

**RBAP/RBRDFI**



**MICRO - ENTERPRISE ACCESS TO BANKING SERVICES IN MINDANAO**

**DEPOSITS & LOAN MANAGEMENT SYSTEM  
User Requirements Specification  
Version 1.0**

*Provided by*

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*In association with:*

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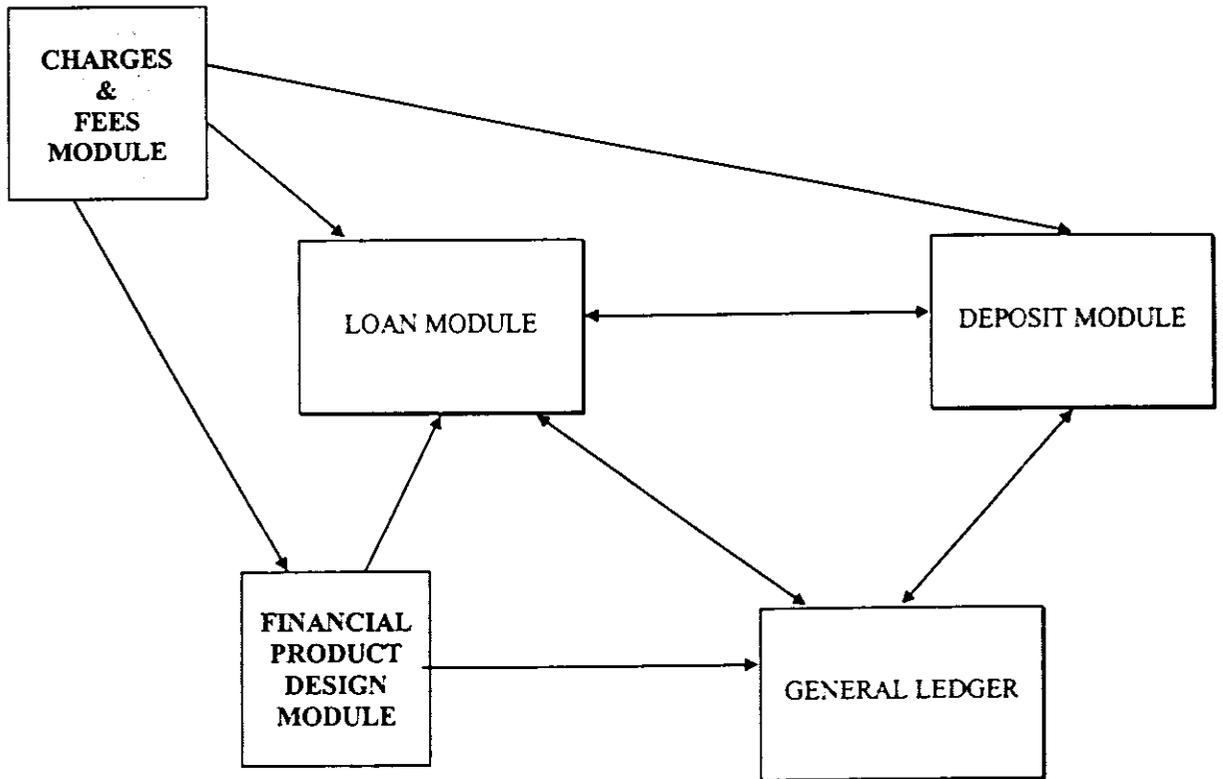
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System Overview Diagram

## 1. Supporting Best Banking Practice

1.1 The system must be able to support the aim of rural banks to introduce the key elements of best banking practice into their operations. In particular, the system is to support the following key areas:

1.2 **Step Lending** - the practice of starting borrowers with small loans, and increasing the amount of these loans over time as the borrower establishes a track record of payment.

1.3 **Small Frequent Repayment Installments** - to encourage discipline in first time borrowers, so that they understand their obligations to the bank.

1.4 **Cash-Flow Lending** - this recognizes that some small enterprises receive their revenue in lump sums. For example, a small manufacturer may be required to invest in raw materials which are then processed into the final product, which are then sold as a batch. In many cases, the time between purchase of raw material and final sale will be counted in weeks, or sometimes months. This being the case, the system needs to take into account that it is both unrealistic and counterproductive to schedule weekly repayments from such cash-flow dependant small enterprises.

1.5 **Links between savings and loans** - the aim of establishing these links is to focus the efforts of banks on potential cross-selling opportunities; to market loans to depositors and encourage borrowers to open deposit accounts.

1.6 **Relationship banking** - banks need to improve the service level they are able to offer to their clientele. For micro-business clients this comes down to rapid access to loans and administrative convenience.

1.7 **An Effective Follow-up system** - to rapidly identify and enforce loan accounts that are past due.

1.8 **Simplicity** - once a loan is satisfactorily paid off, the borrower knows that they will be able to obtain another even larger loan within 30 minutes of repaying their last installment.

1.9 **Improve management of funds** - It is often the case that branches agree to loan funds that their banks treasury department do not have money for. As a result the bank is forced to borrow expensive money from commercial banks. The system is to provide relevant management information at head office level to reduce the occurrence of this situation.

1.10 **Incentive system** - the system must allow the performance of banks, loan officers and borrowers to be measured to allow suitable incentive systems to be established.

## 2. Common System Functionality

2.1 This section details specific functionality that will be common between the Loan Management and Deposit modules.

2.2 The system is to incorporate a check digit in the account number. Account numbers will be constantly typed into the system, with a great deal of room for mistakes. A check digit in the account number will verify the information entered by the operator. For example, in the account number 23406-5, the final digit is a check digit calculated by summing the digits of the account number ( $2+3+4+0+6 = 15$ ) and dropping the tens digit (resulting in the check digit of 5). If the operator mistypes a digit, the check digit will no longer match and the number will be rejected by the system.

2.3 The system is to include a "history account number field" that can be related to the system generated account number. The history account number is a number that referenced a particular account in a previous computer or manual-based systems. The provision of such a history account number will greatly ease the migration of accounts and associated data from legacy systems to the new system.

2.4 The system must be able to accommodate 999,999 accounts per branch.

2.5 The system must be able to accommodate the Central Bank of the Philippines (Bangko Sentral ng Pilipinas, or BSP) standard 6-digit bank code identifier.

2.6 The system must be able to differentiate accounts held by different branch offices. This is to be achieved by appending the standard BSP 6-digit branch code identifier to the front of each account number to create an account number that is unique across the bank.

2.7 Account numbers are to be assigned automatically by the system to prevent the possibility of two different accounts having the same number. Automatic generation of an account number will also prevent closed account numbers from being reused. The system must allow the original account number to be retained in the event of the following account changes:

- Reclassification from an individual to a joint account and vice-versa
- Change of address
- Change of name through marriage

2.8 The system is to allow a link to be established between the client identification number and deposit and loan accounts. The system is to use the assigned client identification number to track all transactions (deposit, loans, and etc.). This will enable the system to track not only the current loan account and transactions, but also the history of the loan accounts as well.

2.9 All drop-down selection lists must be editable by authorized users.

2.10 The system must allow the storage of branch level information at head office level.

2.11 The system must allow that storage of historical data at head office level to enable time-series comparisons to be made.

2.12 The system is to allow the user to define no-banking days. For example, Sunday, or Saturday and Sunday each week, and for individual public holidays, such as Christmas and New Years day.

2.13 Online and context sensitive help is to be available throughout the system. This is an important facet to assist users who are located in remote areas without ready access to technical expertise.

2.14 The system is to provide an end-user report writer that will enable bank users to write their own ad-hoc reports without having to rely on an outside company to develop these for them. The provision of a report-writer will allow managers to make 'what-if' inquiries without the delay and expense of using an external organization.

2.15 The system is to automatically assign a client identification number to new loan or savings clients. The branch identifier will be appended to the client id number to guarantee uniqueness.

2.16 The system is to allow customer details to be queried from any customer inquiry or account management screen by entering all or part of a customers name, account number, or address. On-line information is to include account information, transaction history, rate changes, collateral descriptions, holds, memo posts stop payments, average balances, changes performed on each account, and group relationships.

2.17 Authorised users are to be able to memo post debits or credits to accounts. Memo posts are to effect inquiry balances immediately. This will ensure that ATM functionality will be able to be easily integrated with the basic system.

2.18 The system is to be able to handle multiple users. The system must be able to transfer branch detail and summary information for consolidation at head office.

2.19 A master interest rate file is to be provided to supply default rates for loan, savings and time deposit products. The benefit of this is when a rate change is to occur on a daily basis or at specified rate change dates, rate information comes from a single source. This single source allows rates to be easily maintained by authorized users.

### **3. Financial Product Design Module**

3.1 The aim of the Financial Product Design (FPD) module is to allow a bank to quickly introduce and market test new financial products without the need for programming assistance. This module will allow a wide variety of differing products to be developed including savings, time deposit, commercial, group and consumer loans, and lines of credit. Product design will be parameter driven to allow new products and services to be easily designed by selecting product features required from a comprehensive range of product attributes. The FPD module will allow new products to be introduced quickly and efficiently and maintained completely in-house by the bank.

3.2 The FPD module is to address a banks needs within two broad product categories - Loans and Savings. Within each product type, the system will be able to give different product types their required characteristics by setting the necessary product attributes.

3.3 The user is to be able to select a product type and then define it by completing a list of attributes for the new product. The Financial Product Design module will allow the user to define the following attributes for all products:

- a) first and last open dates
- b) general ledger account numbers
- c) the basis and frequency for interest accrual and posting calculation
- d) minimum and maximum transaction and balance values
- e) charging structure (by accessing the Charges and Fees module from within the FPD module)
- f) statement cycle

3.4 The FPD module will allow the user to define the following attributes for specific products:

- a) term range
- b) notice period
- c) cheque book attachment
- d) drawdown
- e) deposit book/passbook
- f) line of credit
- g) pretermination rate for deposits/special savings
- h) the system will allow the user to select when loan interest is collected - either with each repayment, or at loan disbursement.

3.5 Penalty fees are to be established in the Charges & Fees module and linked to the product from within the FPD module.

3.6 The user is to have the ability to apply tiered, fixed, variable, penalty, promotional and flat interest rates to whichever product the bank deems appropriate. This will allow different loan products with different interest rate calculations to be targeted at discrete segments of the market. For example, the bank may choose to use

straight-line amortization for loans beneath P150,000 and declining balance over P150,000.

3.7 The system is to be designed to permit future inclusion of event-based letter production to allow in-advance notice of interest rate charges, investment maturity etc.

#### 4. Charges and Fees Module

4.1 Charges and fees are to be handled centrally by a Charges and Fees module. The aim of this module is to permit bank users to define a variety of different charges such as loan service fees and account charges, which can then be attached to the appropriate financial products. This mechanism will provide the flexibility banks need to modify their charging structure without the need for programmer intervention. This will enable the system to respond rapidly and effectively both to changes in the market as well as to the introduction of new, or the modification of existing, taxes.

4.2 The Charges and Fees module is to allow charges to be centrally established for the following areas:

- a) Charges that are applied when a particular function is carried out (e.g. when a statement is printed at the account holders request).
- b) Transaction charges that are applied (either a percentage or a flat rate) when a particular transaction occurs. For example, if a depositor withdraws early from a time deposit, a charge may be incurred.
- c) Account transaction charges that are levied based upon the product design definition for a number of transactions (for example, a client may be allowed 2 free withdrawals from their Special Term Deposit over the term, but additional withdrawals may be subject to a charge (either a percentage, or a flat rate)).
- d) Balance fees that are applied when a balance falls below a defined minimum balance.
- e) Account handling fees such as the charge (either a percentage, or a flat rate) on the balance of a dormant current or savings account.
- f) Government charges which deal with government levies upon debit and credit transactions (e.g. withholding tax on interest, VAT, documentary stamp etc.)
- g) Insurance fees that are attracted by policies required on property, or persons to support a loan.
- h) Service fees associated with setting up a loan (either a flat fee, or a percentage of the principal).
- i) Additional administrative fees such as Property Appraisal, Mortgage Registration (required on loans of more than P50,000), and Notarization Fees (either a flat fee, or a percentage of the principal).

4.3 Fees and services are to be adjustable by an authorized user at the individual client account level.

4.4 In the case of the service fee for a loan, the system must allow a fee to be deducted from the amount disbursed and store its value within the system.

4.5 The charges and fees module is to support 'effective date' schemes to allow for schedules of pre-created schemes. All charges and fees are to be held on the database as individual entries as they occur to permit them to be reported on in detail as necessary.

## 5. Deposits Module

### 5.1 Introduction

5.1.1 Ideally the leading source of funds for microenterprise lending should be current and savings deposits as these provide the cheapest source of funds for a bank. The system therefore, is to make the administration of savings deposits as effective and efficient as possible. The Deposits module will address the banks' needs in the current account/savings account/time deposit areas.

5.1.2 The system is to cater for the following deposit-based products:

- a) Current accounts with supporting cheque book (demand deposits)
- b) Savings deposits operated by depositor held passbooks.
- c) Time deposits.
- d) Special savings deposits (SSDs) these combine a time deposit fixed term with a passbook for easy access.

### 5.2 Integration with Other Modules

5.2.1 The Deposits module is to be fully integrated with the Loan Management and the General Ledger modules. This integration will permit the sharing of data between modules to alleviate the need for and problems associated with, the reentry of data. Close integration will also facilitate management reporting across modules.

5.2.2 The client's unique identification number is to provide the key to access all a client's transactions in the Deposit and Loan Management modules.

5.2.3 The system is to allow money to be transferred between deposit accounts of different clients.

5.2.4 One particular loan product relies upon daily collections made up of contractual savings and loan repayment. These repayments are paid into a savings account. This loan product involves daily collections, but a weekly amortization. At the end of the business week, the loan repayment is to be transferred automatically from the savings account to pay off the weekly amortization.

5.2.5 One particular deposit product offers the client life insurance if the account maintains an average daily balance of P1,000 over the course of each 30-day month. As long as the ADB remains above P1,000 the bank pays a P50 insurance premium on the depositors behalf. If the ADB falls below P1,000 the cost of the P50 premium is to be automatically deducted as a charge from the savings account. If the client closes their account, they should have P50 deducted from the amount before the balance is returned to them.

### 5.3 Standard Functionality

5.3.1 The system is to be able to display the client's transaction history.

5.3.2 Withholding Tax ranges and tax exemption are to be parameterised to allow them to be configured by individual banks:

5.3.3 The system is to automatically compute the following:

- a) average daily balance (ADB)
- b) interest and interest adjustments
- c) withholding tax adjustments

5.3.4 The system must allow users with managerial-level access to change parameters such as:

- a) Interest rates for savings deposits
- b) Fees and other charges
- c) Account charges
- d) Limits on minimum funds in accounts

5.3.5 The system must be able to offer tiered savings accounts. For example, a bank may not wish to pay interest on accounts which maintain a balance below P500. However, the bank may wish to offer 5% interest on accounts between P501 and P1,500, 7% interest between 1,501 and 2,500 and 8% interest on average daily balances over P2,501. The system is to calculate interest on a daily basis and credit interest on either a monthly, or quarterly basis.

5.3.6 The system must be able to identify accounts that were opened with P 1,000 or less and flag them as MABS-M related. Once a depositor account is identified as a MABS participant account, the system must continue to track these deposit accounts as MABS accounts even though the amount on deposit may exceed P1,000. The aim of this is to enable managers to trace the growth of depositors associated with the program. The system is to allow the current initial threshold of P1,000 to be adjusted by an authorized user without the need for programmer intervention. In the event that the threshold amount is raised or lowered, the system must continue to track previously designated MABS-M deposits.

5.3.7 The system is to be able to carry out the following standard banking functions:

a) *Start of Day Processing*

- Execute security sign-on
- Post previous day's end-of-day report
- Post late cheques

b) *Normal Day Processing*

New Accounts

- Open New Account
- Customer inquiry
- Chequebook Requisition/Issuance
- Passbook Issuance

- Certificate of Time Deposit Issuance
- Automatic Debit Memo/Credit Memo Issuance
- Bills Payment or Issuance
- Manager's Cheque
- General Certificate of Deposit
- Petty Cash Replenishment

■ Teller Transactions

- Cash-in/Cash-out
- Multiple savings account transactions
- Post Dated Cheque Transactions
- Customer inquiry
- Automated Debit transactions
- Automated Credit transactions
- Reversal Transactions
- Bills payment
- Automated Loans payment
- Passbook update
- Account closure
- End of day transaction summary report

■ c) *Back Office Transactions*

- View / Edit Accounts
- Monitor Accounts
- Setup/Deletion of a Stop Payment Order
- Setup/Lift Hold, Garnish, Earmark
- Back-date transaction (for backup restoration). This must be written to the audit trail
- Memo posting without the need for machine validation
- Error correction without the need for machine validation, but with an override to provide validation (with error correction) if so required.
- Branch summary inquiry
- Branch Parameter Setup
- File Maintenance
- Report Printing
- Individual cheque downfloating (in the event that cheques are cashed more quickly than expected).
- Increase the number of clearing days due to unforeseen delays after cheque posting.

#### d) *End of Day Processing*

Rolling of Floats

Inward Clearing without the need for machine validation

Reverse cleared cheques

Post RCOCI

If a DAIF the system will automatically reverse/credit an account and lodged as RCOCI

Computation of Average Daily Balance

Interest computation

Report Printing

5.3.8 Account numbers for all accounts are to be assigned by the system automatically to prevent the possibility of two different accounts having the same number. Automatic generation of the account number will also prevent closed account numbers from being reused. The account number will consist of a combination of the system stored branch code identifier and a system generated account number.

5.3.9 The system must be able to differentiate between the following deposits:

- a) cash deposits and cheques from this bank
- b) cash deposits and local cheques
- c) cash deposits and regionalised cheques
- d) out of town cheques

5.3.10 Out of town cheques are to be handled through a contingent account receipt and are to be credited only when cleared.

5.3.11 Computation of interest is to be based on average daily balance (ADB).

5.3.12 The system is to allow the rate of interest paid on current and savings accounts to be varied by an authorized user.

5.3.13 The system will be able to specify the production of all, or a sub-set of client account statements on a periodic basis.

5.3.14 The system is to provide the bank with the option of displaying customer signatures on screen. The aim of this is to reduce the time needed for signature verification from signature cards. It will also allow branches to share signatures electronically. The long term aim is to store pictures of the customer alongside the customers signature.

5.3.15 The system must be able to execute the following instructions: hold, stop payment order and automatic transfer arrangements.

#### 5.4 Creating/Opening a Savings Account

5.4.1 The system must record the following information about the customer when opening a new savings account:

- a) First name, middle name and family name of depositor
- b) Home Address/Business Address
- c) Type of identity card #1 (such as SSS, BIR, School ID, Driver's License, PRC)
- d) Identity card number #1
- e) Type of identity card #2 (such as SSS, BIR, School ID, Driver's License, PRC)
- f) Identity card number #2
- g) Home telephone number (if any)
- h) Work telephone number (if any)
- i) Type of account (if a MABS account, etc)
- j) Occupation
- k) Birthplace
- l) Date of Birth
- m) Gender
- n) Nationality
- o) Opening balance
- p) Date account opened

5.4.2 The system is not to permit first, middle, or family names to be entered all in upper-case, or all in lowercase letters. The first letter of each name and initials may be entered in upper-case, while the remaining letters of the name are to be in lowercase. This is to prevent the often encountered problem of the same individual entered numerous times on a database where systems accept names typed all in upper-case and lowercase, as well as mixed-case.

5.4.3 The user will be presented with a drop-down list of acceptable personal identification documents from which to make a selection when the record is being created on the screen. This list is to be user definable and maintainable.

5.4.4 In the case of joint accounts, the above information is to be recorded for the second and subsequent account holders. The system will allow the user to indicate whether the account is a joint "and/or" account where withdrawals may be made by any, or all of the named depositors, or joint "and" account where deposits may be withdrawn against the signature of all joint depositors.

5.4.5 The system must allow 'wildcard' searching of the family name to identify whether a new depositor is an existing client. Where the wildcard search retrieves a number of possibilities, the names are to be presented to the user in a list to allow the selection to be finalised.

5.4.6 The system must allow an account to be set to closed by an authorized user prior to final closure.

5.4.7 The system must store the date of account closure.

5.4.8 The system must produce a monthly report detailing the accounts with zero balances.

5.4.9 The system must allow the original account number to be retained in the event of the following account changes:

- a) Reclassification from individual to joint account
- b) Change of address
- c) Change of name through marriage

#### 5.4.10 Savings Accounts Opened Report

<i>Savings Accounts Opened - August 1998</i>			
Branch office: Gen. Santos		Printed: 01/08/99 13:50	
Information for: 12/13/98		Prepared by: A. Ensomo	
Account Number	Customer Name	Trans. Dat	Trans. Amount
51-03459-1	Bacalso, Josephine	08/03/1998	50,000.00
52-00030-3	Ampo, Virginia	08/03/1998	5,000.00
53-00001-9	Himota, Vicenta	08/03/1998	5,000.00
51-03460-7	Opelinia, Paz	08/03/1998	5,000.00
<i>Total</i>			65,000.00

5.4.11 Report: List of New Deposit Accounts within a period (MABS Program Report)

List of New Microenterprise Deposit Accounts for xx/xx/xxxx - xx/xx/xxxx  
Sarangani Rural Bank, Inc.

Report No.: \_\_\_\_\_  
Print Date: xx/xx/xxxx

	Account Code (A)	Sector Code (B)	GL Code (C)	CID Number (D)	Account Name (E)	Date Opened (F)	Amount Opened (G)	Amount Committed (H)	Commitment (I)
1.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	x,xxx,xxx.xx	xxxxxxxxxxxx
2.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	x,xxx,xxx.xx	xxxxxxxxxxxx
3.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	x,xxx,xxx.xx	xxxxxxxxxxxx
4.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	x,xxx,xxx.xx	xxxxxxxxxxxx
5.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	x,xxx,xxx.xx	xxxxxxxxxxxx
	<b>Total</b>		x,xxx				x,xxx,xxx.xx		

Legend:

- (A) *Account Code.* Loan account code
- (B) *Sector Code.* Loan Classification Code i.e. Agricultural, Commercial, Industrial, Others
- (C) *GL Code.* General Ledger Code
- (D) *CID Number.* Client's Identification Number. Unique code that identifies the client
- (E) *Date Opened.* Date the deposit account was opened.
- (F) *Amount Opened.*
- (G) *Amount Committed.* Amount the depositor has committed to deposit periodically.
- (H) *Commitment.* Commitment frequency i.e. daily, bi-weekly, weekly, monthly.
- (I) *Account or Loan Officer Code.* Code number of the account or loan officer assigned to monitor the loan.

5.4.12 Statement of Account

The system will be able to automatically generate account statements at the end of each month, or on demand. A sample statement is shown below



Rural Bank of xxxxxx  
 <Address>  
 <Address>  
 <Address>  
 Telephone:< >  
 Fax:< >

<Client name>  
 <Address>  
 <Address>  
 <Address>

February 1, 1999

DETAILED STATEMENT OF YOUR CURRENT ACCOUNT No. 51-03461-5

DATE	TRANSACTION REFERENCE	DESCRIPTION	DEBITS	CREDITS	BALANCE
1/3	60175647	Transfer from savings		500.00	6,500.00
1/6		Interest taxable		150.00	6,650.00
1/6		Tax deducted	30.00		6,620.00
1/10	Gen Santos	Cash	600.00		6,020.00
1/14	60175647	To savings account	350.00		5,670.00
1/21	Butuan	Cash	300.00		5,370.00
1/31		Month-end surplus		250.00	5,620.00
		Total Debits:	1280.00		
		Total Credits:		900.00	
Your account balance on January 31 was:				Peso	5,620.00

5.4.13 The system is to allow the entry of a date range (start and end dates) for the production of ad-hoc bank statements. The system will allow both periodic and interim statements to be printed.

5.4.14 The system must be able to produce an on-demand report detailing RCOCI and Sundry Accounts.

## 5.5 Special Account Functionality

5.5.1 The system is to be able to garnish accounts. The system will allow the identification and freezing of accounts that are attached under court orders pending the final disposition of court cases involving the depositor.

5.5.2 The system must be designed to allow multi-currency accounts and transactions to be easily added in the future

## 5.6 Links between Savings and Current Accounts

5.6.1 The link between the Deposits and Loan Management modules is to allow automatic credit to/debit from deposit accounts for loan releases and loan payment once the accountant has authorized this relationship.

5.6.2 The system is to allow automatic transfer of an 'on-us' cheque deposit to a savings account. An 'on-us' cheque is drawn against an account in the same branch where the cheque is issued.

5.6.3 The system will allow the user the option of holding a portion, or the whole of account balance of a deposit as collateral for a loan.

5.6.4 The system is to allow funds in an interest-bearing deposit account to fund cheques drawn against a current account.

5.6.5 The system is to allow accounts to be established with arrangements for the automatic transfer of funds from savings to current accounts. The system is to specify minimum balances for accounts with arrangements for accounts. For example, a current account may have a minimum opening and operating balance of P2,000 whereas a savings account may have a minimum opening and operating balance of P1,000.

5.6.6 The system must allow a penalty fee to be automatically debited if the minimum average daily balance falls below a certain minimum threshold. The system is to allow account charges to be specified for each account type. For example, should a current account falls below P2,000 a P25 per month charge will be made against the account. Should a savings account falls below P1,000 a P30 per month charge will be made against the account.

Note: The current practice among rural banks is not to pay interest on current accounts. However, a number of commercial banks offer interest-bearing current accounts to their customers. Looking to the future it is a reasonable assumption that the medium and larger rural banks may well wish to offer interest-bearing current accounts. This facility is known as a 'negotiable order of withdrawal', or 'now' accounts. These are interest-bearing account with restricted negotiability.

## 5.7 Interest Posting

5.7.1 Computation of interest is to be based on average daily balance (ADB).

5.7.2 The system is to allow interest to be credited to the account on a monthly or a quarterly basis as defined by an authorised user.

5.7.3 In the event that a customer closes an account before interest is credited for that period then the system is to provide 2 options:

a) The account is not credited with the interest and the accrued interest will be assigned to the bank. For example, accounts closed before the end of a calendar quarter will not earn interest for the quarter.

b) The account is credited with the interest between the date the last interest was credited and the date the account was closed.

5.7.4 The rate of withholding tax is to be parameterized to enable it to be adjusted by an authorized user without the need for programmer intervention. As withholding tax on deposits does not apply to deposits of cooperatives with cooperative rural banks, the system must allow interest to be paid without a deduction for withholding tax. Likewise, final tax is also waived on time deposits with a maturity of at least 5 years (as per the Comprehensive Tax Reform Program).

5.7.5 The passbook printer should print the following on passbooks and monthly statements.

a) Gross Interest

b) Deduction of 20% Withholding Tax

## 5.8 Report: MABS-M Deposit Sizes

This report identifies the number of MABS-M savings depositors and tracks how these deposits grow over time. At the time of writing (April, 1999) MABS-M accounts are classed as those that are opened with an initial deposit of P 1,000 or less.

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<i>MABS-M Deposit Sizes</i>		Printed: 01/08/98 13:50	
Branch office: Gen. Santos		Prepared by: A. Ensomo	
Information for: 7/31/98			

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Deposit Size	Number of Depositors		Amount	
0.01 - 500	550	29%	96,500.00	2%
500.01 - 1,000	600	32%	225,000.00	6%
1,000.01 - 5,000	300	16%	187,800.00	5%
5,000.01 - 10,000	197	11%	1,114,000.00	27%
over 10,000.01	220	12%	2,400,000.00	60%
<i>Total</i>	1867	100%	4,023,300.00	100%

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5.9 A second report will be required to show the accounts that are closed under this type of deposit to ascertain the outstanding number of accounts. The report should follow the same format as the report above.

## 5.10 Savings Deposit Report by Size Category

*Savings Deposit Report by Size Category*

Branch office: 221230 : Cagayan de Oro Branch

Information for: 10/31/98

Printed: 01/08/99 13:50

Prepared by: A. Ensomo

Amount by Category	Accounts	Balance
0.01 - 500.00	0	0.00
500.01 - 1,000.00	2	1,002.95
1000.01 - 5,000.00	3	8,007.83
5000.01 - 10,000.00	5	32,178.00
10000.01 - 15,000.00	2	22,916.44
15000.01 - 40,000.00	3	77,443.64
40000.01 - 50,000.00	2	88,995.11
50000.01 - 60,000.00	1	50,390.48
60000.01 - 80,000.00	2	135,195.41
80000.01 - 100,000.00	1	84,214.46
100000.01 - 125,000.00	1	100,010.89
125000.01 - 150,000.00	0	0.00
150000.01 - 200,000.00	4	723,584.36
<i>Totals</i>	26	1323939.57

## 5.11 Active Savings Accounts by Product

This report lists all active savings accounts for a single branch, organized by type of savings product. It includes fields for account number, client name, current balance, balance of accrued interest, date of last transaction, and information on whether the account is linked to active loans. The column 'Days without activity' will show figures exceeding a certain number of days to draw attention to the most inactive accounts.

### Active Savings Accounts by Product

Branch office: Gen. Santos

Information for: 12/31/98

Printed: 01/08/99 13:50

Prepared by: A. Ensomo

Number	Name	Client number	Account balance	Last interest posting	Last transaction date	Days without activity	Accrued interest	Linked to loan account
<i>Product 20-Passbook Savings</i>								
01-23399-2	B. Suarez	2556	16,770.00	340.00	9/15/98		100.00	90-2554-4
01-23422-4	C. Bacolod	2341	42,000.00	610.00	9/28/98		184.00	90-2476-3
01-23430-1	D. Lao	2044	37,652.00	520.00	8/14/98		168.00	
01-23432-1	E. Rodulfo	1865	25,460.00	370.00	6/29/98	98	152.00	90-1587-1
01-23435-2	F. Fornolles	1566	18,000.00	320.00	10/3/98		96.00	
01-23446-1	G. Morales	1944	16,000.00	296.00	10/2/98		100.00	91-9833-1
01-23448-8	H. Dados	2453	11,000.00	100.00	7/30/98	68	72.00	
<i>Product 20-Subtotal</i>		354	1,900,000				49,200.00	
<i>Product 21-Savings Club</i>								
02-23432-1	I. Singkala	1865	25,460.00	370.00	7/29/98	68	152.00	90-1587-1
02-23435-2	J. Pata	1566	18,000.00	320.00	10/3/98		96.00	
02-23446-1	K. Asi	1944	16,000.00	296.00	10/2/98		100.00	91-9833-1
<i>Product 21-Subtotal</i>		275	400,000.00				8,200.00	
<i>Totals</i>		629	2,300,000.00				57,400.00	

## 5.12 Savings Concentration Report

This report provides management with a breakdown of savings account by size of deposit. With this information, management can determine, for example, whether a large share of savings comes from a relatively small number of depositors, and how many accounts are below the minimum balance necessary for profitability. The report groups accounts by size of deposit, reporting the number of accounts and the total deposits in each category, as well as the category's share of all accounts and deposits.

*Savings Concentration Report*  
Branch office: Gen. Santos  
As of 31 December 1998

Printed: 01/08/99 13:50  
Prepared by: A. Ensomo

Size of account	<u>Accounts</u>		<u>Balance</u>		Average balance
	Number	Percent	Amount	Percent	
<i>Product 20- Savings Club</i>	354	100	331,827.98	100	937.37
Less than 100	110	31	5,700.00	2	51.82
101 - 500	89	25	13,300.00	5	149.44
501 - 1000	74	21	47,977.90	14	648.35
1001 - 2500	28	8	43,200.08	13	1,542.86
2501 - 5000	39	11	130,650.00	39	3,350.00
More than 5000	14	4	91,000.00	27	6,500.00
<i>Product 21- Passbook Savings</i>	276	100	449,369.63	100	1,628.15
Less than 100	69	25	5,727.00	1	83.00
101 - 500	55	20	36,000.00	8	654.55
501 - 1000	47	17	43,980.00	10	925.74
1001 - 2500	47	17	57,688.45	13	1,227.41
2501 - 5000	30	11	86,106.70	19	2,870.22
More than 5000	28	10	219,867.48	49	7,852.41
<i>Aggregate</i>	630	100	781,197.61	100	1,240.00
Less than 100	179	28	11,427.00	1	63.84
101 - 500	144	23	49,300.00	6	342.36
501 - 1000	121	19	91,657.90	12	757.50
1001 - 2500	75	12	100,888.53	13	1,345.18
2501 - 5000	69	11	216,756.70	28	3,141.40
More than 5000	42	7	310,867.48	40	7,401.61

### 5.13 Daily Summary of Savings Transactions

*Daily Summary of Savings Transactions - 4/01/1998*

Branch office: 000002 : Davao Branch

Information for: 11/30/98

Printed: 01/08/99 13:50

Prepared by: A. Ensomo

	Accts	Amount		Accts	Amount
Deposit :	35	474,164.70	Withdrawal :	64	401,668.00
No Book Deposit :	30	840,875.79	No Book Withdrawal :	24	892,204.03
Opening Deposit :	2	17,100.00	Returned Cheque :	2	19,000.00
Transfer Credit :	5	12,755.27	Transfer Debit :	1	250,000.00

### 5.14 Dormant Savings Accounts

5.14.1 Banks are required by the BSP to classify a savings account as dormant if it goes without activity for two years. During the intervening two years the account continues to attract interest credits and maintenance charges. Current accounts are required by the BSP to be classed as dormant if they are without activity for one year and work in a similar fashion to savings accounts. This report provides information on these dormant accounts - account number, client name, balance, and date of last transaction. The accrued interest column is included because in some cases interest continues to accrue for dormant accounts. Accounts with no transaction within the stated period, but with outstanding hold-out or garnishing are not to be classed as dormant.

5.14.2 After classification to dormant, the system is to cease to compute and accrue interest. If the account is reactivated, interest is to be computed from the last interest credit date using the latest interest savings rate.

*Dormant Savings Accounts*

Branch office: Gen. Santos

Savings product: Passbook savings

Date: 12/31/98

Printed: 1/08/99 13:50

Prepared by: A. Ensomo

Number	Name	Client number	Account balance	Last transaction date	Days inactive	Accrued interest
01-23399-2	P. Caduaya	1944	16,770.00	9/15/97	388	
01-23422-4	O. Josol	2556	42,000.00	9/28/97	375	
01-23430-1	N. Carillo	1865	37,652.00	8/14/97	413	
01-23432-1	M. Joaquin	2341	25,460.00	8/29/97	399	
01-23435-2	L. Rimando	1566	18,000.00	10/3/97	370	
01-23446-1	K. Sai	2044	16,000.00	10/2/97	369	
01-23448-8	J. Galvez	2453	11,000.00	7/30/97	429	
<i>Totals</i>	87 accounts		100,000.00			

5.14.3 In addition a report will be needed to provide 'early warning' of accounts that will shortly becoming dormant. This report will show the name, address and telephone number of the person to enable the bank to contact and remind the depositor to activate their account.

### 5.15 Dormant Account Charges

5.15.1 The system is to apply dormant account charges to an account on a monthly basis. The system is to allow these charges to be debited on either a monthly, or a quarterly basis. In the case of a quarterly debit, the charge is to be recorded each month (and displayed on the report), although it is not debited from the account until the end of the quarter. The dormant account charge itself is established through the Charges and Fees module.

*Dormant Accounts Charges - For the month of November, 1998*

Branch office: 860001 : Cagayan de Oro Branch

Information for: 11/30/98

Printed: 01/08/99 13:50

Prepared by: A. Ensomo

Account Number	Name of Customer	Charged Amount	Balance of Account	Date of Last Trn
51-00003-8	Magtalas, Fidel M.	5.00	541.00	7/26/96
51-00011-3	Santos, Arsenio A.	5.00	1,087.01	7/26/96
51-00013-1	Calalang, Bayani M.	5.00	1,087.01	7/26/96
51-00015-2	Gabriel, Eduardo G.	5.00	541.00	7/26/96
51-00016-8	Francisco, Juan F.	5.00	322.61	7/26/96
51-00024-1	Cordero, Fabian R.	5.00	52.90	9/25/96
51-00025-6	Esguerra, Ananias E.	5.00	541.00	7/26/96
51-00032-3	Flores, Caesar Nomer N.	5.00	1,087.01	7/26/96
51-00056-2	Garcia, Librada O.	5.00	741.18	9/10/96
51-00141-1	Torres, Lourdes R.	5.00	103.88	8/22/96
51-00159-8	Agsao, Visitacion O.	5.00	103.86	8/23/96
51-00213-0	Balajadia, Loida R.	5.00	50.59	9/20/96
51-00214-5	Laroza, Celso D.	5.00	15.66	9/16/96
51-00215-1	Cabrera, Estelita T.	5.00	212.29	9/10/96
51-00219-2	Padilla, Florante L.	5.00	1,081.32	9/11/96
51-00238-4	Santos, Edison M.	5.00	1,081.09	9/13/96
51-00248-8	Ricafort, Zenaida S.	5.00	2,166.21	9/17/96
51-00253-4	Lopez, Alice E.	5.00	49.29	9/17/96
51-00254-0	Vergara, Victor M.	5.00	49.29	9/17/96
51-00256-1	Masa, Jagina E.	5.00	49.29	9/17/96
51-00292-3	Mendoza, Vicenta M.	5.00	103.46	9/26/96
53-00045-1	King Kabayo MPCl	5.00	2,195.00	8/20/96
Count:	23	115.00	13,365.68	

### 5.16 Current Account

5.16.1 When opening a current account the system must be able to record the following information about the customer:

- a) Name of depositor
- b) Type of use ( Corporate/Company use, Business use, Personal use)
- c) Home Address/Business Address
- d) Type of identity card #1 (such as SSS, BIR, School ID, Driver's License, PRC)
- e) Identity card number #1

- f) Type of identity card #2 (such as SSS, BIR, School ID, Driver's License, PRC)
- g) Identity card number #2
- h) Home telephone number
- i) Work telephone number
- j) Occupation
- k) Birthplace
- l) Date of Birth
- m) Gender
- n) Nationality
- o) Opening balance
- p) Marital status

5.16.2 In the case of joint accounts, the above information is to be recorded for the second and subsequent account holders up to a maximum of six (6) signatories for joint accounts.

5.16.3 The system is to require the new depositor to provide 2 valid forms of identification to allow a person to positively identified. The system is to allow the bank to waive this requirement with the authorization of a senior user. Because of the potential for fraud through misuse, evidence of this authorization is to be kept in the audit trail.

5.16.4 The system is to allow an authorised bank official to alter the account name or ownership.

#### 5.17 Issuance of Chequebook

5.17.1 A cheque book issuance option is to be available from within the opening current account menu option, or from within the current account inquiry option.

5.17.2 The system will record:

- a) The clients account number
- b) The identification number of the chequebook
- c) The first and last serial numbers of the chequebook

5.17.3 The system will allow for a charge to be levied on the account for the cost of the chequebook.

#### 5.18 Current Account Operation

5.18.1 The system is to be able to store dates and numbers of returned cheques for an account holder.

5.18.2 The system is to generate a report of accounts with RCOCI . Details should include the balance of the account.

5.18.3 The system should prevent a client from closing their account should holds against the present balance exist. The system is to prevent account closure until all of the client's uncollected funds have been cleared.

5.18.4 The system is to allow closed accounts to be reactivated by a supervisor-level user to account for accidental closure by the bank.

#### 5.19 Report: Newly Opened Current Accounts

<i>Newly Opened Current Accounts - December 1998</i>			
Branch office: Gen. Santos		Printed: 01/08/99 13:50	
Information for: 12/31/98		Prepared by: A. Ensomo	
Account number	Customer name	Transaction date	Transaction amount
21-00152-5	Collo, Don Marius	7/12/98	2162
<i>Total</i>			2162      count: 1

5.20 In addition to the Current Accounts Opened report, the system must produce a similar Current Accounts Closed report.

#### 5.21 Report: Active Current Accounts

The system is to generate a report displaying active current accounts as shown below.

<i>Active Current Accounts</i>				
Branch office: Gen. Santos			Printed: 01/08/99 13:50	
Information for: 12/31/98			Prepared by: A. Ensomo	
Account Number	Closing Balance	Quarterly Interest	Quarterly Whld Tax	Date of Last Transaction
21-00001-9	2,000.00	3,304.77	660.95	7/21/98
21-00002-2	2,037.29	107.46	21.48	7/14/98
21-00008-4	2,000.00	709.75	141.95	7/21/98
21-00013-5	4,698.60	1,822.46	364.49	7/15/98
21-00014-9	29,778.63	1,534.00	306.80	10/9/97
21-00015-2	1,550.09	498.90	99.78	7/17/98
21-00018-3	3,057.60	1,071.01	214.21	7/20/98
21-00019-7	2,888.78	263.88	52.78	7/21/98
21-00020-3	169,659.40	11,007.27	2,201.45	7/21/98
21-00022-1	1,968.60	122.98	24.59	7/16/98
21-00024-8	18,968.28	751.57	150.32	7/20/98
21-00028-2	61,817.50	2,865.14	573.03	7/21/98
<i>Total</i>	300,424.77	24,059.19	4,811.83	Count: 12

5.22 The system is to produce a report detailing those current accounts, savings accounts and special savings accounts closed in a particular month.

### 5.23 Dormant Current Accounts

5.23.1 The system is to be able to specify a period of time after which an account becomes classed as dormant. The system will be able to specify differing dormancy periods for each account type. For example, current accounts inactive for one year are to be classed as dormant. Such accounts are to be recorded under a separate sundry ledger account.

5.23.2 Accounts with no transaction within the stated period, but with outstanding hold-out or garnishing are not to be classed as dormant.

### 5.24 Report: Dormant Current Accounts

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<i>Dormant Current Accounts</i>						Printed: 01/08/99 13:50
Branch office: Butuan Branch						Prepared by: A. Ensomo
Information for: 12/17/98						
Account number	Closing balance	Quarterly interest	Quarterly withheld tax	Available balance	Prev upd. interest	Date of last tm.
<i>Total</i>	0.00	0.00	0.00	0.00	0.00	

---

5.25 The system is to produce an exception report on a weekly basis to identify accounts with zero balances.

5.26 The system is to allow an authorized user to close accounts that the bank deems to be closed.

### 5.27 Service Charges

5.27.1 The system must allow for and identify miscellaneous charges to be applied to the account. For example, unfunded returned cheques, overdraft cheques, or stop cheque payment orders.

5.27.2 The system must provide an option to allow for service charges to be applied to current accounts if the balance falls below a certain minimum level. An authorized user must be able to adjust the service charge amount and the minimum level where the charge becomes effective. This option must allow a service charge to be made applicable to active and/or dormant accounts.

5.27.3 Although default service charges for each product will be established within the Charges and Fees module the system is to provide a user override function at the Deposits module level to allow managerial-level users to waive particular charges and fees at the banks discretion.

### 5.28 Certificates of Time Deposit (CTD)/Special Savings Deposits (SSD)

5.28.1 Though CTD accounts and SSD accounts are different products, they share many similarities in terms of treatment and operational mechanics. The main difference is that CTDs require documentary stamps whereas a client can access an SSD account with a passbook. With an SSD the client opens an SSD and deposits money for a specified term. The depositor is given

a passbook which substitutes for the physical certificate of time deposit. The holder of an SSD does not pay stamp duty on the SSD, which is a requirement for CTDs. No withdrawals are permitted before maturity. Pretermination reverts the SSD back to a regular savings account which pays regular savings account interest. At the end of the specified term the SSD may be rolled over into another SSD, or converted into a regular savings account.

5.28.2 The system is to be able to address both renewals, roll-overs and pre-termination:

- a) Renewal - where the principal is used to purchase another CTD and the interest is paid to the customer either by cheque, or credited to the customers account.
- b) Roll-over - where the principal and interest are used together to purchase another CTD/SSD. It is usual practice for banks not to change the certificate of a CTD. The new roll-over balance is recorded in the subsidiary ledger of the bank. The certificate is updated by hand like a passbook to reflect the increased value of the CTD.
- c) Pre-termination - where the client elects to terminate a CTD or SSD before maturity date. Typically a pre-terminated CTD/SSD attracts interest at the prevailing savings deposit rate.

#### 5.29 'Double Your Money' CTD/SSD

5.29.1 There are special CTD/SSD's that have a term of five years that do not pay withholding tax if the CTD/SSD is held to term. There are two methods of calculating the interest on these products.

- a) interest is compounded quarterly
- b) interest is accrued based upon the principal sum

5.29.2 The system should allow a user to inquire on the amount of interest accrued or compounded at any point in the life of the CTD/SSD.

5.29.3 Should these long term CTD/SSD's be preterminated, interest becomes liable for withholding tax from the start date of the CTD/SSD. The system is not required to apply withholding tax retrospectively, but should facilitate its manual calculation by the user.

#### 5.30 Interest

5.30.1 Interest for CTDs and SSD's are to be calculated in the following manner:

$$\text{Interest} = \frac{\text{Principal} \times \text{rate} \times \text{term (in days)}}{365 \text{ days}}$$

$$\text{Interest} = \frac{20000 \times 8.5\% \times 30 \text{ days}}{365 \text{ days}}$$

$$\text{Interest} = P139.72$$

### 5.31 Report: Time Deposit by CTD

Time Deposit by CTD#  
 Branch office: Davao Branch  
 Information for: 11/30/98

Printed: 01/08/99 13:50  
 Prepared by: A. Ensomo

Account number	CTD number	Customer name	Address	Date opened	Maturity date	Amount	Rate	Term
41-00747-2	17764	Potenciano, Genevieve	San Francisco, Glodo, Panabo, Davao	2/18/98	8/17/98	20,713.98	8.5	180
41-00748-6	17765	Potenciano, Geneva	San Francisco, Glodo, Panabo, Davao	2/18/98	8/17/98	20,713.98	8.5	180
41-00826-8	18192	Hortessano, Joan	Tibungco, Davao	3/26/98	9/22/98	1,094.97	6.5	180
41-00834-0	18200	Ursora, Apple.	*** NO ADDRESS ***	3/31/98	4/30/98	1,214.01	6.5	30
41-00891-3	18250	Abad, Ernesto	New Visayas, Panabo	4/30/98	7/29/98	50,000.00	16.0	90
41-00894-4	18254	Abad, Ireneo.	Panabo Davao	5/4/98	8/3/98	159,024.91	17.0	91
41-00896-1	18255	Abad, Ireneo.	Panabo Davao	5/4/98	8/3/98	55,032.73	17.0	91
41-00937-8	18301	Florida, Milfe	6197 Luzviminda Subd., Panabo, Dav	5/25/98	10/22/98	8,000.00	6.5	150
<i>Total</i>						315,794.58	count:	8

5.32 A similar report to the one shown above will be required to display Special Savings Deposits.

### 5.33 Report: Upcoming Maturing Time Deposits

For cash flow planning it is essential to project upcoming maturing time deposits in order to anticipate substantial withdrawals. This report groups upcoming maturing accounts by maturity date, giving subtotals of amounts coming due within each date range. The right-hand columns provide information useful for predicting the likelihood that an owner will roll over a deposit, and thus whether the institution should continue using the funds. The column *Account rolled over?* indicates whether the account has been renewed at least once. If so, the column *Days on deposit* gives the number of days that at least some of the funds have been on deposit.

<i>Upcoming Maturing Time Deposits</i>							Printed: 01/08/98 13:50
Branch office: Gen. Santos							Prepared by: A. Ensomo
Savings product: 90-day certificates of deposit							
Number	Name	Client number	Account balance	Maturity Date	Interest rate (percent)	Account rolled over?	Days on deposit
<i>Accounts maturing within 1-15 days</i>							
01-23422-4	P. Adante	2556	40,000.00	10/12/98	18.0	Yes	250
01-23422-4	R. Ambo	1865	30,000.00	10/15/98	18.0	No	
01-23430-1	S. Olares	2341	25,460.00	10/15/98	18.0	Yes	172
01-23432-1	T. Pintac	1566	18,000.00	10/17/98	18.0	Yes	120
01-23435-2	U. Duterte	2044	16,000.00	10/20/98	19.0	No	
01-23446-1	V. Pelonia	2453	11,000.00	10/22/98	19.0	Yes	380
<i>Subtotal-1-15 days</i>			6 accounts	140,460.00			
<i>Accounts maturing within 16-30 days</i>							
11-23455-2	W. Navarro	1633	18,000.00	11/3/98	19.0	Yes	120
11-23546-1	Y. Hernani	2134	16,000.00	11/4/98	19.0	No	
<i>Totals</i>			2 accounts	34,000.00			

### 5.34 Report: Time Deposit by Interest Rate Category

*Time Deposits by Interest Rate Category*  
Branch office: Tagum Branch  
Information for: 11/30/98

Printed: 01/08/99 13:50  
Prepared by: A. Ensomo

Interest Rates	# Accts	Amount
0.00% - 5.00%	0	0.00
5.01% - 10.00%	13	210,486.34
10.01% - 15.00%	26	2,339,469.66
15.01% - 20.00%	37	10,283,886.26
20.01% - 25.00%	0	0.00
25.01% +	0	0.00
TOTALS:	76	12,833,842.26

### 5.35 Report: Time Deposit by Size and Term

<i>Time Deposit Report by Size and Term</i>							Report no.: T07
Branch office: Tagum Branch							Printed: 01/08/99 13:50
Information for: 11/30/98							Prepared by: A. Ensomo
Range	30 days or less		31 - 60 days		61 - 90 days		
	#Acc	Amount	#Acc	Amount	#Acc	Amount	
0.01 - 500.00	0	0.00	0	0.00	0	0.00	
500.01 - 1,000.00	0	0.00	0	0.00	0	0.00	
1,000.01 - 5,000.00	1	1,214.01	0	0.00	0	0.00	
5,000.01 - 10,000.00	2	13,884.23	0	0.00	0	0.00	
10,000.01 - 15,000.00	0	0.00	0	0.00	0	0.00	
15,000.01 - 40,000.00	1	21,069.04	2	70,684.07	3	94,361.34	
40,000.01 - 50,000.00	1	45,000.00	1	50,000.00	5	231,868.99	
50,000.01 - 60,000.00	4	223,946.85	0	0.00	0	0.00	
60,000.01 - 80,000.00	3	206,081.95	1	60,807.07	1	75,000.00	
80,000.01 - 100,000.00	7	690,416.34	1	84,011.00	1	95,088.77	
100,000.01 - 125,000.00	2	211,632.71	0	0.00	0	0.00	
125,000.01 - 150,000.00	1	131,607.11	3	49,100.00	0	0.00	
150,000.01 - 200,000.00	4	757,854.56	0	0.00	0	0.00	
200,000.01+	10	5,201,486.52	4	2,069,919.00	2	1,278,907.27	
<b>Totals</b>	<b>36</b>	<b>7,504,193.32</b>	<b>12</b>	<b>2,384,521.14</b>	<b>12</b>	<b>1,775,226.37</b>	

### 5.36 Report: Listing of Time Deposit by Balance

<i>Listing of Time Deposit by Balance</i>							Printed: 01/08/99 13:50
Branch office: Tagum Branch							Prepared by: A. Ensomo
Information for: 11/30/98							
Account number	CTD number	Customer name	Date opened	Maturity date	Amount	Rate	Term
41-01048-1	18394	Guirpo, Leopoldo	7/17/98	1/13/99	10,000.00	11.0	180
41-01010-4	18359	KSCFC-Lending	6/26/98	6/21/99	8,154.67	6.5	360
41-00937-8	18301	Florida, Milfe A.	5/25/98	10/22/98	8,000.00	6.5	150
41-01050-1	18395	Luayon, Solidad R.	7/17/98	8/16/98	7,699.85	6.5	30
41-01040-1	18388	Carete, Anita	7/15/98	8/14/98	6,184.38	6.5	30
41-00834-0	18200	Ursora, Apple M.	3/31/98	4/30/98	1,214.01	6.5	30
41-00826-8	18192	Hortessano, Joan L.	3/26/98	9/22/98	1,094.97	6.5	180
<i>Total:</i>					<b>42,347.88</b>		

### 5.37 Report: Time Deposit Expiries

Time Deposit Expiries from 01/01/1998 to 01/01/1999  
 Branch office: Davao Branch  
 Information for: 01/01/99

Printed: 01/08/99 13:50  
 Prepared by: A. Ensomo

Account number	CTD number	Customer name	Address	Date opened	Maturity date	Amount	Rate	Term
41-00747-2	017764	Potenciano, Genevieve	San Francisco, Glodo, Panabo, Davao	02/18/1998	08/17/1998	20,713.98	8.5	180
41-00748-6	017765	Potenciano, Geneva	San Francisco, Glodo, Panabo, Davao	02/18/1998	08/17/1998	20,713.98	8.5	180
41-00826-8	018192	Hortessano, Joan	Tibungco, Davao	03/26/1998	09/22/1998	1,094.97	6.5	180
41-00834-0	018200	Ursora, Apple.	*** NO ADDRESS ***	03/31/1998	04/30/1998	1,214.01	6.5	30
41-00891-3	018250	Abad, Ernesto	New Visayas, Panabo	04/30/1998	07/29/1998	50,000.00	16.0	90
41-00894-4	018254	Abad, Ireneo.	Panabo Davao	05/04/1998	08/03/1998	159,024.91	17.0	91
41-00896-1	018255	Abad, Ireneo.	Panabo Davao	05/04/1998	08/03/1998	55,032.73	17.0	91
41-00937-8	018301	Florida, Milfe	6197 Luzviminda Subd., Panabo, Dav	05/25/1998	10/22/1998	8,000.00	6.5	150
41-00945-0	018300	Abad, Ireneo	Panabo Davao	05/25/1998	08/24/1998	160,740.00	16.0	91
41-00947-7	018302	Abad, Ireneo	Panabo Davao	05/28/1998	07/27/1998	149,100.00	17.0	60
41-00954-5	018307	Abad, Ireneo	Panabo Davao	06/05/1998	08/04/1998	84,011.00	17.0	60
41-00963-1	018317	Tagaro, Lilia	Phase 3, Homeland Subd. Magsaysay, Carmen, Davao	06/08/1998	09/06/1998	270,216.50	15.0	90
41-00971-2	018329	Lariba, Alicia	7565 Phase-2 Gamao Subd., Panabo, Davao del norte. 8105	06/15/1998	08/14/1998	30,684.07	8.5	60
41-00981-1	018335	Acedilla, Didia	San Francisco, Panabo Davao del Norte	06/17/1998	08/17/1998	24,780.97	8.0	61
41-00989-1	018342	Tagaro, Lilia	Phase 3, Homeland Subd. Magsaysay, Carmen, Davao	06/20/1998	09/18/1998	50,000.00	15.0	90
41-00991-1	018344	Dela Cruz, Luz	Andrea Homes Panabo, Davao	06/20/1998	07/20/1998	104,019.73	13.5	30
41-00992-4	018347	Bugna, Aludia	San Francisco Panabo, Davao	06/22/1998	09/21/1998	75,180.73	12.0	91
		<i>Total</i>				1,264,527.58		

### 5.38 Report: Time Deposit Interest Accrual Report

Accruals are to be generated during the last banking day of the month.

*Time Deposit Interest Accrual Report*

Branch: Gen. Santos Branch

Printed: 01/08/99 13:50

Information for: 12/10/1998

Prepared by: A. Ensomo

Account number	CTD number	Customer name	Date opened	Maturity date	Amount	Rate	Term	Accrued interest
41-00747-2	017764	Potenciano, Genevieve	02/18/1998	08/17/1998	20,713.98	8.5	180	880.35
41-00748-6	017765	Potenciano, Geneva	02/18/1998	08/17/1998	20,713.98	8.5	180	880.35
41-00826-8	018192	Hortessano, Joan	03/26/1998	09/22/1998	10,000.00	17.0	30	141.67
41-00834-0	018200	Ursora, Apple.	03/31/1998	04/30/1998	200,000.00	17.0	30	2833.33
41-00891-3	018250	Abad, Ernesto	04/30/1998	07/29/1998	200,000.00	17.0	30	2,833.33
41-00894-4	018254	Abad, Irene.	05/04/1998	08/03/1998	100,000.00	17.0	30	1,416.67
41-00896-1	018255	Abad, Irene.	05/04/1998	08/03/1998	100,000.00	17.0	30	1,416.67
41-00937-8	018301	Florida, Milfe	05/25/1998	10/12/1998	100,000.00	17.0	30	1,416.67
41-00945-0	018300	Abad, Irene	05/25/1998	08/24/1998	1,094.97	6.5	180	35.59
41-00947-7	018302	Abad, Irene	05/28/1998	07/27/1998	1,214.01	6.5	30	6.58
41-00954-5	018307	Abad, Irene	06/05/1998	08/04/1998	50,000.00	16.0	90	2,000
41-00963-1	018317	Tagaro, Lilia	06/08/1998	09/06/1998	159,024.91	17.0	91	6,758.56
41-00971-2	018329	Lariba, Alicia	06/15/1998	08/14/1998	55,032.73	17.0	91	2,338.89
41-00981-1	018335	Acedilla, Didia	06/17/1998	08/17/1998	105,000.00	17.0	91	4,462.50
41-00989-1	018342	Tagaro, Lilia	06/20/1998	09/18/1998	244,919.00	17.0	60	6,939.37
41-00991-1	018344	Dela Cruz, Luz	06/20/1998	07/20/1998	160,740.00	16.0	91	6,429.60
<i>Total</i>					15,669,881.54			40,790.13

### 5.39 Report: Schedule of Monthly Terminated CTDs

This report will allow a bank to keep track of CTD outflows that may be caused by the bank offering uncompetitive interest rates, or for example the transfer of residence of the client, or withdrawal of working capital by a business.

*Schedule of Monthly Terminated CTDs - July 1998*

Branch office: Butuan Branch

Printed: 01/08/99 13:50

Information for: 11/30/98

Prepared by: A. Ensomo

Account number	CTD number	Customer name	Date opened	Maturity date	Principal Amount	Int Rate	Gross Interest
41-00656-1	17268	Arceno, Cresencio C.	1/2/98	7/2/98	60,000.00	13.0	3,900.00
41-00678-6	17290	Guirpo, Leopoldo	1/14/98	7/13/98	10,000.00	14.0	700.00
41-00681-0	17293	Eliedo, Rosela H.	1/16/98	7/15/98	50,000.00	13.5	3,375.00
41-00824-1	18191	Abad, Ruth D.	3/26/98	4/25/98	39,946.45	16.0	532.62
41-00825-4	18193	Abad, Ireneo S.	3/26/98	4/25/98	38,975.55	16.0	519.68
41-00836-7	18202	Tagaro, Lilia B.	4/2/98	7/1/98	53,114.41	16.0	2,832.77
41-00837-1	18203	Mamacos, Luz G.	4/2/98	7/2/98	40,000.00	9.0	900.00
41-00864-7	18230	Flores Jr., Leonardo M.	4/20/98	7/20/98	72,000.00	12.0	2,160.00
41-00950-1	18305	Rondon, Norma	6/1/98	7/2/98	200,000.00	14.5	2,416.67
41-00951-4	18306	Rondon, Norma	6/1/98	7/2/98	50,000.00	14.5	604.17
41-00953-1	18308	Catacutan, Nelly C.	6/4/98	7/6/98	75,000.00	18.0	1,125.00
41-00956-2	18312	Abad, Ernesto	6/5/98	7/6/98	51,753.70	16.0	690.05
41-00957-6	18310	Alfeche, Magdalena M.	6/5/98	7/6/98	1,500,000.00	18.0	22,500.00
41-00958-0	18311	Panes, Evelyn K.	6/5/98	7/6/98	1,000,000.00	17.0	14,166.67
41-00959-3	18313	Rebuta, Dionisio G.	6/5/98	7/6/98	298,347.62	15.0	3,729.35
41-00960-0	18314	Cabalquinto, Alberto	6/6/98	7/6/98	65,769.31	18.0	986.54
41-00961-3	18318	Abad, Ireneo S.	6/8/98	7/8/98	40,843.42	17.0	578.62
41-00962-7	18319	Alang, Sylvia	6/8/98	7/8/98	500,000.00	17.0	7,083.33
41-00964-4	18316	Walpole, Cecile I.	6/8/98	7/8/98	150,000.00	16.0	2,000.00
<i>Total: 47</i>					4,295,750.46		70,800.47

## 5.40 Report: Active Accounts by Products

*Active Accounts by Products - Type: Savings Plus 30-day Account*

Branch office: Gen. Santos

Printed: 01/08/99 13:50

Information for: 12/17/98

Prepared by: A. Ensomo

Account number	Customer name	Closing balance	Date of last transaction
21-00001-9	Ronquillo, Pablo	2,000.00	7/21/98
21-00002-2	Barbarona, Mellie	2,037.29	7/14/98
21-00008-4	Morales, Rocardo	2,000.00	7/21/98
21-00013-5	Militante, Demosthenes	4,698.60	7/15/98
21-00014-9	Crisostomo, Pedro	29,778.63	10/9/97
21-00015-2	Tilan, Geoffrey	1,550.09	7/17/98
21-00018-3	Lebrilla, Albert	3,057.60	7/20/98
21-00019-7	Obenza, Emmanuel	2,888.78	7/21/98
21-00020-3	Arnaez, William	169,659.40	7/21/98
21-00022-1	Tuazon, Gina	1,968.60	7/16/98
21-00024-8	Sy, Jefferson	18,968.28	7/20/98
21-00028-2	De Mesa, Jocelyn	61,817.50	7/21/98
21-00029-6	Abrasaldo, Iane	154,508.60	7/21/98
21-00030-2	Arcenal, Bonifacio	1,072.18	2/5/98
21-00033-3	Panal, Restie	870.08	7/3/98
21-00042-9	Narvaez, Roseller	2,000.00	7/7/98
<i>Total</i>		458,875.63	

## 5.41 Report: Current Account - Daily Transactions Summary

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### Summary of Current Account Transactions

Branch office: Cotabato Branch

Printed: 01/08/99 13:50

Information for: 7/05/98

Prepared by: A. Ensomo

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	Accts	Amount		Accts	Amount
Deposit:	14	407,659.00	Withdrawal:	3	29,436.75
			Withdrawal by cheque:	12	198,066.65
<i>Total</i>		407,659.00			227,503.40

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## 5.42 Client Account Inquiry Access

The system is to be able to allow Personal Identity Number (PIN) controlled access to a customers account. A PC workstation placed in the branch lobby would enable customers to interrogate their own account balances. This workstation would be dedicated to that single purpose and feature a simplified touch screen user interface which could be operated by customers. Presently, requests for account balances by customers consumes a significant amount of branch tellers time.

## 5.43 Regularized Savings

5.43.1 Frequently, a rural bank will require a potential borrower to make regular savings over a period of time before the client will be offered a loan. The system will need to track these regularized savings to ensure that clients adhere to their commitment.

### 5.43.2 Report: Deposit Commitments Defaults for the Day

This exception report details those depositors that have missed their deposit on the day. This report is sorted by Account Officer.

Deposit Commitments Defaults for xx/xx/xxxx - xx/xx/xxxx

Report No. \_\_\_\_\_

Name of Bank \_\_\_\_\_

Print Date: xx/xx/xxxx

Prepared by: \_\_\_\_\_

Account Code	Sector Code	GL Code	CID Number	Account Name	Date Committed	Amount Committed	Times Default	Total Expected
(a)	(b)	(c)	(d)		(e)	(f)	(g)	(h)
Account Officer : xxxxxxxxxxxxxxxxxxxxxxxxxxxx (I)								
1.	xx-xxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
2.	xx-xxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
3.	xx-xxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
Account Officer : xxxxxxxxxxxxxxxxxxxxxxxxxxxx								
4.	xx-xxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
5.	xx-xxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
Total		x,xxx				x,xxx,xxx.xx		

#### Legend:

- (a) *Account Code.* Loan account code.
- (b) *Sector Code.* Loan Classification Code i.e. Agricultural, Commercial, Industrial, Others.
- (c) *GL Code.* General ledger code.
- (d) *CID Number.* Client's Identification Number. Unique code that identifies the client.
- (e) *Date Committed.* Date the deposit should have been deposited.
- (f) *Amount Committed.*
- (g) *Times Default.* The total number of times the depositor has failed to fulfill the commitment.
- (h) *Amount Expected.* The amount of the day's missed payment

## 6. Inter-Branch Operations

6.1 Many rural banks are seeking to improve service to their clients by enhancing their ability to quickly carry out account transactions from a variety of branch locations. The banks' aim is to offer various instruments by which deposit clients can deposit or withdraw rapidly from any one of the branch network within 15 minutes. The following functionality will be required by larger rural banks with multiple branches who seek to link their branches into a coherent network.

6.2 The products are:

6.2.1 Bank-wide Managers Cheque Encashment - The client is able to purchase a branch managers cheque which the payee can present for encashment in any of the banks branches.

6.2.2 Cash Transfer - A non-depositor is able to transfer cash from one branch to another individual, who may, or may not be an account-holder with another of the banks branches.

6.2.3 Bank-wide Cheque Encashment - This is to permit a current account depositor, or the depositor's payee to encash their personal cheque in any of the banks branches.

6.2.4 Branch-wide Savings Withdrawal - This will allow a savings depositor to withdraw from any of the banks other branches.

6.2.5 Bank-wide Account Deposit - a customer or non-customer can make a deposit in any bank branch for credit to a deposit account in any of the banks other branches.

6.2.6 Bank-wide Balance Inquiry - Any savings or current account depositor can inquire on their balance in any of the bank's branches.

6.2.7 Bank-wide Collection and Remittance - Any private institution or single proprietorship can collect/deposit in one of the banks branches for remittance/credit to any of its branches.

### 6.3 Terminology and Key

6.3.1 *Home branch*: a branch where the deposit account is opened and maintained.

6.3.2 *Originating branch*: a branch where the transaction is initiated and corresponding fees are collected.

6.3.3 *Servicing branch*: is a branch which carries out the following activities:

- a) verification of account balance and depositors signature
- b) payment of cheque encashment to payee and cash transfer to the beneficiary.

### 6.3.4 Key

AP-Ben - Accounts Payable (name of beneficiary)  
 BC - Bank Commission  
 CB - Correspondent Bank  
 COH - Cash on hand  
 Cr - Credit  
 DD - Demand deposit (checking account )  
 D/F OB - Due from (originating branch)  
 DFOB - Due from other banks  
 Dr - Debit  
 D/T SB - Due to (service branch)  
 MC - managers check  
 MI - Miscellaneous Income  
 SD - Savings deposit

### 6.4 Bank-wide Managers Check Encashment System Requirements

Transactions	Originating Branch Operations	Servicing Branch Operations
1. Issuance of MC	Dr: COH    xx.xx Cr: MC     xx.xx BC     xx.xx D/T SB xx.xx	_____
2. Encashment of MC	2 <sup>nd</sup> Stage Dr: MC    xx.xx Cr: D/T SB xx.xx	1 <sup>st</sup> Stage Dr: D/F OB    xx.xx Cr: COH     xx.xx BC     xx.xx
3. Settlement of Account	1 <sup>st</sup> Stage Dr: D/T SB    xx.xx Cr: DFOB - CB xx.xx	2 <sup>nd</sup> Stage Dr: DFOB - CB xx.xx Cr: D/FOB xx.xx

### 6.5 Cash Transfer System Requirements

Transactions	Originating Branch	Servicing Branch
1. Receipt of Cash	1 <sup>st</sup> Stage Dr: COH      xx.xx Cr: D/T SB   xx.xx BC      xx.xx	2 <sup>nd</sup> Stage Dr: D/F OB xx.xx Cr: AP-Ben xx.xx BC xx.xx
2. Payment of Cash	_____	Dr: AP-Ben xx.xx  Cr: COH xx.xx
3. Settlement of Account	1 <sup>st</sup> Stage Dr: D/T SB    xx.xx Cr: DFOB - CB xx.xx	2 <sup>nd</sup> Stage Dr: DFOB - CB xx.xx Cr: D/F OB xx.xx

### 6.6 Bank-wide Check Encashment System Requirements

Transactions	Originating Branch	Servicing Branch
1. Encashment of Check	Option 1 client pays the charges by deduction from check  2 <sup>nd</sup> Stage Dr: DD      xx.xx Cr: D/T SB   xx.xx BC      xx.xx  Option 2 client pays the charges in Cash  1 <sup>st</sup> Stage Dr: DD      xx.xx Cr: D/T SB   xx.xx BC      xx.xx	Option 1 client pays the charges by deduction from check  1 <sup>st</sup> Stage Dr: D/F OB   xx.xx Cr: COH      xx.xx BC      xx.xx  Option 2 client pays the charges in Cash  2 <sup>nd</sup> Stage Dr: D/F OB   xx.xx COH      xx.xx Cr: COH      xx.xx BC      xx.xx



6.9 Bank-wide Balance Inquiry System Requirements

Transactions	Originating Branch (Branch of Inquiry)	Servicing Branch (Branch of Account)
1. Receipt of Cable Charges (cost of faxes to originating branch)	1 <sup>st</sup> Stage Dr: COH      xx.xx  Cr: D/T SB   xx.xx MI        xx.xx	2 <sup>nd</sup> Stage Dr: D/F OB   xx.xx  Cr: MI        xx.xx
2. Settlement of Account	1 <sup>st</sup> Stage Dr: D/T SB   xx.xx  Cr: DFOB - CB   xx.xx	2 <sup>nd</sup> Stage Dr: DFOB - CB      xx.xx  Cr: D/F OB            xx.xx

## 7. Automated Teller Machine Access

7.1 The system is to be ATM ready. To meet this objective, the system is to possess sufficient client-end functionality to allow a rural bank to join existing ATM networks by means of a simple 'plug-in' approach. ATM functionality is to be fully integrated with the Deposit and Loan Management modules. During the processing of an ATM transaction, the system is to perform the following operations:

- a) Validation of the card and PIN
- b) Check for HOT card
- c) Check for valid card status i.e. an active card
- d) Check if the requested transaction is allowed for the card
- e) Verify the various limits
- f) Verify PIN retry limits
- g) Verify account status and balance
- h) Process the actual request
- i) Apply a service charge if applicable

7.2 If a card that does not belong to the bank is presented at the bank's ATMs (not-on-us transaction), the system is to send the transaction across the network to the card issuing bank for validation and authorization. The system is to maintain all transaction details for day-end settlement purposes.

7.3 The system is to accommodate the following common transactions:

- a) cash withdrawal
- b) balance inquiry
- c) PIN change
- d) Statement of account/Checkbook request
- e) Statement printing

7.4 The system must be capable of interfacing with leading brand ATM machines

7.5 The Deposit module must be capable of being extended to accommodate the following reports:

- a) Online transactions
- b) Withdrawal reports
- c) Deposit Reports
- d) System up/downtime report

### 7.6 ATM Management

7.6.1 The system is to possess centralized ATM device management facilities to provide an efficient and cost effective method to manage and maximize both functionality and availability of the ATM's. The device management facilities described below will provide the bank with the

necessary tools to effectively and efficiently manage its network of ATMs. The system is to provide the following:

7.6.2 Changes, updates and enhancements to the functionality of the ATM are to be implemented by the use of parameters downloaded to the ATM's across the communications network.

7.6.3 The system will allow ATM's to be monitored by the system in real-time. On an exception basis (e.g. out of cash), the system is to send an alert message to the relevant party as dictated by user parameters. This notification is to be sent to the relevant party in real-time for immediate action.

7.6.4 All consumables (cash, receipts and journal paper) usage is to be monitored in real-time. The system records usage of these consumables. When an item reaches a low-level a warning message is to be sent to the relevant party. This will ensure there is minimum down-time of the ATM due to consumable exhaustion.

7.6.5 The system is to keep statistics of media usage by the ATM and are identified by day of week, public holidays and eve of public holidays. The system will generate management reports to aid the management of replenishment schedules.

## 7.7 ATM Card Management

7.7.1 The ATM card management system is to support both traditional centralized card management as well as branch (distributed) card management. The system is to allow the issue of ATM cards at the branch level in real-time. To support this distributed management, the system is to provide the following features:

- a) Segregation and security of all card management functions at branch level.
- b) Segregation of all reports by branch.
- c) Interface to branch teller equipment for customer selection of PIN using PIN pad.
- e) Real-time card issue transaction in the encryptor.
- f) Segregation and security of account attachment to a card.

## 8. Loan Management

### 8.1 Introduction

All loan transactions are to course through the Deposit module. Loan files will be automatically updated whenever there is a loan transaction received from the Deposit module.

### 8.2 Loan Types

8.2.1 The system is to be able to establish separate loan ledgers to differentiate between differing loan types. The system will be able to categorize loans under the following major loan types and present loan types to the user in the form of a menu selection box.

- a) Agricultural Loans
- b) Commercial Loans
- c) Industrial Loans
- d) Others

8.2.2 The system is to be able to assign loan sub-types beneath each of the major loan types. For example, beneath the 'Other' option, there is a need to list the following loan sub-types:

- Salary Loans
- Jewelry Loan
- etc.

Or under Agricultural as:

- Rice
- Coconut
- etc.

8.2.3 The loan type and loan sub-type are to be stored along with the loan itself to enable reporting to take place. The system must allow authorized users to modify existing loan types/loan sub-types and add additional loan types/loan sub-types by means of a menu-based interface. No programming intervention is to be required to achieve this.

### 8.3 Loan Application

8.3.1 The system is to allow the option of capturing information from the loan application stage, not solely from the loan approval stage.

8.3.2 All loans are managed by dedicated account officers. The system must be able to assign an account officer to each loan and relate all subsequent corresponding loan transactions back to the account officer.

### 8.3.3 Report: Pending Clients by Account Officer

The purpose of this report is to ensure that clients do not wait an unduly long time before receiving a loan. People generally become active clients and are assigned to an account officer when their first loan application is prepared. Until their loan is disbursed, however, the client will not appear in lists of active loans. Clients who have repaid their loan and are awaiting another also do not appear in lists of active loans. The report also helps ensure that clients who stop borrowing are processed properly and that the dropout indicator is calculated accurately.

The report includes information on the client's previous loan and repayment performance that is helpful in determining whether the client merits another loan. It also shows the status of the loan approval process and how many days the processing has taken thus far.

<i>Pending Clients by Account Officer</i>							
Branch office: Gen. Santos						Printed: 4/26/98 13:50	
Report date: 4/25/98						Prepared by: A. Ensomo	
Account officer: H. Basilio							
Client number	Client name	Amount	Previous loan		Days without loan	Loan prepared?	Loan approved?
			Date paid	On time (percent)			
2546	J. Pata	18,000	2-Apr	100	23	Y	Y
2549	S. Olares	26,800	8-Apr	95	17	Y	N
2560	T. Pintac	37,600	20-Apr	100	5	N	N
2568	V. Duterte	20,000	18-Apr	108	7	N	N
2590	V. Pelonia	14,000	New	New	New	N	N
2596	A. Agiam	18,000	19-Apr	92	6	N	N
2602	B. Sigawan	11,200	New	New	New	N	N
2613	C. Borrez	16,000	9-Apr	100	16	Y	N

8.3.4 The system is to capture basic loan application information which is to include:

- a) Date of loan application
- b) Family name
- c) First name
- d) Middle name
- e) Title (Mr, Mrs, Ms, Dr)
- f) Tax Identification Number (TIN)
- g) Loan identifier
- h) Loan amount
- i) Loan Interest
- j) Loan term
- k) Responsible account officer
- l) Date of loan approval
- m) User name

- n) Date of entry
- o) Time of entry
- p) The system must specify the type of collateral that backs the loan. Such collateral types are Real Estate Mortgage, co-signers, or post-dated cheques.
- q) Microenterprise loan flag
- r) MABS loan flag

8.3.5 The system is to provide a 400-character text memo field to enable additional loan application information to be recorded.

8.3.6 The system is to generate a unique 6-digit loan identification number for a particular client. Appended to the rear of this loan identification number is a 3 digit loan cycle number.

e.g. 878676-001 - first loan for loan customer 878676  
878676-002 - second loan  
878676-003 - third loan

This loan cycle number will allow users to readily identify how many loans a client has obtained.

8.3.7 The system must be able to apply the following deductions from the approved loan amount Service, Property Appraisal, Mortgage Registration, Notarization, and Documentary Stamp Fees. The Charges and Fees module will enable the bank to create and assign additional fees. If fees and charges are not deducted from the loan amount, the system is to be able to track sources of payments, for example, account debits or cash.

8.3.8 The system is to handle two types of loan applications - one for group loans and one for individual loans.

8.3.9 In the case of individual loans, the system is to record the names and addresses of 2 co-borrowers. In the case of group loans the system is to be able to assign multiple borrowers to a single group.

8.3.10 The system is to allow a revised repayment schedule to be generated at any time up to the point of loan disbursement. This is to take into account the frequent occurrence where a client requests a loan amount/term and the branch loan committee approves a lesser amount over a shorter term.

8.3.11 After the loan has been approved on the system, the account officer will meet with the client to agree a loan disbursement date and will generate an appropriate loan schedule. Once the loan disbursement date is entered the system should prevent the loan schedule from being modified.

8.3.12 The system is to allow the user to identify a loan as a microenterprise loan at the time of loan application. In addition, the system must allow the user to further specify the loan as a MABS program loan. This identification is to be achieved by means of on-screen check boxes. A significant amount of comparative reporting will

be based upon the full loan portfolio, the microenterprise loan portfolio and the MABS loan portfolio which it why it is important to differentiate loans at the initial stages of loan application.

8.3.13 The system must be able to flag a loan according to schemes that channel credit facilities to microenterprises such as PCFC.

8.3.14 MABS research indicates that around 80% of loans are repeat agreements. This figure is expected to increase as a structured step-lending approach recommended by the MABS program gains increasing acceptance by rural banks. The system is to be able to 'carry across' the relevant details from the clients previous loan application to the latest application to reduce typing time.

8.3.15 The system is to provide an option to permit the granting of re-loans. A re-loan is a further loan application before an existing loan is fully paid off. The system is to allow a re-loan to be formulated in the same way as any other loan, by an authorised user. It will be the individual banks policy to determine whether re-loans are allowed.

8.3.16 Loans that are supported by post-dated cheques will need to record cheque information against the loan record. The following information is to be recorded: date of cheque, cheque number and cheque amount.

8.3.17 The system is to track post dated cheques (PDC) paid by individual borrowers. In particular, the system is to track the date the PDC was paid and cleared as well as the date a PDC was returned because it was drawn against insufficient funds (DAIF), or drawn against uncollected deposits (DAUD).

8.3.18 The system must be able to link a loan number to the client account number, if the borrower already has a client account number by reason of possession of a savings or current account or having had a previous loan with the bank.

8.3.19 Once a loan has been disbursed the system must transfer borrower and loan information to the loan ledger.

#### 8.4 Group Loans

8.4.1 The system will be required to automatically generate a group loan number and assign concurrent numbers to the borrowers that comprise the group.

8.4.2 The system is to track the individual repayments by members of the group as well as a summary of repayments by the group.

8.4.3 The system must be able to track the mandatory deposit account for each member of a group and/or individual borrowers.

8.4.4 The system is to be able to cross reference an individual's loan account to a group's deposit account.

8.4.5 The system is to cross reference individual deposit account of group members to group's deposit account

(For a more detailed discussion of the functionality required for Group Lending, please refer to the following section).

### 8.5 Links to savings

8.5.1 The system is to allow the user to link a loan to a savings accounts. This will facilitate the generation of reports detailing a bank's complete relationship with a particular customer.

8.5.2 The system must allow the bank the option of requiring a defined minimum level of savings to be on deposit before a loan is approved. The system will prevent withdrawal of the earmarked amount. This will allow savings to be used indirectly as collateral against loan defaults.

8.5.3 The system must be capable of regularly debiting loan repayments from the customers' current or savings account.

8.5.4 The system is to allow a bank to require a borrower to make regular saving (this will require a monthly report, plus an exception report if a savings day is missed).

### 8.6 Daily collection with Weekly Amortization

8.6.1 Amortization payments for loans granted by some rural banks to their microenterprise clients are collected as deposits on a daily basis, from Monday to Friday. These collections are supposed to be posted daily in the client's respective savings accounts. On the last working day of each week (Friday), the bank automatically debits the amount of loan amortization due for the entire week from the clients' respective deposit accounts as payment for their loans.

8.6.2 The system will need to monitor the regularity of a client's daily deposits. The sizes of subsequent loans are based on the number of daily deposits (which are actually loan amortization payments) that a client has missed (and only clients with perfect daily deposit records can borrow the maximum amount for their next loans).

8.6.3 When, therefore, a client has fully repaid a loan and applies for their next loan, the bank has to check their statement of account (savings) to determine the number of days, if any, missed, in remitting the required daily deposits.

8.6.4 However, due to operational considerations, posting of the daily deposits is often not carried out on the same day that deposits are collected, but on the day following. This occurs because microfinance staff arrive at the bank after the books after end-of day processing has been completed.

8.6.5 When the day's deposit is posted the following day, the client's statement of account will show that they missed their deposit for the proceeding day (when

actually this is not the case), thereby, reducing the amount which she is entitled to for her next loan.

8.6.6 The system is to be able to indicate that the amount posted the following day is actually the client's deposit for the previous day. This will make it easier for the bank determine the true repayment performance of its microenterprise clients.

#### 8.7 Restricting Deposit Account Withdrawals

8.7.1 The system must allow the bank to block part or all of the savings account while the client has an outstanding loan balance.

8.7.2 The system must allow the bank to 'unblock' savings in the following circumstances:

- a) once the loan has been fully repaid.
- b) savings can be used for final loan payment.
- c) should savings exceed a certain percentage of the loan balance.

8.7.3 The system is to allow the bank to withdraw overdue loan payments from the savings, or current accounts.

#### 8.8 MABS Program Management Data

8.8.1 The system must be able to flag initial microenterprise loans (P 25,000 and under) for MABS project purposes. Once a borrower is identified as a MABS participant, the system must continue to track subsequent loans (above and below P 25,000) to that borrower as microenterprise loans as long as the initial loan to the borrower was P25,000 or under. The aim of this is to allow growth of microenterprises to be tracked by the system. The system is to allow the current, initial P25,000 loan amount to be adjusted by an authorized user without the need for programmer intervention.

8.8.2 The system is to be flexible enough to enable the identification of loans that may traced to donor funding programs.

Report: List of new borrowers within the period (MABS Program Report)

xx/xx/xxxx

Page : x

NAME OF BANK  
NAME OF BRANCH  
LIST OF NEW LOAN ACCOUNTS FOR THE PERIOD XX/XX/XXXX - XX/XX/XXXX

Account Number (a)	Customer Name (b)	Loan Type (c)	Date Released (d)	Amount Released (e)	Maturity Date (f)	Interest Rate (g)	No. of Installments (h)
Account Officer Name: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx							
xx-xxxxx-xx	xxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxx	xx/xx/xxxxx	xx,xxx.xx	xx/xx/xxxxx	xx.xx	x
xx-xxxxx-xx	xxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxx	xx/xx/xxxxx	xx,xxx.xx	xx/xx/xxxxx	xx.xx	x
				SUB-TOTAL :	xx,xxx.xx		
Account Officer Name: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx							
xx-xxxxx-xx	xxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxx	xx/xx/xxxxx	xx,xxx.xx	xx/xx/xxxxx	xx.xx	x
xx-xxxxx-xx	xxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxx	xx/xx/xxxxx	xx,xxx.xx	xx/xx/xxxxx	xx.xx	x
xx-xxxxx-xx	xxxxxxxxxxxxxxxxxxxxxxxxxxxx	xxxxx	xx/xx/xxxxx	xx,xxx.xx	xx/xx/xxxxx	xx.xx	x
				SUB-TOTAL :	xx,xxx.xx		
				GRAND TOTAL:	xx,xxx.xx		

A user is to be able to select to whether to report on all loans, or on microfinance and MABS loans by means of a drop down list prior to report generation. In addition the user should be able to enter maximum and minimum loan sizes to enable the user to segment the data on the report.

Legend:

- (a) Account Number. Account number assigned to the borrower
- (b) Customer Name. Name of the borrower
- (c) Loan Type. Type of loan i.e. Agricultural, Commercial, Industrial, Others
- (d) Date Released. Date the loan was released
- (e) Amount Released. Loan disbursed amount
- (f) Maturity Date. Date the loan will fall mature.
- (g) Interest Rate. Interest rate of the loan.
- (h) No. Inst. Number of installments (amortization)

## Report: List of Depositors with Borrowings

### List of Depositors with Borrowings

Name of Bank

Date: xx/xx/xxx

	Account Code (a)	Sector Code (b)	GL Code (c)	CID Number (d)	Loan Account Name	Deposit Balance (e)	Loan Acct. No. (f)	Loan Amount (g)	Date Loan Released (h)	A/O Code
1.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xxx,xxx.xx	xx-xxxxx-x	x,xxx,xxx.xx	xx/xx/xxxx	xxxxx
2.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xxx,xxx.xx	xx-xxxxx-x	x,xxx,xxx.xx	xx/xx/xxxx	xxxxx
3.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xxx,xxx.xx	xx-xxxxx-x	x,xxx,xxx.xx	xx/xx/xxxx	xxxxx
4.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xxx,xxx.xx	xx-xxxxx-x	x,xxx,xxx.xx	xx/xx/xxxx	xxxxx
5.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xxx,xxx.xx	xx-xxxxx-x	x,xxx,xxx.xx	xx/xx/xxxx	xxxxx
Total:						xxx,xxx.xx		x,xxx,xxx.xx		

### Legend:

- (a) *Account Code.* Loan Account Code
- (b) *Sector Code.* Loan Classification Code i.e. Agricultural, Commercial, Industrial, Other
- (c) *GL Code.* General Ledger Code
- (d) *CID Number.* Client's Identification Number. Unique code that identifies the client.
- (e) *Deposit Balance.* Total to-date deposit balance of the depositor..
- (f) *Loan Account Number.* Account number of the outstanding loan of the depositor.
- (g) *Loan Amount.* The amount of the loan granted to the depositor.
- (h) *A/O Code.* Account Officer identification code

## 8.9 Formulae Library

The system is to provide a broad range of formulae that will allow the user to develop new deposit and loan products in a flexible manner. A library of formulae will be maintained by the system. The Financial Product Designer module will be able to make use of this loan formulae library and a user will be able to select the most appropriate formula for a particular product. This comprehensive library of formulae will speed financial product development time and eliminate the need for expensive and time-consuming programming changes. Please refer to section 10. Formula Library for more information.

## 8.10 Interest calculations

8.10.1 Loan interest is to be calculated on the basis of a 360-day year.

8.10.2 The system must allow interest to be calculated using both the declining balance and flat methods.

8.10.3 Interest is to be charged against loan principal only.

8.10.4 Repayments will deduct interest in advance and record the value as UID until the appropriate time.

8.10.5 The system is to allow interest to be deducted from the loan amount before release of a loan.

8.10.6 The system is to allow interest to be calculated as an "add-on".

8.10.7 The system will enable the user to specify loan repayment based upon the declining balance method.

8.10.8 The default loan interest rate is to be editable by an authorized user to allow the bank to alter interest rates as commercial demands dictate. Each loan product is to be permitted to possess its own default interest rate.

8.10.9 An interest rate that differs from the default interest rate for a product must be agreed by an authorized user. This authorization must be recorded on the audit trail as one potential area for fraud is alteration of interest rates charged on a loan. Once a loan rate is established for a particular loan (be it the default or a modified rate) the interest rate is to remain the same throughout the term of the loan. However the system must be able to reschedule a loan if the need arises.

## 8.11 Penalty Interest

8.11.1 If the borrower does not pay according to the repayment schedule, penalty loan interest is to be calculated based upon the number of days since the last payment due date. The system is to allow a bank the discretion of allowing a grace period of up to 3 days after the due date before the penalty is applied. If the borrower pays within the grace period then they will not incur any excess interest. However, if repayment is

not made until after expiry of the grace period then interest is incurred from the due date of repayment to the actual date of payment.

8.11.2 The system must allow the user a degree of discretion as to whether, or not additional interest is imposed. For example, interest may be imposed:

- a) one day after the repayment day
- b) a user defined number of business days after the repayment due date.

8.11.3 The system need not validate loan size. Loan ranges vary between banks and donor programs, so an across the board validation will difficult to achieve as there are in excess of 140 rural banks operating in Mindanao. It will be the responsibility of the *account officers and their supervisors* to ensure that the loan values remain within the policy range of a particular bank.

8.11.4 Interest that is deducted from the loan amount *up front* must be written to a unearned income account. The system will automatically compute accrued interest and amortization of unearned interest and discount (UID) where appropriate. As the loan period progresses, interest is withdrawn from the UID and posted to the appropriate account at the end of each repayment due date.

8.11.5 Loan interest is to be charged from the date the loan is disbursed to the borrower.

8.11.6 The system must be able to deal with variety in the composition of installment payments. For example, one product may have interest-only payments, and other products comprise interest and principal payments.

## 8.12 Fee Calculations

8.12.1 Fees are to be set up through the Charges and Fees module. The system must be able to deduct the following up-front fees and commissions from the amount of the loan before dispersal:

- a) Service Charges
- b) Property Appraisal
- c) Mortgage Registration
- d) Notarization Fees

8.12.2 The system will not calculate these fees automatically, but will allow the user to manually enter the appropriate amounts. This will provide a system with the greatest flexibility for changes in approach in the future.

8.12.3 All charges and fees are to be stored as separate items under separate income accounts to provide clarity in loan account management.

8.12.4 In the case of multiple disbursements of a loan, up-front fees are to be assessed on the full amount of the loan.

8.12.5 Although default service charges for each product will be established within the Charges and Fees module the system is to provide a user override function at the loan module level to allow supervisory-level users to waive particular charges and fees as the bank sees fit.

### 8.13 Repayment Scheduling

8.13.1 The system will automatically compute and generate the amortization schedule. The schedule will consist of amount, number and date of payments.

8.13.2 The following repayment schedule needs to be accommodated:

- a) Daily amortization
- b) Weekly amortization
- c) Monthly amortization
- d) Single amortization paid at end of term (30 days, 45 days, etc)
- e) Quincena (every 15-days)

### 8.13.3 Report: Daily Collection Report

The system will summarize collections by Account Officer at the end of the day.

---

Daily Collection Report

Name of Bank

Date: xx/xx/xx

Account Code (a)	Sector Code (b)	GL Code (c)	CID Number (d)	Account Name	Date Collected (e)	Amount Collected (f)	Times Deposited (g)	Total Expected
Account Officer : xxxxxxxxxxxxxxxxxxxxxxxxx (I)								
1.	xx-xxxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
2.	xx-xxxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
3.	xx-xxxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
Account Officer : xxxxxxxxxxxxxxxxxxxxxxxxx								
4.	xx-xxxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
5.	xx-xxxxx-x	xxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xxx	xxxx.xx
Total		x,xxx				x,xxx,xxx.xx		

---

Legend:

- (a) *Account Code.* Loan account code
- (b) *Sector Code.* Loan Classification Code i.e. Agricultural, Commercial, Industrial, Other
- (c) *GL Code.* General Ledger Code
- (d) *CID Number.* Client's Identification Number. Unique code that identifies the client.
- (e) *Date Collected.* Date the deposit was collected.
- (f) *Amount Collected.*
- (g) *Times Deposited.* The total number of times the depositor has fulfilled its commitment.

## 8.14 Flexible Repayment Schedule

8.14.1 The system must be able to accommodate flexible repayment schedules. Flexibility will allow banks to develop a schedule that closely matches the clients cash flow (and thus their ability to repay on time). One example of a flexible repayment schedule is shown in the following example:

Principal: P 10,000  
Interest: 10%  
Term : 10 months  
Amortization: Monthly

*For the first three months:*

	Principal	Interest	Total
Month 1	1,000.00	100.00	1,100.00
Month 2	1,000.00	100.00	1,100.00
Month 3	1,000.00	100.00	1,100.00

*Principal Recalculation Point: Principal Balance after 3 months is P 7,000*

Month 4	1,000.00	70.00	1,070.00
Month 5	1,000.00	70.00	1,070.00
Month 6	1,000.00	70.00	1,070.00

*Principal Recalculation Point: Principal balance after 6 months is P 4,000*

Month 7	1,000.00	40.00	1,040.00
Month 8	1,000.00	40.00	1,040.00
Month 9	1,000.00	40.00	1,040.00
Month 10	1,000.00	40.00	1,040.00

8.14.2 The key to understanding this method is that while repayment due dates are regular the repayment amount collected from the borrower will vary depending upon the value of the principal that interest is calculated on. In the example above there is an principal recalculation point after 3 months and another after 6 months. However, the system should allow these principal recalculation points to be user defined to allow recalculation points to be specified after every due date if necessary.

8.15 The system is to be able to calculate the repayment schedule and display this on the screen. The user will be able to print multiple copies of the repayment schedule, so a copy may be given to the borrower.

8.16 The following payment information is to be stored by the system:

- a) Principal payments
- b) Interest

8.17 Payments are to be recorded by the system and allocated among principal, interest, fees and penalties. The staff must be able to override any and all of the above to cater for the eventuality that repayments do not follow the original repayment

schedule, or when a borrower makes a partial payment. The allocation hierarchy is to first to impose penalties, interest due, then principal due, then interest accrued (but not yet due) then principal not yet due.

8.18 The system must be able to accept installments of equal, or varying amounts.

8.19 The system is to allow the user to specify 'no-banking' days. The system must recognise that a repayment due on a no banking day (e.g. a Sunday, or public holidays) can only be paid on the following day (and no penalty interest is due).

8.20 The system must be able to provide for a single lump sum repayment to support Real Estate Mortgage (REM) backed lending. The lump sum may consist of principal alone, or a combination of principal and interest.

8.21 Report: Loan Repayment Schedule

The Loan Repayment Schedule is to include key information about the loan, such as borrower information, loan term, and interest rate. Since it needs to be fully understood by the client, it should clearly identify all charges and payments.

<i>Loan Repayment Schedule</i>								
Client name: T. Pintac						Printed: 06/07/98 13:50		
Client number: 2315						Report date: 06/07/98		
Loan number: 124454-001						Prepared by: A. Ensomo		
Date approved: 06/07/98								
Term: 6 months								
						Loan product: Working capital loan		
						Amount approved: 18000.00		
						Interest rate: 36.0%		
						Fees: 3.0%		
						Savings: 10.0%		
Date	Disbursement	Principal	Fees	Savings	Interest	Total payment	Loan balance	Savings balance
6/14/98	18000.00						18000.00	0.00
7/14/98		3000.00	90.00	300.00	540.00	3930.00	15000.00	300.00
8/14/98		3000.00	90.00	300.00	450.00	3840.00	12000.00	600.00
9/14/98		3000.00	90.00	300.00	360.00	3750.00	9000.00	900.00
10/14/98		3000.00	90.00	300.00	270.00	3660.00	6000.00	1200.00
11/14/98		3000.00	90.00	300.00	180.00	3570.00	3000.00	1500.00
12/14/98		3000.00	90.00	300.00	90.00	3480.00	0.00	1800.00
<i>Totals</i>		18000.00	540.00	1800.00	1890.00	22230.00		

8.22 The system must be capable of regularly debiting the correct loan repayment from the customers current or savings account.

## 8.23 Disbursement Policies

8.23.1 The system must include an authorisation facility before a loan may be disbursed. The details of the user authorizing a loan are to be written to the audit trail.

8.23.2 The system must allow a user definable grace period to be granted between disbursement and the initial installment.

8.23.3 Where necessary, the system is to store the following Promissory Note information before a loan is disbursed:

- a) Promissory Note Number (10 digit number from a range generated by the BSP each year)
- b) Date of PN
- c) Original Due Date
- d) Loan Amount

8.23.4 The system is to allow disbursements to be made in the form of cheque, or credit to the clients current, or savings accounts. If the loan is disbursed by cheque then the amount is to be either paid in cash and/or credited to the borrowers account by means of a deposit slip. If the loan is disbursed in cash the system must be able to credit the cash to the teller's cash account.

8.23.5 Once a loan request is approved, the system should allow the user to automatically credit loan proceeds to the clients' account. The system is to provide an option where the *proceeds of the loan can be disbursed by means of a managers' cheque/cashiers cheque.*

8.23.6 The date of the initial installment is to be input by the account officer.

8.23.7 The system must be able to place an expiry date on approval for a loan. For safety and security reasons the system is to withdraw approval for the loan if the loan has not been disbursed within a period of time specified by the bank (typically 30-days, or less). The client's situation could have changed substantially in this time, making reevaluation of the loan advisable. An expiration also reduces the potential for staff embezzlement of uncollected loans.

8.23.8 The system is to allow the bank to release the loan in between one and three batches. Typically this will be determined by the bank policy based upon the loan amount and term. However, loan repayments are to be calculated from the date of the first release of funds. The inclusion of this functionality will allow the system to be easily modified in the future to accommodate project financing for those rural banks that require it.

8.23.9 The system is to allow for a user-defined grace period between disbursement and installment.

8.23.10 In the case of loans that have been authorized, but not yet disbursed, the system should be able to cancel non-disbursed loans, but not delete them from the

system. This information is useful to have on record when judging if a borrower should have a loan in the future.

### 8.24 Report: List of Loan Releases for the Day

List of New Releases for the Day  
 Name of Rural Bank  
 Information for: xx/xx/xxxx

Report No.:  
 Print Date: xx/xx/xxxx  
 Prepared by:

	Account Code (a)	Sector Code (b)	GL Code (c)	CID Number (d)	Account Name	Date Released (e)	Amount Released (f)	Maturity Date (g)	No. Inst. (h)	Prod. Code (i)	A/O Code (j)	
1.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xx/xx/xxxx	xxx	xxx	xxxxxx	
2.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xx/xx/xxxx	xxx	xxx	xxxxxx	
3.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xx/xx/xxxx	xxx	xxx	xxxxxx	
4.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xx/xx/xxxx	xxx	xxx	xxxxxx	
5.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxxxx	xx/xx/xxxx	x,xxx,xxx.xx	xx/xx/xxxx	xxx	xxx	xxxxxx	
Total:							x,xxx,xxx.xx					

Legend:

- (a) Account Code. Loan account code
- (b) Sector Code. Loan Classification Code i.e. Agricultural, Commercial, Industrial, Other
- (c) GL Code. General Ledger Code
- (d) CID Number. Client's Identification Number. Unique code that identifies the client.
- (e) Date Released. Date the loan was released.
- (f) Amount Released. Amount of loan released.
- (g) Maturity Date. Date the loan will mature.
- (h) Number of Installments. Number of installments the loan shall be paid (amortization).
- (i) Product Code. The product loan code i.e. NPP for Negosyo Palamboon, Pundo Padaghanon, etc..
- (j) Account or Loan Officer Code. Code number of the account or loan officer assigned to monitor the loan.

8.25 Report: List of Loan Releases for the Month

At the end of each month the system is to provide a summary list of loan releases.

List of Loan Releases for the Month - January 1998  
 Branch office: 000002 : Dipolog Branch  
 Information for: 11/30/98

Printed: 8/01/99 13:50  
 Prepared by: A. Ensomo

Account number	Customer name	Date 1 <sup>st</sup> disbursement	Due date	Disbursed to date	Account balance
<b>Agricultural - Coconut</b>					
016338-001	Arnaez, William	1/29/98	1/29/99	20,000	15,900
	SUB-TOTAL : 1			20,000	15,900
<b>Agricultural - Rice</b>					
002015-004	Esguerra, Sherwin	1/15/98	1/15/00	250,000	250,000
	SUB-TOTAL : 1			250,000.00	250,000.00
<b>Commercial</b>					
034530-002	Narvaez, Roseller Z.	1/16/98	1/16/00	75,000.00	59,507.93
	SUB-TOTAL : 1			75,000.00	59,507.93
<b>Other - Salary</b>					
668038-001	Delgado, Joseph V.	1/17/98	1/17/99	30,000.00	20,000.00
00236 002	Crisostomo, Pedro G.	1/20/98	1/20/99	30,000.00	10,000.00
	SUB-TOTAL : 2			60,000.00	30,000.00
	GRAND TOTAL : 5			410,000.00	340,000.00

## 8.26 Loan Management

The system must provide for a memo field at loan record level to allow account officers comments to be recorded against a particular loan.

8.27 Report: Installment Due Report

*Installment Due Report*  
 Rural Bank of Digos, Inc.  
 Information for: xx/xx/xxxx

Report No.: \_\_\_\_\_  
 Print Date: xx/xx/xxxx  
 Prepared by: \_\_\_\_\_

	Account Code	Sector Code	GL Code	CID Number	Account Name	Date Due	Principal	Interest	Inst. Total.	Rem. No. Inst.	A/O Code
	(a)	(b)	(c)	(d)		(e)	(f)	(g)	(h)	(i)	
1.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	xxxxxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xxx
2.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xxx
3.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xxx
4.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xxx
5.	xx-xxxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xxx
							Total: xx,xxx.xx	xx,xxx.xx			

This report is to be parameterized to allow a user to view all the installments due on, or before a particular date. This is to be achieved by allowing the user to enter in a date range before the report is generated.

Legend:

- (a) *Account Code.* Loan account code
- (b) *Sector Code.* Loan Classification Code i.e. Agricultural, Commercial, Industrial, Other
- (c) *GL Code.* General Ledger Code
- (d) *CID Number.* Client's Identification Number. Unique code that identifies the client.
- (e) *Due Date.* Date the amortization is due.
- (f) *Principal.* Principal amortization amount.
- (g) *Interest.* Interest amortization amount.
- (h) *Inst. Total.* - Principal + Interest. Total amount due per amortization schedule.
- (i) *Remaining Installments.* - Remaining number of installments for the entire loan.;
- (j) *A/O Code.* - Code number of the account or loan officer assigned to monitor the loan.

## 8.28 Report: Daily Collection Report

Collection Report for the Day  
 Name of Rural Bank  
 Information for: xx/xx/xxxx

Report No.: \_\_\_\_\_  
 Print Date: xx/xx/xxxx  
 Prepared by: \_\_\_\_\_

	Account Code (a)	Sector Code (b)	GL Code (c)	CID Number (d)	Account Name	Date Due (e)	Date Paid (f)	Principal (g)	Interest (h)	Penalty (i)	Inst. Total. (j)	Inst. No. (k)	Rem. Instal. (l)	A/O Code (m)
1.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxx	xx/xx/xxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xx	xxxx
2.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xx	xxxx
3.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xx	xxxx
4.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xx	xxxx
5.	xx-xxxx-x	xxx	xxxxx	xxxxx	xxxxxxxxxxxxxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx	xx	xxxx
Total			x,xxx					xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx			

### Legend:

- (a) *Account Code.* Loan account code
- (b) *Sector Code.* Loan Classification Code i.e. Agricultural, Commercial, Industrial, Other
- (c) *GL Code.* General Ledger Code
- (d) *CID Number.* Client's Identification Number. Unique code that identifies the client.
- (e) *Due Date.* Date the amortization is due.
- (f) *Date Paid.* Date the amortization was paid.
- (g) *Principal.* Principal amortization amount.
- (h) *Interest.* Interest amortization amount.
- (i) *Penalty.* Penalty amount based on total amount due.
- (j) *Inst. Total.* Principal + Interest. Total amount due per amortization schedule.
- (k) *Inst. No.* Installment Number
- (l) *Rem. Instal.* Remaining Installments - Remaining number of installment for the entire loan.;
- (m) *A/O Code.* Code number of the account or loan officer assigned to monitor the loan.

### 8.29 Report: Active Loans by Account Officer

The report lists all active loans in an account officer's caseload, with initial information (amount, disbursement date, and term), upcoming payments, and current loan status. For delinquent loans the report shows the principal and interest in arrears so that the account officer can tell the client the total amount due.

<i>Active Loans by Account Officer</i>											
Branch office: Gen. Santos						Report date: 25/04/98			Printed: 4/26/98 13:50		
Account officer: N. Carillo									Prepared by: A. Ensomo		
Number	Name	<u>Disbursement</u>			<u>Next payment</u>		Loan balance	Payments in arrears	<u>Arrears</u>		Days without payment
		Amount	Date	Term	Amount	Date			Principal	Interest	
90-00020-3	C. Bacolod	14400	8/2/96	9	1600	2/5/98	12,520.00	3.5	5,600.00	340.00	56
90-00024-7	D. Lao	10800	12/4/96	12	920	4/5/98	9,400.00	3	2,720.00	200.00	24
90-00048-2	E. Rodulfo	21600	6/24/96	9	2400	24/6/98	11,200.00	0	0.00	0.00	
90-00052-9	F. Fornolles	9200	2/1/97	10	920	1/5/98	7,600.00	2.2	2,040.00	140.00	12
90-00053-7	G. Morales	7200	2/3/97	4	440	2/3/98	5,600.00	0	0.00	0.00	
90-00077-4	H. Dados	10800	1/2/97	6	440	1/2/98	9,400.00	1	440.00	40.00	6
<i>Totals</i>	6 active loans						55,720		10,800	720	

### 8.30 Report: Daily Payments Report by Account Officer

This report lists clients who made payments on a specific date, to enable account officers to check whether clients have made payments since the last delinquency report. This report should be produced for each account officer. The report includes the current status of each loan in the right-hand columns.

<i>Daily Payments Report</i>									
Branch office: Gen. Santos		Report no.: 138							
Account officer: S. Olares		Printed: 4/26/98 13:50							
Payments received: 25 April 1998		Prepared by: A. Ensomo							
Account number	Client name	Receipt	Amount paid	Principal	Interest	Penalty	Balance	Amount overdue	Payments overdue
90-00020-7	J. Pata	1254	2,160.00	1,800.00	360.00		36,000.00		
90-00024-5	S. Olares	1298	3,493.60	3,040.00	253.60	200.00	25,360.00	6,000.00	2
90-00048-1	T. Pintac	1422	4,952.00	4,800.00	152.00		15,200.00		
90-00052-9	V. Duterte	1243	3,962.00	3,600.00	182.00	180.00	18,200.00	3,000.00	1
90-00053-5	V. Pelonia	1278	2,592.00	2,200.00	392.00		39,200.00		
90-00077-3	A. Agiam	1420	2,950.00	2,720.00	230.00		23,000.00		
90-00083-8	B. Sigawan	1401	1,436.00	1,320.00	116.00		11,600.00		
90-00092-6	C. Borrez	1287	2,302.00	2,240.00	62.00		6,200.00		
<i>Totals</i>	count: 8		23,847.00	21,720.00	1,747.60	380.00	174,760.00	9,000.00	

8.31 Report: Outstanding Loan Portfolio by Account Officer

This report identifies the number of loans and outstanding loan portfolio per account officer. The user is to be able to generate this report for the entire loan portfolio, microenterprise loans or MABS loans.

<i>Outstanding Loan Portfolio by Account Officer</i>				
Branch office: Gen. Santos			Printed: 8/01/98 13:50	
Information for: 7/31/98			Prepared by: A. Ensomo	
Account Officer	Number of Outstanding Loans	Percentage of Outstanding Loans	Amount of Outstanding Loans	Percentage of Total Amount
E. Pacana	550	15%	13,762,500.00	15%
M. Abellanos	1578	43%	39,452,500.00	43%
C. Avillon	734	20%	18,350,000.00	20%
S. Nabatar	440	12%	11,010,000.00	12%
R. Ratilla	367	10%	9,175,000.00	10%
<i>Total</i>	3,669.00	100%	91,750,000.00	100%

8.32 Report: Summary of New Loans and Deposits for the Period

Prior to running this report the user should be permitted to select between the total loan portfolio, microenterprise loan portfolio and the MABS loan portfolio. The user is also to be permitted to select between all new deposits and those deposits that fall into the microenterprise category (i.e. those deposit accounts opened with P 1,000 and under).

*Summary of New Loans and Deposits for the Period for xx/xx/xxxx - xx/xx/xx*  
 Name of Rural Bank

Report No.: \_\_\_\_\_  
 Print Date: xx/xx/xxxx  
 Prepared by: \_\_\_\_\_

	<u>New Deposits Generated</u>		<u>New Loans Released</u>		
	No.	Amount	No.	Amount	
	(a)	(b)	(c)	(d)	
Male	x,xxx	xxx,xxx.xx	Male	x,xxx	xxx,xxx.xx
Female	x,xxx	xxx,xxx.xx	Female	x,xxx	xxx,xxx.xx
	-----			-----	
Total	x,xxx	xxx,xxx.xx	Total	x,xxx	xxx,xxx.xx
	=====			=====	

Legend:

- (a) Number of new depositors(male & female) generated for the week.
- (b) Amount generated from new depositors.
- (c) Number of loans released to new borrowers (male and female) for the week.
- (d) Amount generated from new loans borrowers.

8.33 Report: Repayment Rate by Business Sector.

In this report the outstanding balance does not include interest.

*Repayment by Business Activity between <start date>  
and <end date>*

Branch office: Gen. Santos  
Information for: 12/31/98

Printed:  
1/08/99 13:50  
Prepared by:  
A. Ensomo

Type	Sub-Type	Total Number of Loans	Summary Total Loan Amount	Outstanding Balance
Agricultural	Banana	3	227,400.00	87,320.00
	Mango	1	26,000.00	14,000.00
	Rice	1	50,000.00	0.00
Commercial	Banana Chipper	5	269,000.00	207,200.00
	Dried Fish	0	0.00	0.00
	Sari Sari Store	2	128,000.00	97,200.00
Industrial	Plumbing supplies	1	86,000.00	65,000.00
	Electric Motor Rewinder	1	140,000.00	130,000.00
Other	Salary	2	186,400.00	24,600.00
Totals		16	1,112,800.00	625,320.00

### 8.34 Report: On-time Repayment Rate

This report identifies the on-time repayment rate (collection performance). The repayment rate is defined as:

$$\text{Repayment Rate (Principal Only)} = \frac{\text{Total Principal Paid}}{\text{Total Principal Due}}$$

A user must be able to run this report for all loans, microenterprise loans and MABS loans depending upon selection of suitable criteria before running this report.

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<i>On-time Repayment Rate</i>	
Branch office: Gen. Santos	Printed: 8/01/98 13:50
Information for: 7/31/98	Prepared by: A. Ensomo
<hr/>	
Total Loan Due (Principal)	1,750,000.00
Total Loans Paid (Principal)	1,640,000.00
On-time Repayment Rate	94%

---

8.35 Report: Loan Cycle and Historical Loan Profile by Account Officer

This report identifies the loan cycle the borrower is in and a summary history of loan repayment over previous loan cycles. The historical loan portfolio by account officer and by client helps determine how a loan portfolio develops and is managed by the account officer. For example, did one account officer establish 100 loans of P 10,000 but none of the clients returned for a second loan, while another account officer established 200 loans of P 5,000 but 150 clients returned for a second loan and 100 clients returned for a third loan.

*Loan Cycle and History of Loan by  
Account Officer*

Branch office: Gen. Santos  
Information for: 7/31/98

Printed: 8/01/98 13:50

Prepared by: A. Ensomo

Account Officer	Customer Name	Loan Number	Loan Amount	Times Past Due
E. Pacana	Dela Cruz, Juan	1 <sup>st</sup>	144,000.00	0
		2 <sup>nd</sup>	180,000.00	
		3 <sup>rd</sup>	300,000.00	
	Robles, Oscar	1 <sup>st</sup>	60,000.00	2
		2 <sup>nd</sup>	85,000.00	
	M. Abellanos	Dela Cruz, Juan	1 <sup>st</sup>	144,000.00
2 <sup>nd</sup>			180,000.00	
3 <sup>rd</sup>			300,000.00	
Robles, Oscar		1 <sup>st</sup>	60,000.00	2
		2 <sup>nd</sup>	85,000.00	

### 8.36 Report: Performance by Account Officer for the Period

This report provides a weekly summary of the performance of each Account Officer. In addition, this report may also be used by those banking institutions that wish to introduce a staff incentive plan. Many of the column headings provide sufficient relevant information upon which each bank can build an incentive scheme best suited to its needs. For example, some banks may choose to measure their Aos based upon Repayment rate, while others may choose to measure the Amount of Repeat Loans Disbursed.

Performance Report by AO for the Period  
Information for: xx/xx/xxxx

Name of Rural Bank Print Date: xx/xx/xxxx

(a) AO Code	(b) # Clients	(c) Loan Balance	(d) # Loans	(e) Total Amount	(f) # New Loans	(g) Amt. New Loans	(h) # Repeat Loans	(i) Amt. Repeat Loans	(j) Portfolio At Risk Amount	(k) Portfolio At Risk Percentage	(l) Payments Expected	(m) Payments Received	(n) Repayment Rate
xxx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx,xxx.xx	xx.x%	xxx,xxx.xx	xxx,xxx.xx	xxx.x%
xxx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx,xxx.xx	xx.x%	xxx,xxx.xx	xxx,xxx.xx	xxx.x%
xxx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx,xxx.xx	xx.x%	xxx,xxx.xx	xxx,xxx.xx	xxx.x%
xxx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx,xxx.xx	xx.x%	xxx,xxx.xx	xxx,xxx.xx	xxx.x%
xxx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx,xxx.xx	xx.x%	xxx,xxx.xx	xxx,xxx.xx	xxx.x%
Total	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx	xxx,xxx.xx	xxx,xxx.xx	xxx.x%	xxx,xxx.xx	xxx,xxx.xx	xxx.x%

#### Legend:

- (a) *AO Code.* Account Officer's Code.
- (b) *# Clients.* Number of Clients monitored by the AO.
- (c) *Loan Balance.* Total outstanding loan balance being monitored by the AO.
- (d) *# Loans.* Total Number of Loans Disbursed for the week.
- (e) *Total Amount.* Total amount of loans disbursed for the week.
- (f) *# New Loans.* Number of new loans disbursed for the week.
- (g) *Amount of New Loans.* Amount of new loans disbursed for the week.
- (h) *# Repeat Loans.* Number of repeat loans for the week.
- (i) *Amt Repeat Loans.* Amount of repeat loans for the week.
- (j) *Portfolio at Risk Amount.*
- (k) *Portfolio at risk percentage.*

(l) *Payment Expected.*

(m) *Payments Received.*

(n) *Repayment Rate.* (Payment Received / Payments Expected X 100)

### 8.37 Report: Loan Portfolio Concentration Report

To diversify risk, management need to regularly monitor the distribution of the portfolio by such criteria as business activity; geographic area, and size of loan. This report shows a standardized format that can be used for such analysis. Distribution is monitored according to both number of loans and share of portfolio, and percentages of totals are calculated for each category.

*Loan Portfolio Concentration  
Report*

Branch office: Gen. Santos

Printed: 01/03/98 13:50

Prepared by: A. Ensomo

As of 31 December 1998

Sector / Sub sector	<u>Loans</u>		<u>Portfolio</u>		<u>Delinquency</u>	
	Number	Percent	Amount	Percent	Amount	Percent
Agricultural	348	16	3,549,600	17	455,200	12.8
Mango	239	11	2,505,600	12	350,800	14.0
Rice	109	5	1,044,000	5	104,400	10.0
Industrial	1,612	74	15,868,800	76	1,545,120	9.7
Textiles	675	31	7,099,200	34	851,920	12.0
Shoes	131	6	1,461,600	7	58,480	4.0
Wood/metal fabrication	392	18	4,176,000	20	459,360	11.0
Food preparation	196	9	1,252,800	6	87,680	7.0
Crafts	131	6	835,200	4	25,040	3.0
Stone cutting	87	4	1,044,000	5	62,640	6.0
Others	218	10	1,461,600	7	60,680	4.2
Salary	218	10	1,461,600	7	60,680	4.2
<i>Totals</i>	4,136	100	20,880,000	100	2,061,000	9.9
Original loan size	<u>Loans</u>		<u>Portfolio</u>		<u>Delinquency</u>	
	Number	Percent	Amount	Percent	Amount	Percent
Less than 5,000	261	12.0	1,044,000	5.0	31,320	3.0
5,001 - 10,000	326	15.0	1,670,400	8.0	100,240	6.0
10,001 - 15,000	435	20.0	2,714,400	13.0	217,160	8.0
15,001 - 20,000	522	24.0	2,088,000	10.0	250,560	12.0
20,001 - 25,000	261	12.0	1,670,400	8.0	167,040	10.0
25,001 - 30,000	218	10.0	4,384,800	21.0	482,320	11.0
More than 30,000	152	7.0	7,308,000	35.0	812,360	11.1
<i>Totals</i>	2,176	100.0	20,880,000	100.0	2,061,000	9.9

### 8.38 Delinquency Management

8.38.1 **Important: Definition of delinquency to be used by the system - The system is to classify loans as delinquent the day following a missed repayment. The system and all reports are to use this definition of delinquency. Under no circumstances is the system to wait until a delinquent loan has passed its past maturity date before identifying the loan as delinquent.**

8.38.2 The system will allow recomputation of the statement of account upon entry of returned cheque payment/reversing entries. These loans will then be classed by the system as delinquent. Under existing BSP rules, loan repayments paid by cheque shall only be applied if cleared. Initially, the cheque value is lodged under Accounts Payable. Loans. After clearing, the sum is reversed and applied to the loan.

8.38.3 If a loan goes past due then the system must provide the option to charge for additional insurance must be added as an Accounts Receivable. The system will need to flag this to ensure extra insurance is charged.

### 8.39 Report: Branch Summary - Amounts Due but Unpaid

This report details summary totals of loan principle, amounts due but unpaid and amounts.

---

*Branch Summary - Amounts Due but Unpaid*  
Branch office: Gen. Santos  
Information for: 12/31/98

Printed: 1/08/99 13:50  
Prepared by: A. Ensomo

Total Principle	Total Amount due but Unpaid	Total Amount Undue
14680000	170800	10496000

8.40 Report: Delinquency Report (MABS Program Report)

xx/xx/xxxx		NAME OF BANK NAME OF BRANCH DELINQUENCY REPORT AS OF xx/xx/xxxx						
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	
ACCOUNT #	CUSTOMER NAME	DATE GRANTED	MATURITY	AMOUNT GRANTED	ACCOUNT BALANCE	TOTAL AMOUNT DUE	REM. INST.	
	due date	inst. due	int. due	penalty due	total due	inst. no	days past due	
	(j)	(k)	(l)	(m)	(n)	(o)	(p)	
Account Officer Name : xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx								
xx-xxxx-xx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	xx/xx/xxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xxx	
	yy/yy/yyyy	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xxx	xxx	
	yy/yy/yyyy	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xxx	xxx	
	yy/yy/yyyy	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xxx	xxx	
xx-xxxx-xx	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	xx/xx/xxxx	xx/xx/xxxx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xxx	
	yy/yy/yyyy	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xxx	xxx	
	yy/yy/yyyy	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xx,xxx.xx	xxx	xxx	
GRAND TOTAL :		xx				xx,xxx.xx		

Legend:

- (a) ACCOUNT #. Account number assigned to the borrower
- (b) CUSTOMER NAME. Name of the borrower
- (c) DATE GRANTED. Date the loan was granted.
- (d) MATURITY DATE. Date the loan will fall mature.
- (e) AMOUNT GRANTED. Amount of loan disbursed/released.
- (f) ACCOUNT BALANCE. Outstanding balance of the loan upon printing.
- (g) TOTAL AMOUNT DUE. Total amount due to borrower as date of printing
- (h) REM. INST. Remaining installment not paid.
- (i) AO CODE. Account Officer Code.
- (j) Due date. Date the amortization was due
- (k) Inst. Due. Principal amortization due
- (l) Int. due. Interest amortization due
- (m) Penalty due. Penalty amount due
- (n) Total due. Total amount due (amortization)

(o) *Inst. No.* Installment number

(p) *Days past due.* Number of days the amortization was past due.

#### 8.41 Report: Delinquent Loans by Branch and Product

This report is used primarily by branch managers to monitor the most seriously overdue loans in their branch. It shows the economic sector, and notes the responsible account officer. The days without payment column is helpful in monitoring the effectiveness of follow-up efforts - a loan may be three payments overdue, but if the client has made a payment recently, the situation is less serious than if no payment has been received for 90 days. The net of savings column calculates the outstanding loan balance less compulsory savings. These savings, blocked from access by the client, serve as collateral for the loan.

*Delinquent Loans by Branch and Product*  
 Branch office: Gen. Santos  
 Product: Working capital loans  
 As of 31 December 1998

Printed: 1/08/99 13:50  
 Prepared by: A. Ensomo

Account number	Customer name	Home Phone number	Loan officer	Disbursement		Loan balance	Arrears		Payment in arrears	Days without payment	Net of savings
				Amount	Date		Principal	Interest			
90-00020-5	C. Bourez	715-4532	11	14,400	11/30/96	12,520	3,200	340.00	3.5	242	3,280
90-00024-5	B. Sigawan	345-4435	12	10,800	12/13/96	9,400	1,640	200.00	3	6	8,680
90-00048-5	A. Agiam	715-4532	12	21,600	1/5/97	11,200	2,840	216.00	2.7	24	10,280
90-00033-5	Y. Heinani	345-4435	14	9,200	12/13/96	7,600	2,400	140.00	2.2	6	5,200
90-00024-5	W. Navarro	715-4532	11	7,200	11/30/96	5,600	840	120.00	1.5	27	1,600
90-00027-5	V. Pelonia	345-4435	12	10,800	12/13/96	9,400	920	120.00	1	6	8,600
<i>Totals</i> Clients overdue: 6						55,720	11,840	1,116.00			37,640

#### 8.42 Report : Weekly, Quincena and Monthly Repayment Account Aging

Three separate reports required to show repayment/account aging risk over weekly, two-weekly and monthly loans. This will enable the bank to determine the overall portfolio at risk.

i) The user selects either a weekly, two-weekly, or monthly repayment aging report.

Report output for weekly repayment period:

*Account Aging for weekly repayment period*

Branch office: Gen. Santos

Information for: 12/31/98

Printed: 1/08/99

13:50

Prepared by: A.

Ensomo

Loan Number	1 - 7 days	8 - 14 days	15 - 21 days	22 - 28 days	Over 28 days	Total
13214	1126.6	1126.6	1126.6	-	-	3379.8
14212	529	-	-	-	-	529
15161	68.05	685	-	-	-	1370
Totals	2340.6	1811.6	1126.6	-	-	5278.8

Report output for two-weekly repayment period:

*Account Aging for two-weekly repayment period*

Branch office: Gen. Santos

Information for: 12/31/98

Printed: 1/08/99

13:50

Prepared by: A.

Ensomo

Loan Number	1 - 14 days	15 - 28 days	29 - 42 days	Over 42 days	Total
16121	1928.6	1928.6	-	-	3857.2
16892	1520.6	1520.6	1520.6	-	4561.8
15161	1173	11730	-	-	2346
Totals	4622.2	4622.2	1520.6	-	10765

Report output for monthly repayment period:

*Account Aging for monthly repayment period*

Branch office: Gen. Santos

Information for: 12/31/98

Printed: 1/08/99

13:50

Prepared by: A.

Ensomo

Loan Number	1 - 30 days	31 - 60 days	61 - 90 days	Total
16121	4526.2	-	-	4526.2
16892	7026.2	7026.2	7026.2	21078.6

15161	3568.2	3568.2	-	7136.4
Totals	15120.6	10594.4	7026.2	32741.2

#### 8.43 Penalty Calculations

8.43.1 The system is allow penalties to be applied to loans classed as delinquent. The system is to allow a variety of methods for calculating penalties. These methods should include:

- a) fixed amount per day
- b) percentage charged on overdue principal
- c) percentage charged on outstanding loan balance

8.43.2 The system is to allow different penalties to be calculated for differing penalties for differing products. For example, the penalty may be 2.5% of the unpaid amortization per month for group lending, whereas the bank may choose to impose a penalty of 3% per month for individual loans.

8.43.3 The system will include an override to allow a penalty to be written-off at the banks discretion. The system is to require a senior user to authorize this write-off and details are to be logged in the audit trail.

#### 8.44 Report : Total penalty charges collected

i) The user enters a report date.

ii) Report output:

<i>Penalty Interest Revenue as at &lt;entered date&gt;</i>		Printed: 1/08/99
Branch office: Gen. Santos		13:50
Information for: 12/31/98		Prepared by: A. Ensomo
Loan Number	Penalty Interest	
14678	328	
17921	1239.4	
Total Penalty Interest	1567.4	

#### 8.45 Early Repayment

8.45.1 The system must be able to recalculate the interest amount to facilitate an early loan repayment rebate.

8.45.2 The system must have a 'loan repaid early' adjustment flag to ensure that loan and repayment ledgers balance.

#### 8.46 Loan Repayment and Loan History

8.46.1 The system will automatically close the loan subsidiary ledger upon full repayment of a loan.

8.46.2 The system is to maintain a record of a borrowers historical loan record, its rates, renewals and extensions, and account officer.

#### 8.47 Restructuring and Write-off Procedures

8.47.1 The system is to allow a loan to be restructured. A restructured loan will effectively become a new loan and must be able to incur the usual charges and fees associated with a loan. This will allow all outstanding penalties and interest to be capitalized into the new loan principal balance, or written off as the bank sees fit.

8.47.2 The system must allow a senior authorized user to write-off a loan. An audit trail is to be kept of this.

8.47.3 The system is to continue to track written-off loans in an off-balance sheet account. In order for the bank to collect in the future a nominal balance of one Peso must be retained in the loan ledger as proof of obligation.

8.47.4 With existing loans (already disbursed), the system should possess the ability to reschedule loans using the same loan parameters as any other loan, namely, loan amount, interest rate, number of payment periods, and type of payment period, and first installment date.

#### 8.48 Report: Loan Write-off and Recuperation Report

In terms of write off, the system should be able to produce a detailed report of the loan amount written off.

The loan write-off report itemizes loans written off at a specific point in time - typically at the end of the month or quarter. This report contains the account number, client name, days in arrears, principal, interest, and penalty balances written off.

In a separate section the report should show payments received during the period on loans previously written off.

*Loan Write-off and Recuperation Report*  
 Branch office: Gen. Santos

Printed: 4/03/98 13:50  
 Prepared by: A. Ensomo

For the month of March 1998

Account number	Client	Disbursement		Principal	Balances		Days in arrears	Date written off
		Date	Amount		Interest	Penalty		
71-20334-5	Pata	3/5/97	11,400	7,000	1,920	840	120	3/31/98
71-20452-3	Asi	5/10/97	9,200	7,600	1,680	760	144	3/31/98
71-20501-6	Tejada	5/22/97	7,600	3,200	840	560	138	3/31/98
71-20503-8	Casas	6/12/97	14,000	12,800	2,680	1,360	149	3/31/98
<i>Totals</i>	4 loans		42,200	30,600	7,120	3,520		

*Collections on previous loan write-offs*

Account number	Client	Write-off date	Amount written off	Payment amount	Payment date	Receipt
71-20452-3	Alsola	1/10/98	11,400	4,000	3/10/98	100456
71-49348-8	Duterte	10/15/97	6,000	2,200	3/14/98	100823
<i>Totals</i>	2 payments			6,200		

8.49 Report: Total Doubtful and Written-off Accounts

This report identifies the total doubtful / written-off interest and principal. Banko Sentral ng Pilipinas (BSP) has recently issued a memorandum for full provisioning of outstanding loans with 3 or more repayments overdue.

*Total Doubtful and Written-off Accounts*  
 Branch office: Gen. Santos  
 Information for: 7/31/98

Printed: 01/08/98  
 13:50  
 Prepared by: A. Ensomo

	Principal	Interest
Total Doubtful Accounts (In excess of 3 missed due repayments)	4,587,500.00	99,395.83 5%
Total Written-off Accounts	71,565,000.00	19,879.16 1%

## 8.50 Report: Loan Loss Rate (MABS Program Report)

This is the loss due to uncollectible loans with a specific period. The formula is:

$$\text{Loan Loss Rate} = \frac{\text{Total Written-off Account}}{\text{Total Loan Portfolio}}$$

The user is to be able to select the loan loss rate for either the total loan portfolio, microenterprise loan portfolio or MABS loan portfolio.

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<i>Loan Loss Rate for &lt;loan portfolio selected&gt;</i>	Printed : 8/01/98 13:50
Branch office: Gen. Santos	Prepared by: A. Ensomo
<i>&lt;start date&gt; - &lt;end date&gt;</i>	

---

Total Loan Portfolio	11,750,000.00
Total Written-off Loans	549,000.00
Loan Loss Rate	4.6%

---

## 8.51 Credit Line

8.51.1 The system is to allow credit-line extension.

8.51.2 The credit line will allow disbursements at any point as long as the approved amount is not exceeded. The credit line is only to be available to a client that possesses either a savings, or current account.

8.51.3 The system is to record the type of credit line that is to be made available to a client. The possible types are promissory notes, bills purchased (un-cashed cheques), or straight overdraft.

8.51.4 The system will allow the client to withdraw any amount up to the agreed credit line limit.

8.51.5 Interest will be charged only on the amount of the credit line used.

8.51.6 The interest will be calculated based upon outstanding balance across the month and bill for the interest on a monthly basis.

8.51.7 A repayment is treated the same way as an individual loan.

8.51.8 If the client pays less than the full interest per month, the system is to charge a penalty (flat fee, or percentage of missed payment), interest due and principal on the next payment.

8.51.9 The system is to allow the bank to credit the amount of the credit line to the clients account. The client can then withdraw the money by cheque, or in cash.

8.51.10 The system is to allow the bank to place a hold on a sum held by the client in a saving or current account.

8.51.11 The system will allow lines of credit to be extended. Typically a 30-day extension is provided pending the approval of a new credit line.



8.53 Report: New Microenterprise Loans by Type of Loan Product (MABS Program Report)

This report identifies the number and amount of new microenterprise loans made by type of loan product.

*New Microenterprise Loans by Type of Loan Product*

Branch office: Gen. Santos  
Information for: 7/31/98

Printed: 8/01/98 13:50

Prepared by: A. Ensomo

Loan Product	No. of Borrowers	Percentage of Borrowers (a)	Amount (b)	Percentage of Total (c)
Product 1	550	15%	13,762,500.00	15%
Product 2	1578	43%	39,452,500.00	43%
Product 3	734	20%	18,350,000.00	20%
Product 4	440	12%	11,010,000.00	12%
Product 5	367	10%	9,175,000.00	10%
<i>Total</i>	3669	100%	91,750,000.00	100%

Legend:

(a) % of Borrowers. Percentage of total number of borrowers

(b) Amount. Total amount of loans under this term.

(c) % to Total. Percentage of total amount

8.54 Report: Loan Profile by Gender (MABS Program Report)

xx/xx/xxxx

Name of Bank  
Branch Name  
LOANS PROFILE BY GENDER  
xx/xx/xxxx - xx/xx/xxxx

Page : x

Gender (a)	No. of Borrowers (b)	% of Total (c)	Amount (d)	% of Total (e)
Male	x,xxx	xx.xx%	xx,xxx,xxx.xx	xx.xx%
Female	x,xxx	xx.xx%	xx,xxx,xxx.xx	xx.xx%
TOTAL	x,xxx	xx.xx%	xx,xxx,xxx.xx	xx.xx%

Legend:

- (a) Gender. Gender (Male or Female)
- (b) No. of Borrowers. Number of accounts
- (c) % of Total. Percentage against total number of borrowers
- (d) Amount. Total amount of loans under this term.
- (e) % to Total. Percentage against total amount

8.55 Report: Loan Profile by Age

xx/xx/xxxx

Name of Bank  
Branch Name  
LOANS PROFILE BY AGE  
xx/xx/xxxx - xx/xx/xxxx

Page : x

Age (a)	No. of Borrowers (b)	% of Total (c)	Amount (d)	% of Total (e)
18 - 25	xxx	xx%	xx,xxx,xxx.xx	xx.xx%
26 - 35	xxx	xx%	xx,xxx,xxx.xx	xx.xx%
36 - 45	xxx	xx%	xx,xxx,xxx.xx	xx.xx%
46 - 55	xxx	xx%	xx,xxx,xxx.xx	xx.xx%
56 & Over	xxx	xx%	xx,xxx,xxx.xx	xx.xx%
No info	xxx	xx%	xx,xxx,xxx.xx	xx.xx%
TOTAL	x,xxx	xx%	xx,xxx,xxx.xx	xx.xx%

Legend:

- (a) *Age*. Age of the borrower.
- (b) *No. of Borrowers*. Number of account.
- (c) *% of Total*. Percentage against total number of borrowers.
- (d) *Amount*. Total amount of loans under this term.
- (e) *% to Total*. Percentage against total amount.

### 8.56 Report: Loan Profile by Economic Activity (MABS Program Report)

This report identifies and groups loans by the BSP's five standard categories of economic activity.

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<i>Loan Profile by Economic Activity</i>			Printed: 8/01/97 13:50
Branch office: Gen. Santos			Prepared by: A. Ensomo
Information for: 7/31/97			

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Economic Activity	No. of Borrowers		Amount	
Agriculture	550	15%	13,762,500.00	15%
Commercial	1,578	43%	39,452,500.00	43%
Industrial	734	20%	18,350,000.00	20%
Others	807	22%	20,185,000.00	22%
<i>Total</i>	3,670	100%	91,750,000.00	100%

---

## 8.57 Report: Listing of Loans by Purpose

Listing of Loans by Purpose  
 Branch office: Butuan Branch  
 Information for: 12/31/98

Printed: 01/08/99 13:50  
 Prepared by: A. Ensomo

Loan Type -	Account number	Customer name	Date opened	Date maturity	Amount granted	Account balance
<b>Agricultural - Coconut</b>						
	012030-001	Crisostomo, Pedro	6/16/98	12/13/98	17,500.00	17,500.00
	010029-001	Rivero, Joy	6/13/98	06/13/1999	50,000.00	50,000.00
		NO. OF ACCTS: 2			SUBTOTAL:	67,500.00
<b>Agricultural - Rice</b>						
	222679-002	Seneres, Elsie	6/18/97	12/18/98	65,000.00	13,962.93
	228321-001	Abrasaldo, Iane	12/3/97	12/3/99	80,000.00	71,889.56
	020014-002	Panal, Restie	12/13/96	12/13/98	100,000.00	29,102.76
		NO. OF ACCTS: 3			SUBTOTAL:	114,955.25
<b>Industrial</b>						
	014326-002	Betonio, Eugenio	3/17/98	3/17/99	20,000.00	15,000.00
		NO. OF ACCTS: 1			SUBTOTAL:	15,000.00
<b>Other - Jewelry</b>						
	019090-005	Gomez, Mamerta G	12/11/97	6/12/99	50,000.00	50,000.00
	031291-001	Zafra, Samuel	5/27/97	5/27/00	300,000.00	220,889.50
		NO. OF ACCTS: 2			SUBTOTAL:	270,889.50
<b>Other - Salary</b>						
	001541-001	Daquio, Anecita D.	4/27/98	4/27/99	15,000.00	15,000.00
	004354-004	Devilleres, Celestina	03/18/1998	3/18/99	20,000.00	20,000.00
	001236-002	Linaza, Lucia	12/3/97	12/3/98	50,000.00	50,000.00
	001038-001	Presente, Adelfa	1/29/98	01/29/1999	20,000.00	15,900.00
	001037-001	Pungay, Fulgencio	2/6/98	02/06/1999	25,000.00	25,000.00
		NO. OF ACCTS: 5			SUBTOTAL:	125,900.00
		TOTAL NO. OF ACCTS: 13			GRAND TOTAL:	3,984,719.92

## 8.58 Report: Listing of UIDs

*Listing of UIDs, Interest to be transferred to income since previous working day*

Printed: 01/08'99 13:50

Branch office: Davao Branch

Prepared by: A. Ensomo

Information for: 07/31/98

Account number / Type - sub type	Customer name / Address	Granted / Due date	Balance / UID balance	Interest transfer
161030-001	Cadelli A, Romeo	6/16/98	17,500.00	11.18
Agriculture - Coconut	Andrea Homes Subd. New Visayas,P	12/13/98	1,598.82	
001029-005	Lim, Gregorio	6/13/98	50,000.00	31.94
Agriculture - Coconut	Tadeco,A.O. Floirendo Panabo,Dav	6/13/99	10,381.94	
001227-003	Santander, Jovita	05/04/1998	32,000.00	20.44
Agriculture - Coconut	6769 Arguelles St. San Francisco	10/31/98	2,044.44	
	SUB-TOTAL : 3		99,500.00	63.57
			14,025.21	
002241-005	contestable, Norma	9/22/97	7,000.00	11.25
Agriculture - Hog	Lozada Subd. Panabo,Davao	09/22/1998	686.25	
	SUB-TOTAL : 1		7,000.00	11.25
			686.25	
004698-002	Daquio, Anecita	04/27/1998	15,000.00	10.42
Agriculture - Mango	Manay,Panabo Davao del Norte	4/27/99	2,895.83	
007638-001	Presente, Adelfa	1/29/98	15,900.00	16.11
Agriculture - Mango	New Malitbog, Panbo,Davao	1/29/99	3,061.11	

	SUB-TOTAL .:	2		30,900.00	26.53
				5,956.94	
926399-007	Asumbrado, Paulino		07/15/1998	40,000.00	25.56
Other - Salary	Kasilak, Panabo Davao del Norte		07/15/1999	9,123.34	
636097-001	Namuag, Eduardo		6/29/98	26,000.00	16.61
Other - Salary	Cabili, Panabo Davao del Norte		06/29/1999	5,664.39	
	SUB-TOTAL :	2		66,000.00	42.17
				14,787.73	
	GRAND TOTAL :	8		1,396,098.0	978.07
				0	
				224,049.49	

#### 8.59 Report: Loans Interest Rate & Maturity Matching

*Loans Interest Rate & Maturity Matching as of 11/30/98*

Branch office: Davao Branch

Printed: 8/01/99 13:50

Information for: 11/30/98

Prepared by: A. Ensomo

	On demand	1-7 days	8-30 days	31-90 days
0.01 - 4.00%	0	0	0	0
4.01 - 6.00%	0	0	0	0
6.01 - 10.00%	0	0	0	0
10.01 - 15.00%	0	0	0	0
15.01 - 20.00%	0	0	0	0
20.01 - 25.00%	0	0	0	0
Over 25.00%	0	0	0	1470837.74

	91 days-1yr	>1yr-2 yrs	Over 2 yrs
0.01 - 4.00%	0	0	0
4.01 - 6.00%	0	0	0
6.01 - 10.00%	0	0	0
10.01 - 15.00%	0	0	0
15.01 - 20.00%	10,687.00	1,996.00	0

20.01 - 25.00%	0.00	0.00	0
Over 25.00%	1,383,953.51	145,941.50	0

---

#### 8.60 Report: Total Interest Collected (MABS Program Report)

This report identifies the total loan portfolio, loans collected and total interest collected expressed both as a monetary value and a percentage.

The user will select whether the report will provide details on the total loan portfolio, the microenterprise loan portfolio or MABS loan portfolio.

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*Total Interest Collected for <selected loan portfolio>*

Branch office: Gen. Santos  
Information for: 7/31/98

Printed: 8/01/98 13:50

Prepared by: A. Ensomo

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Total Loan Portfolio	91,750,000.00
Total Loans Collected	71,565,000.00
Total Interest Collected	1,550,575.00
% Interest Collected	78%

---

8.62 Report: Portfolio at Risk

8.62.1 For loans with monthly payments or one balloon payment at maturity

	Number Clients	% Clients	Outstanding Loan Balance (Principal only)	% Amount
Current	x,xxx	xx.x%	x,xxx,xxx.xx	xx.xx%
1 - 30 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.xx%
30 - 60 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.xx%
61 - 90 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.xx%
91 - 180 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.xx%
181 - 360 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.xx%
Over 360 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.xx%
<b>Total</b>	<b>x,xxx</b>	<b>xxx%</b>	<b>x,xxx,xxx.xx</b>	<b>xxx%</b>

8.62.2 For loans with bi-weekly payments

	Number Clients	% Clients	Outstanding Loan Balance (Principal only)	% Amount
Current	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
1 - 15 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
16 - 30 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
31 - 45 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
46 - 60 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
61 - 75 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
Over 75 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
<b>Total</b>	<b>x,xxx</b>	<b>xxx%</b>	<b>x,xxx,xxx.xx</b>	<b>xxx%</b>

8.62.3 For loans with weekly payments

	Number Clients	% Clients	Outstanding Loan Balance (Principal only)	% Amount
Current	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
1 - 7 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
8 - 14 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
15 - 21 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
22 - 28 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
29 - 35 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
Over 35 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
<b>Total</b>	<b>x,xxx</b>	<b>xxx%</b>	<b>x,xxx,xxx.xx</b>	<b>xxx%</b>

8.62.4 For loans with daily payments

	Number Clients	% Clients	Outstanding Loan Balance (Principal only)	% Amount
Current	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
1 Day	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
1 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
3 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
4 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
5 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
Over 5 Days	x,xxx	xx.x%	x,xxx,xxx.xx	xx.x%
<b>Total</b>	<b>x,xxx</b>	<b>xx.x%</b>	<b>x,xxx,xxx.xx</b>	<b>xx.x%</b>

The percentage reserve requirement should be adjustable by the user for all categories.

The user should be able to summarize client accounts by sector (agriculture, commercial, industrial, other) and/or by frequency of payments (monthly, biweekly, weekly, daily).

Payment amounts are not taken into account at all in this report (unless it is a single payment loan) - However, it is important that outstanding principal balances of the loans that have missed one or more payments are identified by the report. See the examples below:

### 8.62.5 Case

Initial Loan Amount: 10,000

Type: Commercial-MABS

Interest Rate: 2% Flat per month

Loan Term: 4 Months

Frequency of Payments: Monthly

Installments: 4 equal monthly installments of 2,700 (2,500 principal + 200 interest)

Disbursement Date: 12/1/98

Payment Dates: 1/1/99, 2/1/99, 3/1/99, 4/1/99

#### Example 1:

Situation: Current date is 2/5/99 and first two payments of 2,700 (5,400 total) were missed. The report is to show that the oldest payment past due is overdue by 35 days (January 1 - February 5). The principal balance still owed of 10,000 is included in the monthly portfolio at risk report in the 31 - 60 day category.

#### Example 2:

Situation: Current date is 2/5/99. First payment was made on time. Second payment (2,700) has not been made yet.

The report is to show that the oldest payment past due is overdue by 5 days (February 1 - February 5). The principal balance still owed of 7,500 is included in the monthly portfolio at risk report in the 0 - 30 day category.

### 8.63 Additional Reports Required

The system must be able to generate the following additional reports:

8.63.1 Number of repeat loans within a period specified by the user.

8.63.2 Numbers of loans sorted by loan term within a period specified by the user.

8.63.3 Number of loans sorted by loan size within a period specified by the user.

8.63.4 Total of interest collected from microenterprise program

8.63.5 Number and amount of new microenterprise loans made by type of account (initial loan size of P25,000 or under, second loan any size).

8.63.6 On-time repayment rate

8.63.7 Reserve Report - The system is to produce a report detailing the total amount of current, savings and time deposits on a daily basis. This report will allow the bank to comply with the 3 percent reserve requirement on savings and time deposits of rural banks (BSP Circular, May 29, 1998).

8.63.8 The system is to produce all reports regarded as mandatory by the BSP as at the date of April 24<sup>th</sup> 1999.

## 9. Group Lending Functionality

### 9.1 Grameen/CARD Group (Mutual Guarantee) Lending Model

9.1.1 The system is to support both the Grameen Bank and Center for Agriculture and Rural Development (CARD), group lending methodologies. The Grameen Bank is a specialized financial institution in Bangladesh that was established in 1983 to provide credit to the rural poor for the improvement of their living conditions. The aim of the Grameen lending model is to provide non-collateralized loans to non-bankable, but viable projects. CARD is a Filipino derivation of the Grameen lending model that was pilot-tested in four villages in San Pablo City in 1989. The results of this pilot encouraged CARD to launch a full-scale Grameen Bank replication program in 1990 and the model has subsequently been adopted by other Filipino rural banks. Currently, loans are being made to enterprises involved in trading agricultural produce, hog-raising, retail stores, fishing, fish-drying and trading, and food vending. It is the medium-term goal of the MABS-M program to support the introduction of group lending to rural banks in Mindanao.

### 9.2 Features of these Methodologies

9.2.1 Borrowers are organized into small groups of around 5 like-minded persons. A loan is made to an individual borrower of the group, rather than to the group as a whole. While no collateral is required for a loan, the members of the group share joint liability for repayment if any of the group members default. Peer pressure, regular monitoring and the imposition of joint liability are used to ensure proper utilization of the credit, serving as a substitute for the collateral taken in normal credit programs. Typically, the disbursement schedule is staggered. For example, two of the five members may initially receive a loan followed by another two members in a month and the last borrower in another month.

9.2.2 Initial loans are given in small sizes with progressively higher amounts for repeat loans as the lender and borrower gain confidence in utilizing the previous loan. The group is required to establish a collective fund with compulsory weekly savings of the members. Savings linked to credit is a key element of the lending model as it provides a clear incentive for the program participants to develop the savings habit, since under the program, it is the only way they can gain access to credit. The group is either managed directly by an account officer, or the group is organized with several other groups into a 'Center' that is managed by an account officer. In all other respects, repayments are handled by the system in the same way as collateralized loans.

### 9.3 Implications for System Functionality

To enable the effective management of such a loan model, the system is to be able to:

9.3.1 Record the details of the individual members of a group and record the same details as borrowers of collateralized loans.

9.3.2 The system will be able to assign/remove the individual members to/from a group.

9.3.3 Individuals in the groups are to be allowed to utilize any of the usual loan products that the bank wishes to make available to them.

9.3.4 Repayment schedules are to be generated for each individual borrower. The reason for this is that repayment schedules frequently differ between members based on the loan value. For example, it is possible for borrower A to have a loan for P 10,000 and borrower B to have a loan for P 7,000 and accordingly their respective loan repayments will reflect the different loan amounts.

9.3.5 The system will record the loans made to individual members of the group and at the group level, record the overall value of the loans to the group.

9.3.6 Although, repayments are collected from the group on a weekly basis, repayments are to be credited to the individual's loan account.

9.3.7 The system will be required to monitor weekly saving of individual members of the group and report missed savings by individual and group on an exception basis.

9.3.8 In cases where a single group savings account is mandated by the bank, the system is to be able to link each of the individual borrowers loan accounts to the group savings account.

9.3.9 The system is to allow interest on savings is to be paid in the usual manner of other savings accounts.

9.3.10 The system is to identify overdue repayments by individual borrower of the group, and also show the group that the individual belongs to.

9.3.11 The system is to be able to report which loan cycle the group is in. This is important to assist account officer establish appropriate loan value increases, or other decisions.

#### 9.4 Reporting Group Loans

9.4.1 The following reports share many similarities with reports for regular, collateral-based loans, however, these reports relate specifically to group loans. The motivation behind this separation of group from collateral-based loans is to reflect the requirement of many rural banks to maintain tight operational control over group lending.

#### 9.5 Report: Group Membership Report

This report details the membership and payment history of lending groups.

Group number	Group name	Client number	Client name	Gender M/F	Loan number	Loan amount	Disbursement date	Balance	Arrear s
103	Derecho	23114	F. Siongco	M	71-23004-6	60,000.00	3-Feb-98	28,000.00	0.0
		23115	G. Sumalinog	M	71-23220-5	60,000.00	4-Mar-98	31,200.00	0.0
		23116	H. Basilio	M	71-23221-4	50,000.00	4-Mar-98	31,200.00	0.0
		23117	I. Gabrido	M	71-23340-9	70,000.00	1-Apr-98	36,400.00	0.0
<i>Totals</i>			4 members	count: 4/0		240,000.00		126,800.00	
104	Barangay '99ers	25611	J. Galvez	F	71-23004-6	8,800.00	3-Feb-98	6,000.00	0.0
		25612	N. Alsola	F	71-23220-5	10,000.00	4-Mar-98	6,400.00	0.0
		25613	Q. Signer	F	71-23221-4	10,000.00	4-Mar-98	6,400.00	0.0
		25614	J. Pata	F	71-23340-9	12,000.00	1-Apr-98	8,400.00	1.0
<i>Totals</i>			4 members	count: 0/4		40,800		27,200.00	

## 9.6 Additional Reports

The following reports will be required:

9.6.1 *Number of Active Groups* Refers to the number of groups (composed of 5 members) organized and functioning during the reporting period.

9.6.2 *Total Active Members* Total number of individuals with active membership within the program during the reporting period. This includes the number of members currently borrowing as well as the number of members currently saving but not borrowing (either because they are waiting for their loans to be released or they decided to temporarily stop obtaining loans). This indicator should therefore account for all individuals with funds currently deposited with the program.

9.6.3 *Total Active Borrowers Divided into groups and individuals.* This indicator includes total number of members with outstanding loans, members waiting for their loans to be released and members who have not borrowed for not more than one year. There is a need for a different group base from regular loans.

9.6.4 *Number of Members with Loans* This indicator includes total number of members with

outstanding loans only.

9.6.5 *Number of Loans Disbursed* The total number of loans disbursed to members during the reporting period.

9.6.6 *Total Amount of Loans Disbursed* The total value of loans disbursed to individual members during the reporting period. This figure reflects only the value of loan principal disbursed to clients excluding interest, service charges, penalties and other fees. It is broken down by loan product.

9.6.7 *Average Loan Amount Disbursed* The average value of loans disbursed to individual members, categorized by loan product, during the current reporting period.

Method of calculation:

$$\frac{\text{Total amount of loans}}{\text{Number of loans disbursed}}$$

Example: Average loan amount disbursed

During the current reporting period, 10 group members received their loan. The total amount of the loan received was P20,000.00. The average loan amount per group member during the period is thus P2000.00.

9.6.8 *Total Number of Loans Outstanding* Number of loans with payments owed to rural bank by group members at a point in time. This figure should also include number of loans owed that are considered delinquent, but should not include number of loans determined non-recoverable. Loans that have been repaid in full as of the end of the reporting period are not included in this indicator.

Method of calculation:

$$\begin{aligned} &\text{Number of loans with repayments owed to rural bank at a future date} \\ &\quad + \\ &\text{Number of loans with payments past due but under 90 days} \\ &= \text{Number of loans outstanding} \end{aligned}$$

9.6.9 *Total Amount of Loans Outstanding* Also called loan portfolio. Loans outstanding refers to current principal value of loans owed to the rural bank by members at a point in time, in this case, at the end of the month. This figure should also include value of loans determined non-recoverable. Loans that have been repaid in full as of the end of the reporting period are not included in this indicator. Broken down by loan product.

Method of calculation:

$$\begin{array}{r} \text{Amount of loans with repayments owed to rural bank at a future date} \\ + \\ \text{Amount of loans with payments past due but under 90 days} \\ = \quad \text{Total amount of loans outstanding} \end{array}$$

9.6.10 *Average Amount of Loans Outstanding* This indicator refers to the average amount of loans with payments owed to rural bank including loans with payments past due but considered recoverable.

Method of calculation:

$$\frac{\text{Total amount of loans outstanding}}{\text{Number of loans outstanding}}$$

9.6.11 *Number of Dropouts* This indicator reports the number of participants who resigned from the program for whatever purpose.

9.6.12 *Total Active Savers* This indicator includes the number of individuals who maintains compulsory and voluntary savings balance with the rural bank (members) and those who maintain only voluntary savings balance (non-members).

9.6.13 *Total Amount of Savings* This refers to the total amount of savings balance maintained with the rural bank by members and non-members.

9.6.14 *Total Amount Paid* Indicates the principal and interest payments received for the month.

9.6.15 *Total Amount Due* Indicates the principal and interest payments which should be paid for the month including past due accounts, plus payments due on past due accounts.

9.6.16 *Repayment Rate* Measures the amount of principal and interest payments received with respect to the amount due. The amount due must include payments due during the period as well as payments that are past due.

Method of calculation:

$$\frac{\text{Total Amount Paid during the Period}}{\text{Total Amount Due during the Period} + \text{Total Payments Past Due}} \times 100$$

9.6.17 *Past Due Amount* Payments are considered past due if they are one or more days past scheduled payment date. For the purpose of calculation, past due payments include those that were due before this period, have not been paid, and have not yet been determined non-recoverable.

Example: A borrower obtained a P10,000 loan payable in 50 weeks. The borrower failed to pay the 25<sup>th</sup> amortization. Thus the past due amount is P240.

9.6.18 *Total Balance of Loans with Past Due* The total amount of outstanding loans with one or more payments past due.

Example: A borrower obtains P10,000 loan payable in 50 weeks. The borrower missed the 25<sup>th</sup> payment and based on the schedule of amortization, the total balance of the loan with past due is P6,240.

9.6.19 *Portfolio at Risk* Measures value of outstanding loans with one or more payments past due as a percentage of the total value of loan outstanding. Payments should be considered past due if they are one or more days past scheduled payment date. This indicator is more sensitive to the risk of a delinquency problem because it considers the total value of loans outstanding with one or more payments past due and not just amount overdue. It illustrates the percentage of the portfolio that is affected or contaminated by late payments.

Method of calculation:

$$\frac{\text{Total Balance of Loans Outstanding with One or More Payments Past Due}}{\text{Total Amount of Loans Outstanding at end of Period}} \times 100$$

Example: Portfolio at risk

Using the previous example, we can calculate the portfolio at risk thus. There was one client with two payments (P240/payment) past due. The amount of outstanding loans owed by the borrower to the rural bank was P620, while the total amount outstanding was P200,000. This sum ordinarily is larger than the value of payments used in the calculation of the arrears rate because it accounts for the total principal value of loans, not just the amount of payments that is due to be paid.

Given: Total Balance of Loans with Past Due: P6,240  
Total amount of Loans Outstanding at the end of the Period: P200,000

Calculation:  $(6240/200,000) \times 100$

Portfolio at risk: 0.31%

9.6.20 *Arrears/Delinquency Rate* Measures amount of payments past due as a percentage of the total value of loans outstanding. Payments are considered past due if they are not paid to the account officer on the scheduled payment date. This indicator is also often referred to as the delinquency rate; it gives an indication of the risk that a loan will not be repaid.

Method of calculation:

$$\frac{\text{Amount of Payments Past Due}}{\text{Total Amount of Loans Outstanding at end of Period}} \times 100$$

Example: Arrears rate

A borrower was absent from the meeting with the account officer in the morning of the last week of the month. In the afternoon, the member went to the bank and attempted to pay the weekly due (P240). It was not accepted as amortization, but as a special deposit instead. The purpose of this is to enforce payment discipline among borrowers. Hence, at the end of the monthly reporting period, the amount of payment past due was P240. The total amount of loans outstanding was P200,000 at the end of the reporting period.

Calculation:  $(240/200,000) \times 100$   
 Arrears Rate: 0.12%

9.6.21 *Loan Loss Rate* Measures value of non-recoverable loans as a percentage of average value of loans outstanding during the reporting period. A bank will have its own policy stating at what point in time a loan is determined non-recoverable and is "written-off". It is important to note the value of non-recoverable loans is measured in respect to average value of loans outstanding during the period and not the value of loans outstanding at the end of the period to account for fluctuations in the portfolio during that time.

Method of calculation:

$$\frac{\text{Amount Written-Off in Period}}{\text{Average Value of Loans Outstanding during Period}^*} \times 100$$

\* Ave. loans outstanding = (value of loans outstanding beginning of period + value loans outstanding end of period) / 2

Example: Loan loss rate

Given the case that P5,000 is considered non-recoverable. The total amount of loans outstanding at the end of the period is P200,000. The value of the loans outstanding at the beginning of the period was P224,000. Therefore, the average value of loans outstanding during the period is P212,000.

Calculation: Average loan outstanding:  $(200,000/224,000) \cdot 2$   
 $= P212,000$   
 Loan loss rate:  $= (5,000/212,000) \times 100$   
 $= 2.36\%$

## 10. Formulae Library

10.1 The purpose of this section is to detail the types of loan formulae that the system is to accommodate within the Formulae Library. This library will provide a repository for frequently used formulae that users can select when creating financial products through the Financial Product Design (FPD) module. The system is to allow the user to add formulae to the library as necessary without the need for programmer intervention. The FPD module is to be used to create new deposit and savings products.

The system is to make provision for the following formulae:

### 10.2 Straight Line Quarterly Repayments

Example:                      Principal Amount:                      P100,000  
   Interest Rate       :                      23% per annum  
   Payment every     :                      90 days or Quarterly  
   Loan Term         :                      One year of 360 days

#### Quarterly interest

Annual Interest = Principal Amount x Interest Rate x Loan Term in days

$$P\ 23,000 = P100,000 \times 23/100 \times 360/360$$

Quarterly Interest = Principal Amount x Interest Rate x Loan Term in days

$$P\ 5,750 = P100,000 \times 23/100 \times 90/360$$

#### Amortization Schedule

Quarter	Principal	Interest	Amortization	Principal Balance at End of Quarter
1	25,000	5,750	30,750	75,000
2	25,000	5,750	30,750	50,000
3	25,000	5,750	30,750	25,000
4	25,000	5,750	30,750	-
Total	100,000	23,000	123,000	

### 10.3 Declining Balance Bi-Annual Repayment

Example:	Principal Amount:	P200,000
	Interest Rate	25% per annum
	Payment every	180 days
	Loan Term	Two years of 360 days per year (total 720 days)

#### Amortization Amount

P.T.O.

1.

$$\text{Amortization} = \text{Principal} \left[ \frac{\text{Interest rate} \times \text{Number of days} / 360}{1 - \left[ \frac{1}{1 + \text{Number of days} / 360 \times \text{Number of Installments}} \right]^{\text{No. of Installments}}} \right]$$

2.

$$\text{Amortization} = 200,000 \left[ \frac{25/100 \times 180/360}{1 - \left[ \frac{1}{1 + (180/360 \times 25/100)} \right]^4} \right]$$

3.

$$\text{Amortization} = 200,000 \left[ \frac{0.12328767}{1 - \left[ \frac{1}{1 + (0.12328767)} \right]^4} \right]$$

4.

$$\text{Amortization} = 200,000 \left[ \frac{0.12328767}{1 - [0.89024390]^4} \right]$$

5.

$$\text{Amortization} = 200,000 \left[ \frac{0.12328767}{1 - 0.62811046} \right]$$

6.

$$\text{Amortization} = 200,000 \left[ \frac{0.12328767}{0.37188954} \right]$$

7.

Amortization = 200,000 (0.33151691)

8.

Amortization = 66,303.38

Interest due first installment = Principal balance at beginning of installment period x interest rate x time in days

$$\begin{aligned} \text{Interest due first installment} &= 200,000 \times 25/100 \times 180/365 \\ &= \underline{24,657.53} \end{aligned}$$

$$\begin{aligned} \text{Interest due 2}^{\text{nd}} \text{ installment} &= 158,354.15 \times 25/100 \times 180/365 \\ &= \underline{19,523.11} \end{aligned}$$

$$\begin{aligned} \text{Interest due 3}^{\text{rd}} \text{ installment} &= 111,573.88 \times 25/100 \times 180/365 \\ &= \underline{13,755.68} \end{aligned}$$

$$\begin{aligned} \text{Interest due 4}^{\text{th}} \text{ installment} &= 59,026.18 \times 25/100 \times 180/365 \\ &= \underline{7,277.20} \end{aligned}$$

#### Amortization Schedule

Installment	Principal	Interest	Amortization	Balance
1	41,645.85	24,657.53	66,303.38	158,354.15
2	46,780.27	19,523.11	66,303.38	111,573.88
3	52,547.70	13,755.68	66,303.38	59,026.18
4	59,026.18	7,277.20	66,303.38	-
Total	200,000.00	65,213.52	265,213.52	

The system will allow the interest on the first installment to be discounted from the amount dispersed (in the example above the figure is P24,657.53)

#### 10.4 Straight Line Quincena Repayment (Quincena = 15 days)

Amount granted                      P30,000  
 Interest rate                        20% per annum  
 Payment every                        15 days  
 Loan term                                360 days

#### Interest per Quincena

Annual Interest = Principal amount granted x interest rate x Time in days

$$P6,000 = P 30,000 \times 20/100 \times 360/360$$

Interest per Quincena = Principal amount granted x interest rate x Time in days

$$P 250 = P 30,000 \times 20/100 \times 15/360$$

Quincena	Principal	Interest	Amortization	Principal Balance at end of Quincena
1	1,250	250	1,500	28,750
2	1,250	250	1,500	27,500
3	1,250	250	1,500	26,250
4	1,250	250	1,500	25,000
5	1,250	250	1,500	23,750
6	1,250	250	1,500	22,500
7	1,250	250	1,500	21,250
8	1,250	250	1,500	20,000
9	1,250	250	1,500	18,750
10	1,250	250	1,500	17,500
11	1,250	250	1,500	16,250
12	1,250	250	1,500	15,000
13	1,250	250	1,500	13,750
14	1,250	250	1,500	12,500
15	1,250	250	1,500	11,250
16	1,250	250	1,500	10,000
17	1,250	250	1,500	8,750
18	1,250	250	1,500	7,500
19	1,250	250	1,500	6,250
20	1,250	250	1,500	5,000
21	1,250	250	1,500	3,750
22	1,250	250	1,500	2,500
23	1,250	250	1,500	1,250

24	1,250	250	1,500	-
Total	30,000	6,000	36,000	

The system will allow the interest to be discounted from the amount dispersed (in the example above the figure is P6,000).

### 10.5 Straight Line Monthly Repayment

Amount granted                    P30,000  
Interest rate                        22% per annum  
Payment every                        30 days  
Loan term                              360 days

#### Monthly Interest

Annual Interest = Principal amount granted x interest rate x Time in days

$$P6,600 = P 30,000 \times 22/100 \times 360/360$$

Monthly Interest = Principal amount granted x interest rate x Time in days

$$P 550 = P 30,000 \times 22/100 \times 30/360$$

Month	Principal	Interest	Amortization	Principal Balance at end of Month
1	2,500	550	3,050	27,500
2	2,500	550	3,050	25,000
3	2,500	550	3,050	22,500
4	2,500	550	3,050	20,000
5	2,500	550	3,050	17,500
6	2,500	550	3,050	15,000
7	2,500	550	3,050	12,500
8	2,500	550	3,050	10,000
9	2,500	550	3,050	7,500
10	2,500	550	3,050	5,000

11	2,500	550	3,050	2,500
12	2,500	550	3,050	-
Total	30,000	6,600	36,600	

The system will allow the interest to be discounted from the amount dispersed (in the example above the figure is P6,600).

10.6 Bank Employee Salary Loans - Quincena/Diminishing/No Discounting of Interest/No Fee

Example:	Principal Amount	P40,000
	Interest Rate	12% per annum
	Payment every	15 days
	Loan Term	360 days

Amortization Amount on Installment Payment

P. T.O.

1.

$$\text{Amortization} = \text{Principal} \left[ \frac{\text{Interest rate} \times \text{Number of days} / 360}{1 - \left[ \frac{1}{1 + \text{Number of days} / 360 \times \text{Number of Installments}} \right]^{\text{No. of Installments}}} \right]$$

2.

$$\text{Amortization} = 40,000 \left[ \frac{12/100 \times 15/360}{1 - \left[ \frac{1}{1 + (15/360 \times 12/100)} \right]^{24}} \right]$$

3.

$$\text{Amortization} = 40,000 \left[ \frac{0.00499999}{1 - \left[ \frac{1}{1 + (0.00499999)} \right]^{24}} \right]$$

4.

$$\text{Amortization} = 40,000 \left[ \frac{0.00499999}{1 - [0.99502489]^{24}} \right]$$

5.

$$\text{Amortization} = 40,000 \left[ \frac{0.00499999}{1 - 0.88718598} \right]$$

6.

$$\text{Amortization} = 40,000 \left[ \frac{0.00499999}{0.11281402} \right]$$

7.

Amortization = 40,000 (0.04432064)

8.

Amortization = 1,722.82

Interest due 1<sup>st</sup> installment = Principal balance at beginning of installment period x  
rate x Time in days

$$= 40,000 \times 12/100 \times 15/360$$

$$= \underline{200.00}$$

$$\text{Interest due 2<sup>nd</sup> installment} = 38,427.18 \times 12/100 \times 15/360$$

$$= \underline{192.14}$$

Interest due for the 3<sup>rd</sup> installment up to the 24<sup>th</sup> installment is computed by using the same formula as above.

#### Amortization Schedule

Installment	Principal	Interest	Amortization	Balance
1	1,572.82	200.00	1,772.82	38,427.18
2	1,580.68	192.14	1,772.82	36,846.50
3	1,588.59	184.23	1,772.82	35,257.91
4	1,596.53	176.29	1,772.82	33,661.38
5	1,604.51	165.31	1,772.82	32,056.87
6	1,612.54	160.28	1,772.82	30,444.33
7	1,620.60	152.22	1,772.82	28,823.73
8	1,628.70	144.12	1,772.82	27,195.05
9	1,636.84	135.98	1,772.82	25,558.19
10	1,645.03	127.79	1,772.82	23,913.16
11	1,653.25	119.57	1,772.82	22,259.91
12	1,661.52	111.30	1,772.82	20,598.39
13	1,669.83	102.99	1,772.82	18,928.56
14	1,678.18	94.64	1,772.82	17,250.38
15	1,686.57	86.25	1,772.82	15,563.81
16	1,695.00	77.82	1,772.82	13,868.81
17	1,703.48	69.34	1,772.82	12,165.33
18	1,711.99	60.83	1,772.82	10,453.34

19	1,720.55	52.27	1,772.82	8,732.79
20	1,729.16	43.66	1,772.82	7,003.63
21	1,737.80	35.02	1,772.82	5,265.83
22	1,746.49	26.33	1,772.82	3,519.34
23	1,755.22	17.60	1,772.82	1,764.12
24	1,764.12	8.82	1,772.94	
Total	40,000.00	2,547.80	42,547.80	

### 10.7 Interest Computation for Palengke Loan

Short Term (30 - 180 days)

Example:

Principal	P 5,000
Interest rate	30% per annum
Loan Term	60 days
Payment mode	Daily

#### Total Interest

$$\text{Total Interest} = \text{Amount granted} \times \text{interest rate} \times \text{Time}$$

$$P 250 = P 5,000 \times 30/100 \times 60/360$$

$$\text{Disbursement Amount} = \text{Amount granted} - \text{Total interest}$$

$$P 4,750 = P 5,000 - P 250$$

$$\text{Daily Amortization} = \text{Amount granted} / \text{Term}$$

$$P 83.33 = P 5,000 / 60$$

The last amortization should be adjusted to P 83.53 to fully recover the amount granted

### 10.8 Straight Line Interest for Daily Amortization

Example:

Loan Principal: P5,000

Term : 60 days  
 Payment mode: Daily Amortization (60 days)

Principal	$\frac{P5,000}{60 \text{ days}}$	=	P 83.33
Interest	$\frac{20\% \text{ p.a}}{12 \text{ months}} \times 2 \text{ months} \times \frac{P5,000}{60 \text{ days}}$	=	<u>2.78</u>
Sub-Total (Principal & Interest)		=	P 86.11
Daily savings deposit (10%)		=	<u>P 8.61</u>
Total daily amortization (60 days)		=	P 94.72
		Or	P 95.00 per day*

Equal Daily Amortization, Monday to Friday

$\frac{\text{Total amortization for seven days}}{5 \text{ days}}$	=	$\frac{P95 \times 7 \text{ days}}{5 \text{ days}}$	=	P 133.00 per day
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Three-day lump sum

a. Amortization for Friday or Monday	= P 95 x 3 days**	=	P 285.00 per day
b. Rest of the week (4 days)		=	95.00 per day

Two-day lump sum

a. Amortization for Friday	= P 95 x 2 days***	=	P 190.00
b. Amortization for Monday	= P 95 x 2 days****	=	P 190.00
c. Rest of the week (3 days)		=	P 95.00 per day

\* The difference of P0.28 will be debited from the client's savings deposit

\*\* Friday-Saturday-Sunday, or Saturday-Sunday-Monday

\*\*\* Friday & Saturday

\*\*\*\* Sunday & Monday

#### 10.9 Straight Line Interest Deducted Up-front from Amount Dispersed

Repayments will consist of principle only.

The Amount Dispersed is divided by the number of repayment installments to arrive at an installment figure. This figure is then rounded up to the nearest whole Peso. The new rounded up figure is the repayment installment for all but the final installment. The final installment is the amount remaining between the principle already paid by the borrower and Amount Dispersed to the Borrower. Below are three examples of the calculations required.

Example:

Loan Amount: P20,000

Interest Amount at 10% flat interest rate over 12 months:  $P20,000 \times 10/100 = P2,000$

Amount Dispersed to Borrower (Loan Amount less Interest Amount):  $P20,000 - P2,000 = P18,000$

Number of Installments: 12 monthly installments

Calculation of Installment Amount:  $18000 \times 1/12 = P1,500 \Rightarrow 12$  equal installments of P1,500

Loan Amount: P50,000

Interest Amount at 11% flat interest rate over 6 months:  $P50,000 \times 11/100 \times 6/12 = P2,750$

Amount Dispersed to Borrower (Loan Amount less Interest Amount):  $P50,000 - 2,750 = P47,250$

Number of Installments: 6 monthly installments

Calculation of Installment Amount:  $P47,250 / 6 = P7,875$

Repayment Amounts = >

Total Number of Installments - 1 x Rounded Installment = Amount Y  $\Rightarrow 6 - 1 \times P7,875 = P39,375$

Final Installment = Amount Dispersed - Amount Y

Final Installment =  $P47,250 - 39,375$

Final Installment = P7,875

Repayment Schedule = 6 installments of P7,875

Loan Amount: P146,460

Interest Amount at 9% flat interest rate over 8 months:  $P146,460 \times 9/100 \times 8/12 = P8,787.60$

Amount Dispersed to Borrower (Loan Amount less Interest Amount):  $P146,460 - P8,787.60 = P137,672.40$

Number of Installments: 8 monthly installments

Calculation of Installment Amount:  $P137,672.40 / 8 = P17,209.05$ . Round up P17,209.05 to nearest whole Peso = P17,210

Repayment Amounts = >

Total Number of Installments - 1 x Rounded-up Installment = Amount Y  $\Rightarrow 8 - 1 \times P17,210 = P120,470$

Final Installment = Amount Dispersed - Amount Y

Final Installment =  $P137,672.40 - P120,470$

Final Installment = P17,202.40

Repayment Schedule = 7 installments of P17,210 and final installment of P17,202.40

### Declining Balance Calculations

Principle : P180,000.00

Amortization: P16,933.74

Interest Rate: 23%

Payment Every : 30days

Term of Loan : 1 year (360days)

Installment	Principal	Interest	Amortization (ie. Monthly Repayment)	Balance
1	13483.74	3450	16933.74	166516.26
2	13742.18	3191.56	16933.74	152774.08
3	14005.57	2928.17	16933.74	138768.51
4	14274.01	2659.73	16933.74	124494.5
5	14527.6	2386.14	16933.74	109946.9
6	14826.42	2107.32	16933.74	95120.48
7	15110.6	1823.14	16933.74	80009.88
8	15400.22	1533.52	16933.74	64609.66
9	15695.39	1238.35	16933.74	48914.27
10	15996.22	937.52	16933.74	32918.05
11	16302.81	630.93	16933.74	16615.24
12	16635.24	318.46	16933.7	
<b>Total</b>	<b>180000</b>	<b>23204.84</b>	<b>203204.84</b>	

## 11. General Ledger Functionality

### 11.1 Overview

11.1.1 Individual transactions from the Savings and Loan modules are to be summarized in the General Ledger on a daily basis under the appropriate account heading. The detail line information for each transaction will be held in a series of subsidiary ledgers (there being a sub-ledger for each main ledger). The GL will store a daily summary, while the sub-ledgers will store the details of each transaction.

### 11.2 Required Functionality

11.2.1 The GL is to be fully integrated with the Savings Products Module and the Loan Management Module. In addition, the Financial Product Design module will require close integration with the GL in order to allow appropriate account numbers to be selected by a user.

11.2.2 The GL is to be able to accommodate 9,999 branches.

11.2.3 The GL is to be able to accommodate 9,999 types of journals or books.

11.2.4 The GL is to be able to record full transaction detail.

11.2.5 The GL is to be designed with the capability of accepting multi-currency transactions.

11.2.6 All transactions on the GL are to be recorded by a full audit trail.

11.2.7 Security access to the GL is to be seamlessly integrated with the security system of the Savings Products and Loan Management modules.

11.2.8 The GL is to have the capability to automatically recover in the event of a systems crash.

11.2.9 A user-friendly interface is required that will allow an authorized user to maintain the GL. For example, the user must be able to enter new account codes and modify, or delete existing account codes.

11.2.10 The system is to be capable of allowing an authorized head office user with the necessary clearances to remotely view the GL at each branch.

11.2.11 The GL is to automatically compute the following:

- a) Average Daily Balance (ADB) for real and nominal accounts
- b) Monthly Depreciation and Amortization Expense
- c) Establishment of starting balances at the start of the Fiscal Year.
- d) Conversion of foreign currency to Peso

e) Accruals for month end entries such as bills payable and Special Time Deposits.

Accrual should be on a per account basis and summarized in the GL

f) Income tax provisions for head office, or at branch level. Some banks allow branches to utilize tax provisions at branch level especially when the branch is not located in the same Bureau of Internal Revenue district as the head office.

g) Gross Receipts Tax (GRT)

### 11.3 Month End/Year End Balances

11.3.1 The GL is to record and store end of month and end of year balances of both Savings Product and Loan Management modules.

### 11.4 Bank Reconciliation

11.4.1 The General Ledger is to be capable of producing a bank reconciliation on a daily, weekly, monthly and ad-hoc basis. The BSP plans to require Rural Banks to supply them with weekly bank reconciliations as opposed to the monthly reconciliations that are now the norm. None of the software currently in use by the rural banking community with multiple branches is able to provide the reconciliations that the BSP requires. As a further development it is the BSP's stated aim that they intend to pursue daily reconciliations.

### 11.5 Single Branch versus Multi-Branch Reporting

11.5.1 Banks consisting of a single branch will be able to generate all the following reports. The intention is that the head offices of banks with multiple branches will be able to access branch systems remotely. All reports that require bank-wide consolidation for internal use, or for submission to external agencies (such as the BSP) will be generated at the Head Office from Branch Summary Information. To support this method of consolidation, the General Ledger must be able to perform file upload to head office.

11.5.2 The GL is to allow the production of the following reports:

### 11.6 Daily Reports

11.6.1 Ticket Transaction List

11.6.2 Trial Balance

11.6.3 Balance sheet and Income Statement (adhoc)

### 11.7 Weekly Reports

11.7.1 Inter-office Transaction Float Items

11.7.2 Consolidated Daily Report of Condition

### 11.8 Monthly Reports

11.8.1 Trial Balance

- 11.8.2 *Income Statement*
- 11.8.3 *Subsidiary Ledger statements*
- 11.8.4 *Balance Sheet*
- 11.8.5 *Foreign Currency Deposit Unit Financial Statements (breakdown by currency type).*

#### 11.9 Internal Control Reports

- 11.9.1 *Miscellaneous Cash Out/Cash In*
- 11.9.2 *Sundry Items*
- 11.9.3 *Pre-paid accounts*
- 11.9.4 *Lapsing Schedule*
- 11.9.5 *Outstanding Out of Town Cheques*
- 11.9.6 *Bills Purchased Schedule*
- 11.9.7 *Outstanding Managers Cheque Schedule*
- 11.9.8 *Inter-office Float Items*
- 11.9.9 *Withholding Tax Remittances*
- 11.9.10 *Documentary Stamp Remittances*

#### 11.10 Central Bank Reports

11.10.1 These are currently under re-design by the Bangko Sentral ng Pilipinas and will follow once they have been finalized.

#### 11.11 Integration between GL and 3<sup>rd</sup> Party Accounting Packages

11.11.1 A bank's accounting system is connected to the Savings Product and Loan Management systems by means of common account codes in the GL. In order to allow the GL to seamlessly integrate with accounting systems purchased on the open market, the GL module is to be designed to conform to the standards laid down by the International Accounting Standards Committee (IASC). There are a wide number of suitable accounting systems available in the home and international markets and it is recommended that each of the rural banks purchases the accounting system that best meets their individual requirements in terms of functionality and price. A GL that is written to IASC standards will readily interface with 3<sup>rd</sup> party subsidiary ledgers for Accounts Receivable, Accounts Payable, Payroll and Inventory.

#### 11.12 Suspense Account Management

11.12.1 The system is to maintain suspense accounts for unprocessed items in the event that items cannot be allocated to an account. For example, due to insufficient funds, account closure, incorrect account number, accounts frozen or garnished. These transactions are to be stored in a suspense account (and recorded as such through the general ledger) until such time as the suspended transactions can be directed to the correct account or cleared.

11.12.2 The batch suspense facility is to apply to all transaction types which fall into the batch-processing category. On-line transactions are validated in realtime and processed immediately.

### 11.13 Chart of Accounts

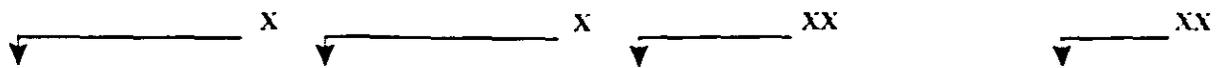
11.13.1 The chart of accounts provides a structure within the GL to allocate debits and credits to specified accounts. The system is to accommodate the revised chart of accounts as proposed by the Bangko Sentral ng Pilipinas in its consultation letter of July 30<sup>th</sup>, 1998. This new chart of account structure is shown on the following pages.

11.13.2 Sub-ledgers are identified by the last two characters of the BSP's general ledger code.

Bangko Sentral ng Pilipinas (BSP) Proposed Chart of Accounts/General Ledger Codes

X	X	XX	XX
↓	↓	↓	↓
1 - ASSETS	1 - CASH AND DUE FROM BANKS	02 CASH ON HAND	00 - 99 GL SUB-ACCT
		04 CHECKS AND OTHER CASH ITEMS	
		06 DUE FROM BSP	
		08 DUE FROM OTHER BANKS	
	2 - LOANS & DISCOUNTS	04 LOANS AND DISCOUNTS	
		06 AGRARIAN REFORM & OTHER AGRI CREDITS - PD 717	
		08 DEVELOPMENT INCENTIVE LOANS - PD 717	
		16 RESTRUCTURED LOANS	
	3 - INVESTMENTS	04 INVESTMENT IN BONDS & OTHER DEBT INSTRUMENTS (IBODI)	
		06 EQUITY INVESTMENTS	
	4 - OTHER ASSETS	02 DUE FROM HEAD OFFICE BRANCHES AGENCIES	
		04 BANK PREMISES, FURNITURE, FIXTURES & EQUIPMENT	
		06 REAL AND OTHER PROPERTIES OWNED & ACQUIRED (ROPOA)	
		12 FOREIGN CURRENCY (FXCY) NOTES & COINS ON HAND	
		14 FOREIGN CURRENCY (FXCY) CHECKS & OTHER CASH ITEMS	
		16 RETURNED CHECKS & OTHER CASH ITEMS (RCOCI)	
		18 MISCELLANEOUS CHECKS & OTHER CASH ITEMS	
		20 PETTY CASH FUND	
		22 DEFICIENCY JUDGMENT RECEIVABLE	
		24 DOCUMENTARY STAMPS	
		26 POSTAGE STAMPS	
		28 STATIONERY AND SUPPLIES ON HAND	
		30 SHORTAGES	
		32 DIVIDENDS RECEIVABLE	
		34 ACCOUNTS RECEIVABLE	





2 - LIABILITIES

7 - VALUATION  
RESERVES LOANS &  
DISCOUNTS

8 - VALUATION  
RESERVES  
INVESTMENTS

9 - VALUATION  
RESERVES OTHER  
ASSETS

- 38 WITHHOLDING TAX PAYABLE
- 40 SSS, MEDICARE, EMPLOYEES' COMPENSATION  
PREMIUMS AND PAG-IBIG CONTRIBUTIONS  
PAYABLE
- 42 OVERAGES
- 44 SUBSCRIPTIONS PAYABLE
- 48 SUNDRY CREDITS
- 54 DEPOSIT FOR STOCK SUBSCRIPTION
- 56 INTER-OFFICE FLOAT ITEMS (CREDIT BALANCES)
- 58 MISCELLANEOUS  
LIABILITIES
- 04 ALLOW FOR PROBABLE LOSSES - LOANS &  
DISCOUNTS
- 06 ALLOW FOR PROBABLE LOSSES - AGRARIAN  
REFORM AND OTHER AGRICULTURAL CREDIT -  
PD 717
- 08 ALLOW FOR PROBABLE LOSSES - DEV.  
INCENTIVE LOANS
- 16 ALLOW FOR PROBABLE LOSSES -  
RESTRUCTURED LOANS
- 50 2% GENERAL PROVISIONS FOR PROBABLE LOAN  
LOSSES
- 04 PREMIUM AMORT - IBODI 00 - 99 GL SUB-  
GOVT ISSUE ACCT
- 04 PREMIUM AMORT - IBODI PRIVATE ISSUE
- 04 ALLOW FOR PROBABLE LOSSES - IBODI
- 06 ALLOW FOR PROBABLE LOSSES - EQUITY  
INVESTMENTS
- 04 ACCUM. DEPRECIATION BANK PREMISES -  
BUILDING
- 04 ACCUM. DEPRECIATION APPRAISAL INCREMENT  
- BUILDING
- 04 ACCUM. DEPRECIATION FURNITURE, FIXTURES  
& EQUIPMENT
- 06 ALLOW FOR PROBABLE LOSSES - ROPOA



	X	X	XX	XX
	↓	↓	↓	↓
6 - EXPENSES		0 - OPERATING EXPENSES		
			20 RENTAL INCOME	
			22 MISCELLANEOUS INCOME/(LOSS)	
			02 INTEREST EXPENSE	
			04 FINANCE CHARGES	
			06 COMPENSATION/FRINGE BENEFITS	
			08 MANAGEMENT AND OTHER PROFESSIONAL FEES	
			10 BANKING FEES	
			12 FINES, PENALTIES AND OTHER CHARGES	
			14 TAXES AND LICENSES	
			16 INSURANCE	
			18 DEPRECIATION AMORTIZ ATION	
			20 LITIGATION ASSETS ACQUIRED EXPENSES	
			22 BAD DEBTS WRITTEN-OFF	
			24 PROVISIONS	
			26 RENT	
			28 POWER, LIGHT AND WATER	
			30 INFORMATION TECHNOLOGY EXPENSES	
			32 FUEL AND LUBRICANTS	
			34 TRAVELLING EXPENSES	
			36 REPAIRS AND MAINTENANCE	
			38 SECURITY, CLERICAL, MESSENGERIAL & JANITORIAL SERVICES	
			40 POSTAGE, TELEPHONE, CABLES AND TELEGRAMS	
			42 DOCUMENTARY STAMPS USED	
			44 STATIONERY AND SUPPLIES USED	
			46 PERIODICALS AND MAGAZINES	
			48 ADVERTISING AND PUBLICITY	
			50 REPRESENTATION AND ENTERTAINMENT	

← X

← X

← XX

← XX

7 - EXTRAORDINARY  
CREDITS/CHARGES

0 - NON-OPERATING  
INCOME/EXPENSE

- 52 MEMBERSHIP FEES AND DUES
- 54 DONATIONS AND CHARITABLE CONTRIBUTIONS
- 56 FREIGHT EXPENSES
- 60 MISCELLANEOUS EXPENSES
- 02 RECOVERY ON CHARGED-OFF ASSETS
- 04 INCOME ON ASSETS  
ACQUIRED
- 06 PROFIT/(LOSS) ON ASSETS SOLD/EXCHANGED
- 08 DIVIDENDS - EQUITY  
INVESTMENT
- 10 OTHER EXTRAORDINARY CREDITS CHARGES

## 12. System and Access Security

12.1 The purpose of system security is to protect data, restrict user access and limit fraud through control routines. To these ends, the system is to provide the following functionality:

12.2 System access is to be controlled through a username/password combination that will restrict the user to a defined area of the systems' functionality. The system must possess a clearly defined authorization hierarchy that separates responsibility between the following organizational roles:

- a) teller
- b) account officer
- c) loan supervisor
- d) departmental manager
- e) branch manager
- f) technical systems administrator

For example, a password assigned to a teller will allow sufficient access to allow the teller to carry out their routine work, but it will prevent them from approving loan disbursements, or adjusting loan balances. In this case, a pop-up message is to be provided to inform the teller that their access level is too low. In this way, the security system will ensure that there is a separation of responsibility between tellers, loan officers and those staff responsible for loan authorization.

12.3 Record-level data security is to be provided by the database to protect sensitive system information against unauthorized manipulation.

12.4 The system is to allow a user's record access authority to be defined as any combination of the following - read, write, update.

12.5 The system is to use a Relational Database Management System (RDBMS) to provide database protection and an effective crash recovery capability. The RDBMS is to use a transaction log to support crash recovery. The transaction log will allow all incomplete transactions to be backed out of the system. In the event of disc failure where the database file is no longer accessible, a combination of database backup and the transaction log will allow the database to be restored.

12.6 For banks with large transaction volumes the RDBMS is to have the capability to provide full and incremental on-line backups.

12.7 The system must be able to perform automatic daily backup to the computer's hard disk at the close of day and operator-controlled backup to external storage devices (such as discs or tape).

12.8 The system is to include an audit trail which will maintain data relating to time, date, transaction, operator and client. This repository is to be available for examination for security and management reporting purposes.

12.9 The audit trail should consist of the following fields:

- a) User identification number
- b) Date and Time stamp
- c) Transaction type (read, enter, update or delete)
- d) Value of field before the transaction
- e) Value of field after the transaction
- f) Supervisor identification number (for override transactions)

12.10 Audit trails are to be generated for:

- a) All financial transactions (e.g. loan payments, deposits, withdrawals)
- b) Client account adjustments
- c) Client account functions (e.g. opening or closing of an account, ad-hoc statement production)
- d) Approvals registered on the system (e.g. loan approvals)

12.11 The audit trail is to be encrypted to prevent unauthorized viewing or alteration.

## 13. Software and Hardware

### 13.1 Software

13.1.1 The system is to be developed using a Relational Database Management System (RDBMS). The use of an RDBMS will offer a number of benefits including increased speed of development, improved data access and improved maintainability. The selected RDBMS will offer the user bank a choice of using the RDBMS in its full form, in the case of a large bank with multiple branches, or in a cut-down version that will be easier for a remote rural bank to maintain with little or no technical resource of its own.

13.1.2 The design of the database is to be clearly documented in diagrammatic form to allow review by MABS-M technical staff. This is to satisfy MABS that the underlying design will be able to meet the needs of rural banks in the short term and continue to meet their needs as they evolve in the medium and long terms.

13.1.3 The system is to use either Microsoft Windows98 and/or Windows NT for its operating system. This will enable the system to be supported with the minimum of technical intervention.

### 13.2 Hardware

13.2.1 There is no particular preference on equipment configuration, other than the proposed system must seek to protect the banks' investment in PC-based passbook printers and the existing inventory of 486 Mhz and higher performance PC workstations and PC servers.