

ERP FUNCTIONAL REQUIREMENTS

Technical Guidelines



Table of Contents

CURRENT PRODUCT PORTFLOLIO OF PMIC	3
GL / FICO Module	4
General Ledger Module	4
Accounts Payable/ Receivable Module	4
Budgeting Module	4
Reporting Module	4
Fixed Assets	5
LMS Module	5
Retails Lending	7
Risk Management Module	8
Operational Risk Module	8
Market & Liquidity risk module:	8
Credit Risk Module:	8
PMIC's Borrowers Database	9
Compliance Module	9
☐ Marking of PEPs identified in borrowers' management / BoD	9
Corporate Finance Module	9
Treasury Module	10
Procurement Module	10
Purchase Requisition	10
HOD Review/Approval	10
Finance Manager/CFO Approval	10
Financial Controller Approval	10
HOD Procurement approval for the processed PR as per the thresholds CEO Approval as per the threshold	11
Procurement Review & Approval (Once PR is approved Procurement will generate PO/ will follow procurement procedures as per PMICs policy)	11
Procurement Methods	11
System Generated Solicitation (RFP/RFQ/IFB/TOR's) and Amendments (M)	11
Submission of Quotations Online (M)	11
Generate RFP Links on Website with Submission Dates	12
Newspaper Advertisement (O) if Applicable	12
Start Date & Closing Date	12
Technical Team Formation & Approval (M)	12
Technical Evaluation System Generated - Form (M)	12
Technical Evaluation System Generated - (M)	12
Technical Evaluation System Approval - Technical Memo (M)	12



Review & Approval	12
Purchase Order/Contract (To Be Approved as Per Threshold)	12
Modification	13
Delivery (Milestones)	13
Delivery Acceptance Sheet/Goods Receiving Note (GRN)/ service satisfaction certificate (M)	13
Human Resource Module	13
SDD/Grants Module	14
Other Functionalities	15
Preferred Functionalities/Features in Phase-I	16
THE USERS BASE	16
USER ACCEPTANCE TEST	16
ROLLOUT PLAN OF THE ERP	16
POST IMPLEMENTATION SUPPORT	17
TECHNICAL SUPPORT	18
THE IMPLEMENTATION APPROACH	18
PROJECT DELIVERABLES	19
WARRANTY	22
DATABASE MANAGEMENT	23
INFORMATION SECURITY MANAGEMENT	23
SOFTWARE MAINTENANCE AND SUPPORT SERVICES	24
SOFTWARE LICENSE MANAGEMENT	24
SERVICE LEVEL MANAGEMENT	24
PENALTIES	25

GENERAL GUIDELINES



THE FUNCTIONAL REQUIREMENTS OF PMIC

Below are the indicative features which are expected to be covered by ERP Solution provider.

CURRENT PRODUCT PORTFLOLIO OF PMIC

Following are major products that PMIC currently operates (these are an indicative list, which is expected to expand in coming periods):

Functional Area ;	Products
Lending / Loan Management System (LMS)	Long Term Secured Lending
	Short Term Secured Lending
	 Non-funded products
	 Wholesale Lending (Term Finance, Credit Guarantees, Tier-IIs, Islamic Finance) Retail Lending
Treasury	• Repo
	Reverse Repo
	 Placements (Banks, TFC, Mutual funds, Sukuk, etc)
	Government Treasury Bills Bonds
	Arbitrage transaction
Corporate Finance	Long Term Commercial Borrowings
	Running finance facility
	Repayment guarantee
Off Balance Sheet	Guarantee Product
HR	Employees Management
	 Payroll
	Leave Management
	Travel Management



	PF and bookkeeping
	• Loans
Grants	Disbursement Note
	 Tracking of Grant activities
	Grants Approvals
	• Reports

PMIC Functional Requirements are as follow:

GL / FICO Module

General Ledger Module

- Multiple users support (maker checker concept)
- System should support multi-currency accounting.
- System should allow users to update and modify regulatory parameters such as tax rates.
- Amortization of pre-paid expenses
- Payroll Processing along with provident fund record and management

Accounts Payable/ Receivable Module

- Party-Wise ledgers, exposure, Aging, Alerts for Upcoming Payments, Receipts, Tax Withholding Functionality.
- Summary activity reports

Budgeting Module

Basic Budget functionality such as setting up periodic budgets and their tracking/monitoring.

Reporting Module

The system should be able to extract some basic reports. For example:

- o Balance Sheet Profit and Loss Account for specific periods.
- O Cost center wise profitability
- O Employee ID wise transaction log report
- O Project/ Department profitability report
- O System access rights report
- O Workstation transaction log report
- O Withholding taxes report
- O Borrower wise, sector wise, product wise, fund-based and non-fund-based statement
- O NPL reports borrower wise, product wise



- O Days past due report
- O Statement of affairs
- O Un-utilized limits report
- O General and specific provisioning report
- O Maturity wise receivables report
- O Asset Liability maturity/ mismatch reports
- **O** Other key reports
- System should allow marking of transactions with related parties as Related Party transactions and be able to generate reports based on that criteria.

Fixed Assets

- Item Wise List, Date of Purchase, Depreciation, Impairment, Deletion/Disposal Records
- Fixed assets register as per ICAP TR 6.

LMS Module

For each borrower, the system should create a centralized profile that includes all relevant information (Name, Legal structure, External Structure, Registered Office etc.). This ensures that all data and functions related to a particular borrower are organized and easily accessible under their specific profile.

1. Disbursement Note & Repayment Schedule:

- a. Disbursement Schedules Configuration:
 - All the disbursement and repayment schedules will be entered from the financing documents (user input)
 - Generating Disbursement note on the prescribed formats
 - Input data for the disbursement amounts from the scheduled already entered, or user should be able to input it manually
 - System to also allow partial disbursements without changing the original repayment schedules, but keep track of changes in disbursement amounts from the original schedule disbursements

b. Repayment Schedule Configuration:

- The repayments by the borrowers shall be adjusted in principal and markup both in FIS and MIS
- The system should have the ability to accept advance or prepayments and update the repayment schedules accordingly
- system shall have the ability to amend original loan parameters in case of restructuring/rescheduling, e.g. modifying interest rates, modifying original maturities and allowing grace periods, as per approvals.

2. Reports

a. Outstanding Portfolio Report (Borrower wise, product wise, facility wise)



- b. Reports on planned disbursement and planned repayments
- c. Pre and post disbursement exposure limits
- d. Check for per party limits and max approved exposure at any point in time
- e. Days Past Due Date Report
- f. Maturity Wise Receivable Report
- g. Status on Key Covenants (Tracking after manually entering)
- h. Any other report

Provision for additional/new reports should be available.

3. Borrowers Reports

a. NPLs / Monthly Portfolio Reports

The Monthly Progress Reports submitted by the borrowers be entered into the system. The system shall have the ability to show trends in this report, both in numbers and graphs. This includes:

- i. Portfolio At Risk numbers (amount and %ages)
- ii. Aging Analysis reports (Movement in Ageing brackets)
- iii. NPL Reports (General Banking reports)

Triggers shall be alerted through system, when the NPLs are above certain thresh holds.

b. Other Reports

The same procedures would be followed for the following specific reports:

- a) Quarterly Progress Report (QPR) / Operational data
- b) Quarterly Management Accounts / Financial Data
- c) Yearly Audited Financial Reports / Financial Data
- d) Action Plan Update Report

In addition, the system to identify key parameters such as NPLs, write off and other parameters given in the above reports, which are in anomaly or not following the general trends of the borrower

4. Borrowers profiling and preliminary documents requirement:

- An option for the borrower to upload all required documents (financials statements, BBFS, statement of disclosure), where PMIC shall share link to upload the specific documents.
- There shall be an option for automated triggers for expiring/due documents and covenants, if any.

5. Other Reports – additionality at second stage:

- a. All the reports mentioned in point 3 (Borrowers Reports) above shall be uploaded with the following options:
 - i. Interface be provided to borrowers to enter the data at their end. The relationship officer once verified shall be able to allow for uploading into the system
 - ii. Option to upload the standardized reports (standardized manually in excel).

All these reports shall be linked while disbursing new funds to a borrower, in order to check if financial covenants are complied with the last uploaded reports.

6. Preliminary Review and creation of Abridged Indicative Term Sheet (ITS)

- a. Preparation of abridged Indicative Term Sheet on the prescribed format. This includes facility amount, tenor, security, pricing and other key terms.
- b. An option to link the manual Institutional Rating System (IRS) with the ERP Solution



7. Credit Proposal

- Credit proposal to include:
 - Executive summary to be manual written and key terms and conditions for onward sharing. These includes; Facility Amount, Facility Tenor, Pricing, Covenants, Security, Disbursement & Repayment Schedule, Borrowers Projections, Adjusted Projections, Asset Liability Mis-match Analysis and stress analysis.
- The detailed Financial Analysis are to be fetched from financials performed at financial analysis section)
- Option to provide comments by approving authority
- The system should be able to record TAT of credit memo from initiation of request from borrower until disbursement of the loan and provide report to those authorized to monitor.
- System should have the capability that at any time of renewal it should automatically extract
 information regarding repayment behavior, or any exceptional events related to the borrower.

8. Monitoring Visits of Borrowers

Following Monitoring report should be prepared manually by user on the portal which includes:

- a. Client Visit Details (Time, Date, Location and Representatives)
- b. Key Observations and Findings for future references
- c. Financial Performance (To be linked with Financial Analysis)
- d. Operational Data (standardized table to be entered)
- e. Borrower's Credit Lines (Linked with approved CPs)
- f. Status on Key Covenants
- g. Current and Previous Agreed Actions
- h. Status on Social Performance
- i. Products and Services offered to the clients
- j. IRS Rating

Data available in CP, IRS, Reports to be linked with each other to ascertain the accuracy and ambiguities in various reports.

Retails Lending

Retail model to include:

- Digital/Manual Onboarding
- Digital Document Uploading
- Nadra Verification
- KYC
- AML Verification
- Loan Verification
- Loan Approval cycle including approval limits
- CAD compliance for disbursement
- Disbursement
- Collection/Recovery
- EMI and Bullet loans and repayment a mechanism
- Group and Individual loan mechanism
- Non-Performing/Written offs Loans Management and Flagging



- Loan Restructuring, Rescheduling and deferment
- Late Payments
- Pre-payments
- CNIC Backlisting
- Cooling-off Period
- Collateral management and bifurcation of loans through collaterals
- Back Office Operations and Accounting
- Dashboard / Reports / MIS
- Short Term Finance & Long-Term Finance
- Running Finance
- Supply Chain Finance
- Non-Fund Based Services
- Collateral Handling
- Creating Sanction Advice
- Generate Auto Repayment schedule
- Data to be tested includes normal and abnormal data (i.e. CNIC, Cell Numbers, Age, Address etc).
 Abnormal data should be rejected at source
- The applications with duplicate information of the multiple borrowers should be rejected
- Creating a record of all approvals and rejections including comments of staff in the approval chain for audit trail.
- Tagging of all clients at various levels i.e. loan officer, verification officer, Branch Manager,
 Relationship Manager etc

Risk Management Module

Identify breaches to thresholds identified in the Risk Appetite Framework

Operational Risk Module

1. Operational Loss incident management

Market & Liquidity risk module:

- Ratio reports
- investment maturities

Credit Risk Module:

- Performing/ Non-Performing Portfolio DPDs
- Borrower's Repayment Behavior
- Watchlist Borrower Portfolio
- Rating wise Portfolio
- Disbursement Reports
- Borrower wise Approved exposures



- Per Party Limit Capping
- Approved exposure capping
- Collateral Management

PMIC's Borrowers Database

- Borrower's KYC
- Covenant Management
- Watchlist Borrowers Flagging
- Consolidated Aging Report of PMIC borrowers
- Historical trend analysis on above reports
- Partner wise exposure reports
- CAD Documentation Management

Compliance Module

- Marking of PEPs identified in borrowers' management / BoD
- Maintain AML/CFT risk rating of the borrowers

Corporate Finance Module

- The module should be able to cater different borrowing products i.e. Term loan, Over Draft, repo, Term Finance Certificates, repayment guarantee, etc.
- Input of borrowing facilities obtained, auto-generation of repayment schedules and posting to GL (with option to manual override dates, amounts, etc) for both principal and markup payments.
- Functionality to track, identify, monitor and alert generation for upcoming maturities.
- Supports accruing interest on daily/monthly/semi- annually/ annually basis and post to General Ledger.
- Input of applicable covenants for tracking against all borrowing facilities
- Ability to generate reports (repayment schedules, borrowing summary report, maturity profile, cushion statements, receivable report, etc)
- Ability to generate and track ALCO approvals raised through circulation
- Ability to generate and track principal and markup repayments approvals



Treasury Module

- Complete end-to-end treasury deals management, i.e., deal creation, GL posting, accruals and mark to market valuation.
- Maintenance of Treasury deal register and other reports
 - o Cash forecasting reports based on historical or future indicative transactions based on both assets and liability side (funded and non-funded).
- · Bank reconciliation functionality.

Procurement Module

Purchase Requisition (all the documents/checks as per PMICs procurement policy)

- The system shall allow users to create Purchase Requisition forms (PAR) with necessary details such as item description, quantity, estimated cost, and justification for purchase.
- The system shall provide a unique identifier for each PAR for tracking and reference.
- The system shall allow attachments of supporting documents to the PAR.
- The system shall enable users to submit the PAR for approval, initiating the approval workflow.
- Format document to be formed once PR is created and approved

HOD Review/Approval

- The system shall notify the Head of Department (HOD) of a pending requisition. Via email or mobile notification
- The HOD shall have the ability to review, approve, reject, or request modifications to the requisition.
- The system shall record the HOD's decision along with comments and timestamp.
- The system shall route approved requisitions to the Finance Manager/CFO for further approval.

Finance Manager/CFO Approval

- The system shall notify the Finance Manager of a pending requisition. Via email or mobile notification
- The Finance Manager shall review the requisition for budget availability and financial compliance.
- The system shall allow the Finance Manager to approve, reject, or request modifications to the requisition.
- The system shall log the decision with comments and timestamp and, upon approval, escalate the requisition to the Financial Controller.

Financial Controller Approval

- The system shall notify the Financial Controller of a requisition pending approval.
- The Financial Controller shall have the ability to review, approve, reject, or request modifications.
- The system shall document the decision, comments, and timestamp.



• Approved requisitions are then forwarded to the CEO for final approval.

HOD Procurement approval for the processed PR as per the thresholds CEO Approval as per the threshold

- The system shall notify the CEO of a requisition requiring final approval.
- The CEO shall review the requisition and has the authority to approve, reject, or request modifications.
- The system shall record the CEO's decision, including any comments and the timestamp.

Procurement Review & Approval (Once PR is approved Procurement will generate PO/ will follow procurement procedures as per PMICs policy)

- The system shall alert the Procurement team once the CEO approves a requisition.
- The Procurement team shall review the requisition for procurement method suitability and compliance with procurement policies.
- The system shall allow the Procurement team to approve, reject, or request modifications to the requisition.
- The system shall track the approval status and provide notifications to relevant parties.

Procurement Methods

- Petty Cash Procurement: The system shall allow for small purchases via petty cash, with an automated check against petty cash limits. This does not fall in procurement. Petty cash is uptil 10k and admin handles it directly
- Micro Procurements: The system shall facilitate micro procurements, ensuring all transactions fall within predefined limits.
- Macro Procurements: The system shall handle large procurements, ensuring all necessary approvals and documentation are completed.
- Full and Open Competition: The system shall support procurement through a competitive process, ensuring compliance with regulations.
- Sole Source Procurement (CEO/Board Approval): The system shall require CEO or Board approval for sole source procurements, with justification and documentation.
- Authority Matrix: The system shall enforce an authority matrix, ensuring that only authorized personnel can approve certain procurement thresholds.

System Generated Solicitation (RFP/RFQ/IFB/TOR's) and Amendments (M)

- The system shall generate Request for Proposal (RFP), Request for Quotation (RFQ), Invitation for Bid (IFB), and Terms of Reference (TOR) documents based on the approved requisition.
- The system shall allow for amendments to solicitation documents, with a version control mechanism and audit trail.

Submission of Quotations Online (M)

- The system shall provide a secure portal for suppliers to submit quotations online.
- The system shall support various file formats and ensure secure and confidential submission of bids.



Generate RFP Links on Website with Submission Dates

• The system shall automatically generate RFP links on the organization's website, including all relevant submission details and deadlines.

Newspaper Advertisement (O) if Applicable

• The system shall support the option to publish procurement notices in newspapers if required by the procurement policy.

Start Date & Closing Date

- The system shall allow users to set and display the start and closing dates for submissions.
- The system shall automatically enforce submission deadlines, preventing late entries.
- 13. Technical Proposals Upload (M) by Suppliers (Hard Copy Submission via Courier Mail)
- The system shall facilitate the upload of technical proposals by suppliers.
- For cases requiring hard copy submission, the system shall provide instructions and track receipt of documents.

Technical Team Formation & Approval (M)

• The system shall support the formation of a technical evaluation team, including the approval workflow for team members.

Technical Evaluation System Generated - Form (M)

• The system shall generate forms for technical evaluation based on criteria defined in the solicitation documents.

Technical Evaluation System Generated - (M)

- The system shall automate the technical evaluation process, allowing evaluators to score proposals according to predefined criteria.
- The system shall compile evaluation results and generate a report.

Technical Evaluation System Approval - Technical Memo (M)

- The system shall generate a technical memo summarizing the evaluation results, which must be approved by the evaluation committee or relevant authority.
- 18. Financial Evaluation System Generated Financial Memo (M)
- The system shall generate a financial memo detailing the financial evaluation of the bids, including compliance with budget and cost analysis.

Review & Approval

• The system shall facilitate the review and approval process for both technical and financial evaluations, ensuring compliance with procurement policies.

Purchase Order/Contract (To Be Approved as Per Threshold)

• The system shall generate purchase orders or contracts based on the final approved vendor and terms.



- The system shall ensure that all necessary approvals are obtained as per the authority matrix before issuing the purchase order or contract.
- PO format to be formed once created and approved

Modification

• The system shall allow for modifications to purchase orders or contracts, tracking changes and requiring appropriate approvals.

Delivery (Milestones)

• The system shall track delivery milestones, including expected delivery dates and actual delivery status.

Delivery Acceptance Sheet/Goods Receiving Note (GRN)/ service satisfaction certificate (M)

- The system shall generate a Delivery Acceptance Sheet or Goods Receiving Note (GRN) upon receipt of goods or services.
- The system shall allow the relevant parties to verify and accept the delivered items, updating the system accordingly.
- Relevant forms as per PMIC policy to be formed once created.

Human Resource Module

Employee Management

- Comprehensive Employee Information: The system should capture and manage detailed employee
 information from recruitment to retirement or termination, including personal details, educational
 qualifications, job history, and performance records.
- Employee Records Management: The system should manage employee records, ensuring easy access to personal details, job history, performance reviews, and training records.
- Exit Processes: The system should handle offboarding tasks, including final settlements, exit interviews, and documentation.

HR Dashboard

- Key Metrics Display: The system should provide an HR dashboard that displays essential metrics, such as employee turnover and headcount.
- Dashboard Customization: The system should allow the customization of the dashboard to display metrics relevant to the organization's needs.

Leave Management System

- Online Leave Requests: The system should enable employees to request various types of leave (annual, sick, maternity, etc.) through an online portal.
- Leave Balance Tracking: The system should automatically track and update leave balances based on approvals and usage.
- Approval Workflow: The system should include an approval workflow for leave requests, notifying relevant managers and HR personnel.

Recruitment & Talent Management

• Talent Database: The system should maintain a searchable talent database, allowing filtering by



qualifications, experience, and other criteria.

Training and Development

• Training Analytics: The system should provide analytics on training effectiveness, including post-training assessments and feedback.

Performance Management

- Customized Performance Processes: The system should support customized performance management processes, including setting goals, regular check-ins, and annual reviews.
- Performance Criteria Customization: The system should allow customization of performance criteria, weights, and scoring methods to align with organizational goals.

Biometric Machine Integration

- Attendance Tracking: The system should integrate with biometric machines to accurately track employee attendance and working hours.
- Automated Attendance Records: The system should automatically update attendance records based on biometric data.
- Daily Reports: The system should generate daily attendance reports, including late arrivals, early departures, and absenteeism.
- Payroll Integration: The system should integrate with payroll for accurate calculation of working hours and deductions.

Loan Management

- Loan Applications: The system should allow employees to apply for loans against salary, provident fund, or advance salary through the Employee Self-Service Portal.
- Approval Workflow: The system should manage the approval workflow for loan applications, including verification and authorization.
- Loan Repayment Tracking: The system should track loan repayment schedules and update payroll deductions accordingly.
- Employee Access: The system should provide employees with access to their loan balances and repayment history.

Employee Self-Service Portal

- Job Description Access: The system should allow employees to view their job descriptions.
- KPI Tracking: The system should enable employees and managers to set, track, and update Key Performance Indicators (KPIs) and achievements.
- **Progress and Feedback Tools:** The system should provide tools for recording progress and feedback, visible to both employees and supervisors.

Reports

- Attendance Reports: The system should generate daily attendance reports.
- Leave Reports: The system should provide comprehensive leave records and reports.
- Salary Slip Reports: The system should generate and distribute salary slip reports to employees.

SDD/Grants Module

- a. Designing and deploying grant-based interventions
 - i. SDD designs grant based interventions in a range of different product verticals including education finance, agriculture, renewable energy, micro insurance and it may include



others in future as well. PMIC also launches a yearly challenge fund which is deployed on a certain thematic area (approved by management and board). These projects usually spread over 12-18 months (could vary depending on intervention design). These projects are deployed through PMIC's borrowers (Microfinance Banks and Microfinance Institutions) and PMIC only provides funding, advisory and handholding. Subsequently PMIC gets monthly quarterly and yearly reports pertaining to projects and subsequent beneficiaries (end clients). So, with regards to this section, SDD requires an ERP system which shall cover following

- Project proposal information Includes borrowers which are implementing the
 interventions, geographic areas, activities (and this may include trainings,
 awareness sessions, insurance premium and a range of other activities), financing
 targets assigned, project duration, subsidy related information (for PRIME¹
 Program only) etc.
- 2. Disbursement notes Disbursements are usually made on a quarterly basis and is based on achievement of targets in preceding quarter. These disbursements need to be made through ERP. The information pertaining to targets will come from project proposal form (explained above) and performance related information to come from reports submitted to PMIC by borrowers. Disbursement note shall be processed through ERP and approvals will also be required online. Once approved by CEO, a notification to be issued to Finance and accounts department to make the required disbursement to the concerned MFP.
- 3. Reporting SDD collects monthly/quarterly and yearly data from MFPs pertaining to the projects (explained above). Reporting would be required through ERP portal both project as well borrower wise.
- b. Managing branding and communication activities
 - i. Under branding and communication section, SDD collects data and other nformation from all departments and uses it in different publications, social media posts, annual reports, impact reports (developed in collaboration with research department). Organizing events, managing social media pages, and designing and printing of communication material also falls under the branding and communications ambit.
- c. Research and Impact reporting
 - i. Compiles data from all the departments and designs reporting for internal and external stakeholders.
 - 1. Shall require a dashboard to be designed where all departments share data pertaining to their work, which could be compiled by Research for relevant publications

Other Functionalities

The ERP system shall have ability to:

o Export/import data in/ from Word, Excel, Crystal Report etc.



Preferred Functionalities/Features in Phase-I

- a. Business Intelligence Module (Basic Level)
- b. Cost Center and Transfer Pricing Module Cost Centre/Profit Centre, provision for alignment with PMIC's organization chart, flexible account coding structure which includes the ability to have cost-centres and profit-centres.
- c. Procurement Module.
- d. Workflow Automation Features of RFP
- e. Support for Islamic mode of financing (Asset/ Liability module)

THE USERS BASE

- I. The proposed ERP solution and the implementation services are expected to cover the following user base of the organization.
- II. Similarly, the solution should address the processes or operations as carried out by the users listed in the user base

Functions/Divisions of PMIC

- 1. Finance & Accounts
- 2. HR
- 3. Research & Strategy
- 4. Sector Development
- 5. Corporate Finance
- 6. Procurement & Legal
- 7. Portfolio Management
- 8. Risk & Compliance

USER ACCEPTANCE TEST

Comprehensive User Acceptance Tests will be conducted before "Go-Live".

ROLLOUT PLAN OF THE ERP

- Ill. The "Go-Live" is an end-to-end responsibility of the ERP Solution Provider with total Complete Planning, Data Migration, Hand Holding Support as per the scope of work and Facility Management.
- IV. The parallel run of the ERP application for 6 months with the existing system.
 - V. "Go-Live" means commissioning & integration components of the ERP solution as per the RFP, configured, customized and used successfully by all the intended users of PMIC for successfully executing all the intended transactions as per the SLAs and/or mutually agreeable levels. The "Go-Live" shall come into effect only on approval by PMIC Senior



Management/ Steering Committee.

VI. Declaration of "Project Completion"

- a. The Project Managers from the PMIC and system integrator will jointly initiate the notice for declaring "Project Completion" after satisfactory completion of all the following (not limited to):
 - 1. All the activities as listed in RFP have been successfully completed.
 - 2. After scrutinizing all the inspection reports, audit findings, Contracts, licensing agreements etc.
 - 3. Satisfactory completion of closing of accounts and generation of complete balance sheet for one (01) financial quarter, with the ERP solution and approved by the head of finance and accounts of PMIC / Steering Committee.
- VII. The "Project Completion" notice is submitted to the Senior Management of PMIC for approval.
- VIII. Within fifteen (15) days of receiving the notice the Steering Committee will decide on the actions to be taken on "Project Completion".
- IX. The **"Project Completion"** event comes into effect only when the Senior Management/
 - / Steering Committee of PMIC approves the notice for "Project Completion".
- X. If Senior Management of PMIC does not approve or suggest further action, the notices are reinitiated only after the recommended actions have been satisfactorily completed.
- XI. The implementation services for the ERP solution are treated as completed and the support & maintenance services or the post implementation services starts when the following are completed
 - 1. Completion of the of user adoption services after the "Go-Live" of the ERP system.
 - 2. Completion and declaration of "Project Completion" by the Senior Management/ Steering Committee of PMIC.
 - 3. Completion of the three (03) months of system stabilization support after **"Project Completion"** of the system

POST IMPLEMENTATION SUPPORT

- a. ERP Solution Provider shall maintain data regarding entitlement for ERP solution upgrades, enhancements, replacements and maintenance. All the patches/upgrades/ New Releases/New Versions/Requisite Adjustments planned to be implemented should be thoroughly tested and tracked.
- b. PMIC will have the options to extend the post implementation support services by two (02) more years in time buckets of six months each after expiry of Support Period as per



agreed contract.

TECHNICAL SUPPORT

- a. The Technical support for the ERP solution is meant to ensure Software Corporation support and formulation of all policies and procedures related to Basic Technology, System Administration, Data Base Management, Application Management, Archives, Network Management & Security, Back-Up etc.
- b. The ERP Solution Provider shall assist the PMIC Core IT team to perform all authorization-related activities (activity group, authorizations, profiles, etc.) till the ERP system stabilizes and maintaining of legacy data interfaces, print spools, batch Jobs, configuration etc.
- Ill. A detailed *System Administration Manual, Data administration manual, operational manual, User manual* which shall be used by PMIC employees to run ERP enabled production environment. This shall also include how the various parameters shall be monitored/ tuned in a live system.
- III. The ERP Solution Provider shall prepare requisite system configuration for disaster recovery management and Fail Over system plan.

THE IMPLEMENTATION APPROACH

- c. The below list of objects developed or changes to standard objects shall be considered as "Configuration" and not as "Customization or development". The ERP Solution Provider shall not expect or propose any additional charges for developing these objects. It is expected that such efforts are part of the normal effort for implementation of the ERP solution:
 - i. Use of ERP solution provided Customer/ User Exits to achieve specific process requirements/ expectations.
 - ii. Configuration of Field selection and Screen Layouts.
 - iii. Definition and assignment of User Defined statuses for various objects.
 - iv. Definition of Authorization Controls and Assignment.
 - v. Configuration of standard Workflows, including approval for release of tranches.
 - vi. Seamless integration across all ERP solution modules to meet the requirements of **PMIC.**
 - vii. Reports developed in the different functional area using Report Writer/ Report painter
 - viii. Reports and Variants based on different solution modules/ engines along



- with specific reports.
- ix. Change to ERP standard reports / information systems to define and enable User Specific Variants
- x. Change to ERP standard forms to incorporate standard texts and PMIC logo and formatted to address the PMIC formats.
- d. The ERP Solution Provider shall ensure preparation of complete documentation of all configuration settings, customized applications, other activities, steps/ stages involved in the implementation including the source code for the customized product developed for PMIC. The ERP Solution Provider shall prepare the business process document, enduser manual and training document.
 - i. The ERP Solution Provider will provide detailed final system documentation for reference of PMIC. ERP Solution Provider shall prepare the final user manual incorporating all details of all menus and functionality provided by the system.

PROJECT DELIVERABLES

It is expected that the project will move from one phase to the next only when the deliverables of that phase are accepted. Some of the key deliverables which will signal the successful completion of each of the phases shall be as in the following table. System Integrator is encouraged to propose any additional deliverable/s for the sake of comprehensiveness, based on their experience of delivering similar projects, which can enhance the quality of work.

INDICATIVE ACTIVITY/ MILESTONE	DELIVERABLE
Project Plan Preparation	 Agreed and Finalized Project Plan Inception Report Core team training completion report Team profile finalization and Mobilization Sign Off
Business Design	 Master list of processes AS-IS/TO-BE Process Mapping & Gap Analysis Report Customization Requirement Report Master Data Structures Legacy Systems Integration Report Change Management Requirement Report & Strategy Business Design Blueprint sign off
Configuration, customization	 Configuration Document Integration and Interface specification Authorization, Security and Access Control Specification Demonstration Report how system is going to be



	configured
	Training Requirement Report
Training	Training Curriculum
	Training Schedule & Completion Report
	• Unit Test Report, Integration Test Report, Full Load,
Integration Testing	Stress Test Report & Sign-Off
	Integration testing of ERP
	System, User and other Manuals
	Quality Audit acceptance
Audit and quality control	System Quality Assurance undertaking
	Action Taken Report
	Penetration and Vulnerability test report before going live

INDICATIVEACTIVITY/ MILESTONE	DELIVERABLE
Data Migration	Functional Specifications for Upload programs
	Data Migration Methodology & Completion Report
Cut over and "ready to use" preparation	Functional help manual
	Cut over strategy report
	Back up strategy and Disaster Recovery Plan
	Fail over system plan
	Test Report
"Ready to Use" and support	"Usage ready" Sign Off
	Action taken report
	Transition Quality Gate(s) Sign-Off
Operations and managed services	Performance Evaluation report
	SLA report
	Action taken report
	Transition plan

- a. The ERP Solution Provider is required to provide the details of the corresponding deliverables for each of the milestones as well as the delivery of priced items at these milestones. This milestone to deliverables & supply listing will be the basis for payments for the corresponding priced items.
- b. Deliverables acceptance criteria
 - i. The acceptance criteria for each phase is the submission and acceptance of all deliverables specified for that phase. The formal acceptance by PMIC of the



- phase deliverables constitutes completion of the phase and approval to launch the next phase and invoice PMIC for payment if there is a payment attached to that milestone. Acceptance criteria for each deliverable will be established in accordance with the process described in the following paragraphs prior to the beginning of each phase.
- ii. ERP Solution Provider should provide templates of proposed deliverables. At the onset of each phase, system integrator will meet with PMIC IT Project Manager to review the applicable templates, tailored to accommodate the needs of the project, and agree on the scope, format, and content of each of the major deliverables for that phase.

The agreements made during this meeting will be captured in a Deliverable Review Document (DRD) for each deliverable.

- iii. PMIC team at its discretion may give a go ahead to move from one project milestone to the other project milestone only after the deliverables of a particular project milestone are accepted by the concerned authority. Hence, the protocol for submission, review, revision and acceptance will be established at the beginning of the project. The system integrator is required to propose the details of this protocol as a part of the proposal.
- Ill. Project Standards: System Integrator to provide Project Standards for various activities/ documentation. Following is a minimum list where standards must be set by the ERP Solution Provider:
 - 1. Test Cases.
 - 2. Test Scenarios.
 - 3. Business Process Design.
 - 4. Functional Design Specifications.
 - 5. Technical Design Specifications.
 - 6. Transporting Objects
 - 7. Change Control
 - 8. Reporting
- IV. Project Success Criteria: The finished ERP solution meets planned scope and specifications
 - a. **No** issues pending at the end of support period.
 - b. The project is completed on time & All Users adopt the software according to plan.
 - V. Change Requests If there is a genuine change to the scope of work, PMIC will raise



or accept change requests and pay for them based on the efforts estimated for them and the cost of manpower indicated by the ERP Solution Provider in the commercial proposal. The genuineness of the change will be established based on the process, deliverables, solution capability and the validation of it by the PMIC or its advisors.

- a. All change requests should be documented and should have a numerically assigned number in sequential order. A database of all change requests should be maintained, and the Bidder should deploy an automated change management application.
- b. All change requests should be classified, and approval and escalation mechanisms should be defined as per classification.
- c. The change request should include an appropriate rollback mechanism which is identified and tested if changes are not successful.
- d. Changes should be implemented in a controlled manner and should be tested in the test (non-production) environment prior to implementation.
- e. The impact of technical changes on the application environment should also be performed. Dependencies of changes should be documented.
- f. All changes should be reviewed, and the databases of changes should be reviewed for any actions taken post implementation.
- g. Emergency change requests should follow a defined and controlled process.
- h. A release schedule should be maintained for all changes, so as to provide minimum disruption to business services.
- i. The ERP Solution Provider will be required to perform quarterly analysis of change requests to review frequently occurring issues, trend analysis, and an analysis report will be provided to PMIC monthly with summary report every quarter.

WARRANTY

- a. The ERP Solution Provider is expected to propose hardware for the proposed solution (where applicable). However, PMIC reserves the right to procure hardware directly. The Bidder is expected to provide on-site trouble shooting services for all the necessary hardware procured.
- b. The ERP Solution Provider shall offer warranty for a specified period (ideally One-Year) for application software from the date of acceptance by PMIC and an Annual



Maintenance Contract thereafter.

c. The Bidder should detail any first level maintenance to be done by PMIC's official during warranty.

DATABASE MANAGEMENT

- a. The ERP Solution Provider should provide requisite support to PMIC for database management with respect to ERP Application during the contract period.
- b. The ERP Solution Provider should undertake tasks related to database administration for the complete period of the contract.

INFORMATION SECURITY MANAGEMENT

For all critical application, it is essential that it should be protected from all the Vulnerabilities through a proper mechanism.

- a. Vulnerability Assessment & Penetration testing of the proposed solution must be performed
- b. Identity Access Management using 4 Eye Principle along with Role based Access control
- c. Application Password Policy must meet complexity, expiry, lockout and old password threshold
- d. The proposed solution should be developed at each phase under secure software development life cycle industry standards.

Detail documentation on

- a. Archiving of Database and its management
 - b. Policy on retention period
 - c. The proposed solution should be a storage agnostic solution
 - d. Provide details on DR and HA implementation of the system
- V. ERP Solution Provider should also provide extensive documentation related to the ERP:
 - a. Application Architecture
 - b. Detailed Documentation of the ERP
 - c. Process Flow
- VI. Solution which maintains comprehensive Audit Trail with timestamp detailing every user activity.
- VII. Application must have proper authentication mechanism where maker performs the



posting into system and designation approve can approve it (maker checker concept)

SOFTWARE MAINTENANCE AND SUPPORT SERVICES

- a. Appropriate access control mechanisms are available in the ERP application for all users as per the requirements of PMIC
- b. The ERP Solution Provider should ensure that all media and software do not contain any malware, virus, worms or malicious software. As a part of Software Maintenance Services during the contract period, the Bidder should provide the Modifications, Enhancements and Product Upgrades without additional costs to **PMIC.**
- c. ERP Solution Provider should ensure a commitment from the respective OEM to maintain support compatibility at OS/RDBMS/Middleware/Core Application for the entire project period. No customization and subsequent implementation charges shall be payable by PMIC for any of the above services. In case of any discrepancies, the Bidder will undertake to compensate PMIC appropriately for any financial loss as determined by PMIC suffered.

SOFTWARE LICENSE MANAGEMENT

- a. The ERP Solution Provider should furnish a comprehensive list of the licenses that the Bidder proposes to procure to implement the proposed solution.
- b. The ERP Solution Provider shall perform an inventory of software licenses in place as on a particular date.
- c. The Bidder should develop and maintain a software license inventory database to include the licenses for software procured through the Bidder or procured by PMIC for the purpose of this project.
- d. The Bidder should maintain data regarding entitlement for software upgrades, enhancements, refresh, replacements and maintenance
- e. The Bidder should perform periodic audits to measure license compliance against the number of valid End user software licenses consistent with the terms and conditions of License agreements

SERVICE LEVEL MANAGEMENT

- a. The ERP Solution Provider shall define, agree, record and manage levels of service for various services provided to PMIC in accordance with the Service Level Requirements
- b. The ERP Solution Provider shall define the full range of services along with the service level targets and measurement parameters.
- c. The SLA shall be reviewed jointly by PMIC and the Bidder at periodic intervals to ensure its effectiveness during the course of the project.
- d. The ERP Solution Provider shall be responsible for monitoring the service levels



against the targets defined in the SLA and reporting the same to PMIC. The Bidder should provide reasons for non-conformance to PMIC and develop and implement improvement plans.

PENALTIES

- a. The inability of the ERP Solution Provider to provide the requirements as per the scope or to meet the deadlines as specified would be treated as breach of contract and invoke the Penalty Clause.
- b. The maximum limit on the penalties during the period of the contract shall be 10% of the total contract value.
- c. If failure of any component leads to mutually agreed terms more than thrice within a span of six months, then the ERP Solution Provider is expected to replace the component / equipment at ERP Solution Provider cost