M	
8.	The application must enable users to generate a report of loan products and current configuration and features for reference by client services, sales, and audit departments	М	
9.	The application must support multi-currency at loan application and support currency conversion during reporting		

10.	The application must provide alerts to	M	
	responsible users when.		
	Loan application is submitted.		
	Loan application is approved at each		
	level.		
	When disbursement is made.		
	When collateral value falls below		
	required value.		
	Insurance on collateral expires in the		
	next 30 days.		
	➤ Insurance on collateral expires in the		
	next 5 days.		
	➤ When loan instalment or partial		
	installment is made.		
	➤ When a loan account has fallen in		
	arrears.		
	When interest has been recalculated		
	Grace period alert		
	r		
11.	The application should generate a report of	M	
	number of products per category		

6.2.2. Loan application

The key requirements under loan application are as follows:

- a) To enable EDF record, receive and process loan applications online i.e., doing away with paperwork; and
- b) To reduce the time taken to process loan applications.

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	C	D
1.	The application should enable application for	M	
	loans by allowing a client or user to complete a		
	loan application form online.		
	Loan application inquiry		

			Т
2.	The following data should be recorded on the	M	
	loan application form:		
	Client number		
	• Salutation (i.e., Mr., Mrs., Miss, Dr., Eng.,		
	etc.)		
	Client name		
	Gender		
	Marital status		
	Form of identification provided and		
	number (i.e., passport number, driving		
	license number, national ID number,		
	employee ID number, Voter's registration		
	certificate, Signed letter from Chief or		
	Village Headman etc.)		
	• Date of birth 0		
	Place of birth		
	Nationality		
	Address (See general specifications for		
	address and		
	contact definition)		
	• Sector		
	Level of Education		
	Home type (rented/owned)		
	Telephone contact		
	Home village		
	Employer		
	Employer address		
	Income details (net monthly income for at		
	least 6 previous months)		
	Next of kin details (Name, relationship,		
	address, contact, employer, employer's		
	address, job position)		
3.	The loan application form should be	M	
	automatically completed with values already		
	registered in the application e.g., client details		
	(shown above) should be auto completed on		
	entry of client number		
4.	The application must automatically generate	M	
	loan application reference numbers.	-	
	TP		

		T	
5.	The application should enable users to record	M	
	the following additional information:		
	Loan product applied for		
	Loan series or cycle.		
	Loan Amount		
	Proposed repayment period		
	Purpose of loan		
	Guarantor		
	Collateral		
	Loan disbursement form (cash or materials)		
	Loan disbursement account.		
	Notes and alerts to sync with calendar		
6.	Having selected the loan product, the following	M	
	product values recorded at product definition		
	should be automatically completed without		
	need for further entry:		
	Minimum loan size		
	Maximum loan size		
	Maximum loan repayment period		
	Grace period for repayment		
	Repayment frequency		
	Interest rate according to client loan cycle		
	Interest amount		
	Fees charged and basis e.g., service fee,		
	admin fee, processing fee, arrangement fee,		
	insurance fee, commissions, etc.		
	Fees collection method (i.e., upfront, on		
	disbursement, at collection)		
	Mandatory saving amount and collection		
	method (i.e., upfront, on disbursement, at		
	collection)		
	Disbursement form i.e., cash, cheque,		
	transfer or supply of material or a		
	combination of either form		
	Monthly instalment amount		
	Collection method e.g., loan repayment		
	method Interest calculation method.		
7	Loan collections account The distribution of the distributio	3.6	
7.	The application should among other methods	M	
	calculate interest on the scheduled balance		
8.	The application should calculate and indicate	M	
	the Effective Interest Rate (EIR)		
9.	The loan application form should allow users to	M	
	attach digital copies of documents, photos and		
	images that are required to be attached to the		
	application forms.		

	I		
10.	The application should flag clients who have a	M	
	current loan for special evaluation by the Credit		
	Officer		
11.	The application should also indicate the	M	
	following:		
	Whether the collateral provided is		
	sufficient		
	Whether the guarantee provided is		
	adequate		
12.	The application should enable a user to define	M	
12.	the workflow processes such as application,	141	
	verification, approval, disbursement, reporting		
10	etc.	3.6	
13.	The application must have various levels of	M	
	loan approvals depending on set limits.		
	The application should allow setting of		
	approval workflow based on transaction		
1.4	amount limits.	3.6	
14.	The loan application should also be accessible	M	
	to a senior user for approval of the loan		
	application. If rejected, the reason for rejection		
	should be indicated by the user.		
15.	Where changes are made to the loan application	M	
	after submission by the applicant, a trail of the		
	changes should be kept indicating the changes		
	made and user who made those changes		
16.	Email and dashboard alerts and notifications	M	
	should be sent automatically to users and		
	clients at the following points to reduce time		
	taken to process a loan application and to keep		
	clients informed of the progression of their		
	application:		
	When application is submitted by an		
	applicant		
	When application is submitted for		
	verification		
	When application is approved or rejected		
17.	The application should generate the loan	M	
	schedule indicating:		
	Loan balance should be projected based		
	on the date.		
	Dates when repayments will be due,		
	Amount of installment,		
	Number of repayments		
	Frequency of repayments		
	Prequency of repaymentsproportion of installment which is		
	Interest.		
	micrest.		

	 Proportion of installment which is Principal 		
18.	The application should allow users to define standardized content of loan agreement and loan offer letters	M	
19.	 The application should generate a standardized loan agreement and loan offer letter which can be printed for the client to acknowledge and sign against, and which includes: The loan schedule (with details indicated above) Other customized terms and conditions 	M	
20.	The application must enable users make enquiries to establish the status of loan applications being processes	M	
21.	 The application should generate the following operations reports: Number and value of loan application received by loan product type, by category. Number and value of loan applications approved by loan product type, by category 	М	
22.	The application must be able to detect repeat customers and use previously held client information.	M	

6.2.3. Business Lending

The key requirements of Business lending are:

a) To facilitate the application of loans by recognized businesses.

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	С	D
1.	The application must support business lending	M	
	i.e., enable loan applications to be generated for		
	a business		

2.	The application must enable users to record, as	M	
	a minimum, the following business details:		
	 Business name 		
	 Nature of business 		
	 Name and address of shareholders or 		
	owners.		
	 Business physical address and contact 		
	information.		
	 Owners' contribution 		
	 Line of business 		
	 Date of incorporation or registration 		
	 Registration number and Registration 		
	authority		
	 Names of directors 		
	• Bankers		
	• Attachments: certificate of incorporation,		
	memorandum and articles of association,		
	company profile, audited accounts, bank		
	statements for past 3 to 6 months,		
	comprehensive business plan		
3.	The processing of a business loan application	M	
	shall follow the normal Loan application		
	procedures under section 3.3.2 above		

6.2.4. Group Lending

The key requirements of Group lending are:

- a) To facilitate the application of loans by recognized groups; and
- b) To track group obligations as well as individual obligations.

No.	Requirement description	Priority	Bidders' Specifications
A	В	C	D
1.	The application must support group lending i.e., enable loan applications to be generated for a group	M	
2.	The application must enable users to record, as a minimum, the following group details: Group name Group description Group address and contact information. Composition of group (Name, address and telephone, source of income)	M	
3.	The application must indicate the amount of loan applied for by each individual member of the group.	M	
4.	The processing of a group loan application shall follow the normal Loan application procedures.	M	

6.2.5. Collateral registration

The key requirement of collateral registration is as follows:

- a) To adequately record collateral details used to secure loans; and
- b) To verify the authenticity or ownership of collateral provided

No.	Requirement description	Priority	Bidders' Specifications
A	В	C	D
1.	The application should register as a minimum the following details of collateral presented to secure loans: Nature of collateral such as: Properties such as land titles, warehouses, machinery, etc. Cash Deposits Commodities stock. Unique identification (e.g., Property number) Legal Owner Document registration reference number (From collateral registration system in the registrar's office or from Land registry system) Insurance policy taken and insured value. Value of collateral	M	
2.	The application must allow one collateral to cover several loan facilities and allow one facility to be covered by several collaterals.	M	
3.	The application must be able to record multiple securities of different values provided by the same customer	M	
4.	The application should generate a reference code for each collateral registered.	M	
5.	All Loans must be covered by security/collateral whose value exceeds user defined percentage of the loan amount. Loans with security values below the set limit must be flagged	M	
6.	The application must allow updating of securities and their values	M	
7.	The application must generate a batch file which includes all collateral	M	
8.	The application should request a user to confirm that he/she has physically observed the condition of the collateral presented.	M	

9.	The application should indicate the loans taken	M	
	and those applied for using the same collateral.		
10.	The application should allow several loans to be	M	
	taken against one collateral but should indicate		
	the value of all current loans taken against the		
	value of collateral.		
11.	The application should flag collateral whose	M	
	value is below the value of loans against which		
	the collateral is pledged.		
12.	The system should in addition to registration of	D	
	collateral enable geotagging (through google		
	maps plugin) of the registered collateral's		
	location		
13.	The system should be able to attach scanned	M	
	collateral documents		
14.	The application must enable recording of	M	
	securities whose value is affected by a variable		
	factor. By updating such factors, the value of		
	security of changes. E.g., warehouse receipt		
	value depends on the market price of the		
1.5	commodities.	3.5	
15.	Where cash is taken as a form of collateral, the	M	
	system must calculate interest on cash deposits made in the form of collateral		

6.2.6. Guarantor registration

The key requirements under guarantor registration are as follows: a)
To enable registration of guarantor; and

b) To establish guarantor commitment.

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	C	D
1.	The application should enable users to record guarantor details which as a minimum include the following: Name Identification document Home address Business address Telephone contact Occupation Employer Employer's address Employers telephone contact. Value guaranteed.	M	

	Asset guaranteed (e.g., where a guarantor provides the collateral used by a loan applicant to secure his/her loan.)		
2.	The application should allow digital copies of documents such as ID, proof of residence, proof of employment to be attached to the guarantor record.	M	
3.	The application should generate a unique reference number for the guarantor	M	
4.	The application should enable users to register existing clients as guarantors. In such case, the application should automatically complete the appropriate guaranteed details from client records already kept by the application.	M	
5.	The application should be able to show how many loans are guaranteed by one guarantor as well as the number and value of current loans of the guarantor if he/she is a client.	M	
6.	The application should enable users (according to organization policy) to restrict the number of loans that can be guaranteed by one individual.	M	
7.	The application must require a guarantor consent letter attached to a loan application in case collateral used does not belong to applicant	M	

6.2.7. Loan account management

The key requirements for loan account management are to provide a means for properly tracking of all activities regarding the loan including disbursements, repayments, payoffs, prepayments, write offs, rescheduling, refinancing, and restructuring, in order:

- a) To ensure that appropriate and accurate entries have been made to each account:
- b) To determine if the client's repayments are on track:
- c) To identify clients who have defaulted on their repayments; and
- d) To develop a client credit history.

a) Loan account creation

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	C	D
1.	The application should enable authorized users	M	
	to create a loan account for approved loan		
	applications only		
2.	Each loan account should have a unique number	M	
3.	Loan account numbers must be different	M	
	(different series) from loan application reference		
	numbers		

4.	The loan account should be attached to the client	M	
	whose loan application was approved	3.4	
5.	Loan details should be autocompleted from the approved loan application form. These details	M	
	include the following:		
	Client number		
	• Client name		
	• Loan amount		
	Repayment frequencyRepayment period		
	Interest amount		
	Loan schedule (Installment/Repayment		
	amount and due		
	date)		
6.	Loan accounts of a consortium must indicate	M	
	details shown above for each member of the		
	consortium		
7.	The application must have multiple levels of	M	
0	authorizations	M	
8.	The application should allow users to indicate when penalties should be charged to the loan	M	
	account i.e., at end of day or end of week or end		
	of month		
9.	Similarly, the application should allow users to	M	
	indicate when unpaid interest is charged to the		
	account i.e., at end of day or end of week or end		
	of month		
10.	The application must be flexible to facilitate	M	
	allow a user to determine the number of days in		
11	a year which is used to calculate interest.	3.6	
11.	The application must provide a central location	M	
	for maintaining the base rate upon which variable interest rates are based. In other words,		
	the base rate should be changed in one location		
	only.		
12.	The application must support both fixed interest	M	
	rate and variable (or floating interest rate)		
	applicable to a facility. The variable interest rate		
	is a certain percentage above a given base rate.		
	When the policy rate is changed, so does the		
10	interest rate applicable to the facility		
13.	The application must support reversal of	M	
	transactions in case mistakes are made and must		
14.	trigger a corresponding interest reversal	M	
14.	Reversals must be made only by authorized users	1V1	
<u> </u>	usors		

15.	The application must support back-dating of	M	
	transactions by an authorized user and trigger		
	interest recalculation.		
16.	The application must support loan account	M	
	closure and ensure zero balance from the client		
	and generate a standard closure letter.		
	Overpayment should be recognized in		
	the system		
17.	Loan accounts must only be closed when the	M	
	balance is zero. The application must prevent		
	loan account closure if there is a balance		
	whether positive or negative		
18.	The application must round up all amounts to	M	
	two decimal places. Round up means 5.434		
	becomes 5.44		

b) Loan disbursement

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	C	D
1.	 The application should enable users to record loan disbursements to the loan applicant indicating: The disbursement form (cash, or materials or a combination) The disbursement method (cheque, transfer to bank account.) 	M	
2.	The application should enable users to make the appropriate accounting entries in accordance with international accounting standards when funds are disbursed.	M	
3.	Where method is chosen as transfers, the application should generate appropriate transfer instruction file to be sent to the bank or EFT agent.	M	
4.	For group loans, the application must record the distribution of loan amount disbursed to each member of the group.	M	
5.	The loan account should be updated when the disbursement is made	M	
6.	The application must generate a standard disbursement letter for all loan disbursements and issue it to client by email.	M	

c) Loan repayment/ Collections

No.	Requirement description	Priority	Bidders'
_	D.	<u> </u>	Specifications
A	B	C	D
1.	The application should enable repayments received through different channels to be recorded. These include through. bank transfers, and any other transfers.	M	
2.	 The application must automatically trigger interest recalculation when: A loan is restructured, A bullet payment is made by the customer: A penalty is charged to the loan account: An additional loan facility is added to the loan account. A reversal is made. Back-dated transaction Interest rate change 	M	
3.	In all cases above, a new loan schedule must be generated	M	
4.	The system should integrate with the EDF Bank's core banking system to receive a file which updates the loan account.	D	
5.	The system should have the capability to send alerts to the client 5 days before the loan instalment is due and, on the day, when the loan instalment is due.	D	
6.	The application must be able to calculate and report on loan account profitability by comparing: • Total revenue generated by the loan account. (Interest income) • Total expenses on loan account	D	
7.	The application must always check value of security against loan amounts for all loan facilities. The application should have a report which shows the same and flags security values that are below a certain percentage of the loan amount	M	
8.	If a new inspection is made, the previous record must be maintained as history. In other words, a history of collateral inspections must be kept	M	

9.	The application must schedule periodic collatera	ıl M	ı
	inspection and capture all details including:		ì
	 Date of inspection 		ı
	 Value at inspection 		ı
	 Condition 		ı
	 Officer who inspected the collateral 		ı

d) Interest Calculation

No.	Requirement description	Priority	Bidders' Specifications
A	В	С	D
1.	The credit management application must	M	
	support both methods of interest calculation i.e. • Interest calculated on scheduled		
	balance.		
2.	• Interest calculated on a fixed amount Using scheduled balance method, interest is	M	
۷.	calculated daily. The credit management system	IVI	
	should be flexible to allow users to select the		
	applicable number of days in a year. Currently		
	EDF applies 365 days a year.		
3.	For facilities where interest is calculated on a	M	
	fixed amount, interest is calculated monthly		
4	(i.e., annual interest rate / 12)	3.6	
4.	The credit management application must also support the following methods:	M	
	 Annuity amortization i.e., monthly interest is calculated on scheduled capital balance and monthly instalment is a fixed amount. 		
	 Linear amortization i.e., monthly interest is calculated on a scheduled capital balance while monthly capital payment is 		
	fixed		
5.	Interest must be calculated on penalties due, if	M	
	the penalty is not yet cleared by the customer		

e) Penalty Calculation

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	С	D
1.	Penalties must be automatically applied when a	M	
	loan account has gone in arrears i.e., monthly		
	installment not paid.		

2.	The penalty is calculated as a rate of the amount	M	
	in arrears. The credit management system must		
	automatically calculate and apply the penalty		
3.	The system should reverse/ disable the	M	
	application of penalties		

f) Bullet payments, Rehabilitation and Restructuring

No.	et payments, Rehabilitation and Restructuring Requirement description	Priority	Bidders'
			Specifications
A	В	С	D
1.	The application should trigger adjustment of interest when bullet payment of a loan is made. A bullet payment is a large amount of payment that exceeds monthly installment amount	M	
2.	 The order of precedence of application of a bullet payment is as follows: First, the payment is applied to clear any outstanding penalties charged on the account. Second, the payment is applied to clear amount due. Third, the payment is applied to clear outstanding interest on the loan: Fourth, the payment is applied to clear the principal 		
3.	The application should allow restructuring of loans i.e., amendment of a loan from an outstanding balance by changing grace period, or loan duration or interest rate and creating a new repayment schedule.	M	
4.	The loan restructuring request must be approved through various levels of approval	M	
5.	Restructuring or rehabilitation attracts a fee. The current policy charges a fee of 0.25% of outstanding balance. The credit management application must automatically charge the penalty to the loan account	M	
6.	The current policy is such that the fee is added to the monthly instalments i.e., grossed up. The interest charged is also increased by a defined restructuring fee. The application must execute this policy	M	
7.	Some customers prefer to pay the restructuring fee upfront. The system should facilitate the upfront payment of restructuring fee	M	

8.	The application should also allow users or customer to request for rehabilitation of an existing loan. Rehabilitation means an extreme case where the customer can no longer service the loan without radical changes. Rehabilitation requires freezing interest or injecting more cash in a project.	M	
9.	The credit management application should be able to freeze interest over a given period of time		
10.	The credit management application must allow amendment of principal and recalculation of interest and generation of the new loan schedule	M	
11.	Any adjustments made must be made by or authorized by appropriate user.	M	
12.	Adjustments made and approved should update the loan account automatically	M	

g) Write off

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	C	D
1.	The application should enable users to write off	M	
	delinquent loans.		
2.	The application should enable verification and	M	
	approval of loans chosen or selected to be		
	written off by an authorized user (Senior		
	personnel).		
3.	The application should automatically make the	D	
	appropriate accounting entries in accordance		
	with international accounting standards to		
	provide an accurate financial position at all		
	times		

h) Transaction reversal

No.	Requirement description	Priority	Bidders' Specifications
A	В	C	D
1.	The application should enable users to make reversals and adjustments to loan account transactions.		
2.	Any adjustment or reversal should be authorized by an appropriate user (senior personnel).	M	
3.	The application should automatically make the appropriate accounting entries in accordance with international accounting standards to	M	

provide an accurate financial position at all	
times.	

i) Loan account analytics and reports

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	C	D
1.	The application should enable users to generate	M	
	loan repayment schedules for any loan.		
2.	The application should enable users to	M	
	generate loan statement indicating		
	disbursement amount, penalty, repayments,		
	and loan balance for each loan account as at		
	that time.		
3.	The application should have adequate alerting,	M	
	detection, and early warning capabilities to		
	enable users determine loans likely to default.		
4.	The application should have extensive	M	
	reporting capabilities and enable the following		
	reports to be generated by users:		
	CRB report		
	Number and value of loans disbursed. Forey conception Penert		
	Forex generation ReportAging of Accounts		
	Tiging of Tiecounts		
	Sector ReportsInsurance Report		
	Provisions		
	List of loans disbursed.		
	 Monthly payment report 		
	Active loans by credit officer		
	Ageing of portfolio at risk		
	Delinquent loans		
	Summary of portfolio at risk		
	Detailed delinquent loan history		
	Loan write-off and recuperations report.		
	Consolidated reports for the institution		
5.	The application should have a portfolio		
	dashboard that indicates predefined key		
	performance indicators in each period such as:		
	Number of disbursed loans		
	Total amount disbursed.		
	Number of loans in arrears		
	Total amount in arrears		
	Number of fully repaid loans		
	Interest revenue from loan repayments		

6.2.8. Debt Recovery

The debt recovery requirements are aimed:

- a) To easily, quickly, and accurately identify debtors likely to default and delinquent loans; and
- b) To follow up on delinquent loans and recover loans.

No.	Requirement description	Priority	Bidders' Specifications
A	В	С	D
1.	The application must enable users to quickly and accurately identify accounts that are likely to be defaulted through analysis of available data such as repayment trends.	M	
2.	The application must enable users to easily identify delinquent loans and must be able to categorize them by Relationship officer.	M	
3.	The application must automatically send notifications and alerts as follows: • Five (5) days to installment due date • One (1) day to installment due date • When an account is defaulted • Daily when an account is defaulted	M	
4.	The application must allow users to customize the following: • Who receives the notification (the application must allow multiple recipients of the notification message i.e.,, Debtor, Credit Officer, Credit Manager, Head of credit and lending) • When notifications should be sent • The message text	M	
5.	The system must have the capability of generating a Reminder/ demand notice if a client fails to make a repayment beyond a predefined period.	M	
6.	The system should have the capability to track the subsequent processes following issuance of a demand notice to the defaulting client such as: Repayment of the due loan installment amount Issuance of statutory notice Disposal of property	M	
7.	The application must enable users to indicate other notification strategies such as physical visits to debtor premises, phone calls to debtor.	M	

8.	The application must enable users to identify address and contact information for all debtors		
	of delinquent loans.		
9.	The system should allow for definition on the recovery order after write-off i.e., penalty first, followed by interest and principal.	M	
10.	The application should prioritize delinquent accounts for collection purposes giving priority to those with the highest potential for recovery.	M	
11.	The application should enable proactive monitoring of delinquent loan accounts to enable users to determine if recovery strategies are effective.	M	
12.	The application should monitor changes in debtor information, such as employment information, address information to determine if debtor's ability to pay has improved.	M	

6.2.9. Reporting

The reporting requirements are aimed at:

a) Providing a detailed presentation of stored data about loan facilities and clients

No.	Requirement description	Priority	Bidders'
			Specifications
A	В	C	D
1.	The system must provide the following reports: • Funds disbursement report (indicating customer, loan account, amounts disbursed, date of disbursement) • Loan interest rate report (showing customer, loan accounts, effective interest rate) • Loan portfolio report by Officer. • Non-performing loans report. • Top 20 largest loan accounts (showing customer, loan account, loan amounts) • The system should be providing report for large exposures i.e., 10%. • It should include recoveries from delinquent loans. • Statutory and Regulatory reports • Expected Credit Loss • Call Report • Credit Reference Bureau Report • Any other Reports	M	

6.2.10. Integration

No.	Requirement description	Priority	Bidders' Specifications
A	В	С	D
1.	The credit management application must seamlessly integrate with the receivables module so that accurate balances are reflected in the receivables system	D	
No.	Requirement description	Priority	
2.	The credit management system must integrate with the GL and expenses module so that expenses can be associated with a loan account to accurately calculate profitability on each loan account	D	
3.	The credit management system must integrate with CRM so that customer profile is up to date and that a 360-degree view of the customer is achieved in the CRM. The provisions should integrate DFI directives with ECL and IFRS-9	D	