Guidelines on Core Business Solution Features and Controls for Non-Bank Financial Institutions

Version 1.0

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Introduction

Financial Institute in Bangladesh is one of the core drivers in the country's economic development. The focus on inclusion and aim for sustainability have advanced the industry to grow faster and in a well-structured manner. The industry has undergone many changes in providing services to its customers. Most of the FI have adopted automated business environments for faster services and better control in operations to facilitate services at door-steps. Core Business Solution (CBS) is vital to this technology-driven FI service. Today the role of CBS is not just as a processing engine; it is the crucial repository of information to analyze further and detect risks. A standard and flexible CBS significantly contributes to a FI's ability to respond quickly to diversified business, including compliance with changing regulations.

Apart from the CBS, FIs use essential solutions for other business portfolios like Finance, Asset Liability Management, Anti-Money Laundering, etc. Though these business operations may be done by using separate software solutions, the reporting to stakeholders and regulators is done in a consolidated manner. Many FIs have already implemented CBS, and the rest are on the way to implementation. Different FIs of Bangladesh are using other outsourced or self-developed CBS. For the variations in development architecture, support service, modality, and flexibility in these systems, stakeholders face challenges in collecting necessary and intended information at the right time. This challenge necessitates a uniform set of instructions that should be accommodated as a minimum requirement in any CBS.

This document is developed in a collaborative approach to guide the Financial Institute in Bangladesh to maintain minimum required features and controls in their CBS and other related business solutions so that the FIs can comply with most stakeholders' requirements. The document covers necessary features and controls of business services like General Business, Deposits, Loans/Credit/Investment, Treasury, System Administration, and Reporting. Each FI has its way of managing reporting, and regulators also have different query and reporting requirements that are changing over time; as such, fixed reporting formats and demands could not be stated in the Reporting module. The reporting tools used in the business system are expected to be capable and flexible enough to generate new report formats as required. Bangladesh Bank reserves the right to amend/review this document as necessary.

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1. Module: General Business

1.1 Financial Institution and Branch Setup

Sl	Item	Description
1.1.1	Initial Parameter Setup	i. Ability to setup various number formats, i.e., Service Outlet/Branch (SOL) Number format, Customer Information File Number (Cust ID) Format, Internal Account (Office Account) Number Format, Customer Account Number Format, and addition of check digits to omit mistakes. ii. Account Number length shall be at least 13 digits. If the account length exceeds 13 digits, it should be mapped to 13 digits (Length may change as per regulatory requirement). iii. Ability to setup configurable Chart of Accounts [shall have a tree format]. iv. Ability to setup configurable Products. v. Ability to setup configurable customer segments. vi. Ability to setup Static Code/Reference Codes. vii. Ability to configure backdated interest rate with amount slab and term with prior approval from management. viii. Ability to setup inter-branch transactions. ix. The system shall be able to categorize claims or exposures of FIs such as deposits, placements, investments, loans, leases, and advances underlying counterparties according to the Basel III prescribed categories. x. The system shall be able to store and validate the Credit rating of counterparties/customers of FIs given by ECAIs.
1.1.2	Configuration Management and System Architecture	i. Capability to setup all services like interest/profit calculation and applying process EMI service, charging services (periodic and ad-hoc), etc. ii. Configuration management shall have a role-based option to add/activate/deactivate/view any functionality. iii. Ability to ease Branch setup. iv. Ability to branch-wise open/close maintenance of branch operations. v. Deployable in 365x24x7 mode for delivery channels. vi. Interoperable to talk to the external (3rd party) system using standard protocols like ISO 8583 or web services. The system shall have a service-oriented architecture. vii. Shall have well thought and architected security framework. viii. Ability to interface with general required third-party applications. ix. System setup architecture shall be scalable. x. The system shall have a single sign-on mechanism to access any module of CBS. xi. The system shall have role-based User Management xii. The calendar configuration facility shall have holiday information. xiii. The system shall have a data archiving and housekeeping facility. xiv. The system should be able to manage holidays during the EMI calculation schedule. xv. Ability to setup Hub and Spoke

1.2 End of day/Beginning of day/Month End/Year End Operation

Sl	Item	Description
1.2.1	Initial Configuration	i. Batch Job Creation and Scheduling. ii. EOD/BOD parallelization configuration facility. iii. Load balancing in a parallel job. iv. Ability to every-step EOD execution logs generation.

Sl	Item	Description
		v. Log creation configuration facility.
		vi. Usage of standard messaging format.
		vii. Ability to Centralize EOD/BOD with branch-wise options.
		viii. The system shall initiate SMS and email notification to customers for TDR/MTDR account opening, renewal, interest/ profit payment, and encashment.
1.2.2	Book Closure Activity	i. Daily interest /profit accrual/daily interest /profit provisioning/ monthly interest /profit provisioning, monthly/quarterly/half-yearly interest /profit payment and collection or profit/loss sharing, interest /profit adjustment facility and annual transfer of profit and loss and initializing the values for the current year, on maturity, proceed to be transferred/made inoperative with payable deposit awaiting disposal. ii. The system shall be smart enough to collect charges and disburse interest /profit on calendar dates. These calendar dates may be monthly, quarterly, half-yearly, or yearly. iii. Transfer amount from income and expenditure GL heads to retained earnings account through voucher formation as part of the year-end process. The system shall produce an audit trail report. iv. The year-end/half-year-end process shall be as simple as the day close with particular charge computation at the year-end/half-year-end. All functions shall be parameterized, setting with frequency (Daily/ Monthly/Quarterly/Half-Yearly/Yearly, etc.). v. There shall be options so the system can flag the inoperative/ unclaimed deposit accounts for necessary actions.

1.3 General Ledger

Sl	Item	Description
1.3.1	Chart of Accounts	The system shall provide a complete and comprehensive bank-definable chart of accounts aligned with the Bank Company Act/IAS/IFRS/BAS that covers all types of Assets, Liabilities, Income, Expenses, Contingent and Memo, Provision, Profit/Loss, Sundry/Suspense, Inter-branch Reconciliation accounts. The chart of account shall be identifiable in terms of head office transactions, individual branch transactions, transactions for subsidiaries, and corporate house/centralized trade house transactions. The system shall be able to restrict branch(es) or all. To ensure that FIs are advised to take more layers for a chart of accounts on a granular basis.
1.3.2	Accounting Rules Setup	i. The system shall be able to setup accounting rules in different business modules based on product type, customer type, and business event type. ii. The system shall be able to freeze/limit account-wise transaction (Debit/Credit) setup, online transaction option, system generated or both system and manual transaction option. Transaction shall be allowed from any branch. iii. The system shall be able to define different fees/charges and interest /profit rates set up at the product level.
1.3.3	Back Value Entry	i. The system shall be able to allow back-dated/value-dated Transactions both in customer and financial general ledgers/accounts, and there shall be restrictions on these dates. ii. The system shall be able to adjust the interest /profit and charges issues for back-dated entries in customer accounts. iii. The system shall have a high supervision methodology (e.g., EOD report verified by an independent person) for any back value entry process. Shall be able to accommodate historical archives for those entries.

Sl	Item	Description
		iv. Dual control (maker/checker) shall be required for any back-value entry. Approved Delegation of Authority (DOA) shall particularly mention the control authorities.
1.3.4	Self Balance for Manual General Ledger Entries	The system shall be able to perform self-balancing checks to ensure that the debit and credit totals tally for manually entered general ledger batch entries.
1.3.5	Reversal Accounting Entries	i. The system can auto-generate the reversal entries once the original transaction is reversed. It shall exclude those reversals during data analysis and MIS, and there shall be an audit trail for all reversals. ii. The system shall reverse all related entries (charges and commission, VAT, etc.) with back-value-dated options. iii. The system shall be able to identify all reversal entries.
1.3.6	Interest /profit Accruals and Suspense Entries	i. The system shall automatically ensure that the entries for interest /profit accruals generated from the business module will be posted to the respective interest accrual General Ledger accounts as per product /Cost Center and Profit Center/Branch/Division. ii. The system shall be able to provide account-wise interest/profit calculation details for any period.
1.3.7	Layer	i. The system shall be able to handle the business center concept with multiple layers, e.g., HO>Division>Region>Cluster>Branch>, etc. ii. The system shall be able to analyze profitability in all layers. Separate trial balance, profit and loss account, and balance sheet shall be generated for all layers and subsidiaries. iii. The system shall comply with all accounting/general ledger entries, reports, and modules with the cost center and profit center concept.
1.3.8	Transaction Authorization to General Ledger	i. The system shall capture a unique transaction reference number, the client code, the branch code, the general ledger account number, transaction date, value date, currency, input user ID, workstation ID, and batch number at a transaction level to be authorized to the general ledger. ii. The system shall be able to store transaction audit logs, including maker/checker, with a time stamp.
1.3.9	Restrictions for Entry Generation and View	i. The system shall be able to restrict any user/class/group for entry generation, authorization, view, report generation, etc. These restriction-parameters shall be user-defined. ii. The system shall be able to set up user, product, and currency-wise detailed transaction limits, including entry/verify, debit/credit, cash/ clearing /transfer, and same branch/online branch as per delegation of authority.
1.3.10	Edit/Delete of Voucher	i. The system shall be able to restrict edit/delete after authorization of any voucher. ii. The system shall have the option to reject any transaction during authorization.
1.3.11	Balance Restriction/ Prompt/ Reminder Option	i. The system shall raise an override flag at the time of entry generation of the transaction when a balance mismatch has occurred and not allow closing the batch without balancing. ii. The system shall not allow any transaction without matching contra balance.
1.3.12	Auto Provision for Expenses	i. The system shall make cost center/profit center/branch-wise automatic provision for expenses as per user-defined rules (fixed/floating/ average/ percentage). ii. The system shall be able to adjust the provision (fully or partially) as per user-defined (fixed, percentage, minimum, maximum) format (cost center/profit center/branch).

Sl	Item	Description
1.3.13	Day Close with Unauthorized Voucher	i. The system shall not close the day with an unauthorized voucher. ii. This day closing shall be checked branch-wise. If EOD runs centrally, the central team shall take care of it. iii. The System shall provide a branch-wise report for unauthorized or deleted vouchers.
1.3.14	VAT and Tax and Other Charges Compliant	The System shall be flexible/capable enough to parameterize the local Tax, VAT, and other charges (source tax, excise duties, withholding tax, service charges, etc.) rules. These charges shall be configurable.
1.3.15	Integration with Other Software/ Modules	The System shall integrate the general ledger with all the transactional modules of other business systems as per cost center/profit center/branch concepts.
1.3.16	Maker-Checker Functionality	The System shall support maker-checker functionality in real time for allowing entry, verification, editing, committing, post-commit verification, and audit by different users based on the Account, Product, and Transaction types.
1.3.17	Authorization	The System shall support multiple levels/parallel levels of authorization (based on a predefined number as per delegation of authority).

1.4 Customer Profile

Sl	Item	Description
1.4.1	Unique Identification	i. The System shall maintain a unique Customer ID to open any relationship with FI for a customer. ii. Customers may have multiple products in a bank but have one unique ID/customer ID. iii. The System shall be able to create a group ID linking with multiple customers' IDs. iv. The system shall have different types of search options to identify unique customers. v. The System shall not allow the creation of duplicate customer vi. If an identical customer is created, then a merging facility shall be implemented to merge.
1.4.2	Sanctioned Screening (May be done by separate software)	i. During creating a customer profile, the built-in sanction screening system shall scan the customer information automatically, and based on the scanning result, it may allow creating the customer ID or waiting for the decision. ii. Bank which has a separate system to check sanctioning shall have a proper audit trail and approval before opening a relationship. iii. The system shall have the option for AML Escalation screening as per the AML matrix of the FI.
1.4.3	Capture Information (as per Bangladesh Bank KYC A/C Opening Form at least)	i. The system shall store Income Source, Address Details, Currency Details, Nominee Details, Signatory Details, NRB Details, Professional Details, Transaction Profile (TP), Personal Details, predefined Customer Occupation, and Legal Guardians' Information for minors. ii. Information given by the prospective account holder shall be verified with the concerned authority (NID, TIN, VAT, Passport, Birth Registration Number authorities). iii. The system shall support the identification of certain constitutions at multiple levels, such as: For partnership accounts: Registered/ Unregistered; for Societies/clubs: Incorporated/ Unincorporated; for Trusts: Private/Public and Registered/Unregistered. iv. The system shall facilitate identifying customers in various classes, such as Primary account holder, Joint account holder, Proprietor, Partner, Secretary, Director, Manager, Power of Attorney holder, Nominee, Minor, and Guarantor.

Sl	Item	Description
		v. The system shall be able to establish the relationship between Multiple CIF with different business segments, i.e., corporate with retail, retail with VIP, and corporate with treasury. vi. The system shall be able to incorporate free-form text notices into customer records. vii. The system shall facilitate identifying customers on various liability classes not limited to Borrower Guarantor Co-obligate. viii. The system shall facilitate to search customers based on occupation. ix. Compulsory and optional fields shall be marked; without inserting the mandatory values, the system shall not complete the particular procedures.
1.4.4	Mandatory Information for GoAML (If the information is covered in the Capture Information section, this section may be ignored)	**For Bearer:** i. Name of Bearer ii. NID/Passport/Birth Registration Number iii. Address of Bearer, Mobile/Land Phone Number **For Individuals:** i. NID/Passport/Birth Registration Number ii. Address, Mobile/Land Phone Number, Date of Birth, Gender iii. Father/Mother/Spouse Name, Details Occupation iv. Source of Wealth/Source of Income **For Corporate:** i. Incorporation Number/Trade License Number, e-TIN number ii. Business Address, Mobile/Land Phone Number **Director of Corporate:** i. Occupation, Role of Director ii. NID/Passport/Birth Registration Number iii. Address, Mobile/Land Phone Number iv. Date of Birth, Gender, Father/Mother/Spouse Name v. Details of Occupation, Source of Wealth/Source of Income
1.4.5	e-TIN (optional)	The system may validate the insertion of e-TIN to disallow the same e-TIN against different customer IDs, i.e., the system will allow an e-TIN for only one customer ID.
1.4.6	NID Verification (May be done by separate software)	During creation of a customer profile, a built-in validation system (aligned with the NID system of EC) shall bring information about customers from EC. If matched, the user may create a customer profile in the system.
1.4.7	Signature/Photograph	i. The system shall be able to capture signatures/thumb imprints/ biometric stamps and photographs wherever required. ii. The system shall store signatures in an encrypted format. iii. In case of multiple signatories (joint accounts and company accounts), the system shall capture signatory-wise signatures/thumb imprints/ biometric stamps and photographs. It shall make those viewable at the time of the transaction. iv. The system shall retrieve and view signatures of any customer in any branch with the mode of operation and name/designation of the signatory [that view shall be account number-wise instead of customer IDs]. v. The system shall support storing scanned signatures in compressed format. vi. The system shall support viewing signature history. vi. The system shall have the flexibility to change any signatures if requested by customers. vii. The signature of the client's authorized person may be incorporated here.
1.4.8	Nomination	The system shall be able to nominate more than one person in an account with a minor option.

Sl	Item	Description
1.4.9	File Upload Facility	A file upload facility may be introduced to create mass customer IDs for corporate houses. Organizations may set the file limit as per their requirement.

1.5 Reconciliation and Settlement

Sl	Item	Description
1.5.1	Inter Branch/Inter Office	i. The system shall provide a complete auto-reconciliation of all inter-branch/inter-office /SMS /Internet/Call Centre/RTGS/BEFTN/MFS ii. The system shall provide reports for all unmatched items per inter-branch/interoffice/cost center/profit center/ with ageing analysis. It shall have the export facility to Excel/PDF/RTF/DOC/Access. iii. The reconciliation shall be defined, and there shall be options for daily reconciliation. iv. The system shall be able to send the statement of un-reconciled entries to the respective branches/offices. v. The system shall have the option to input remarks for items that are not reconciled.

1.6 Clearing

Sl	Item	Description
1.6.1	General	i. The system shall support and process the RTGS clearing channels. ii. The system shall support and process the other clearing channels via bank such as BEFTN, Cheque etc. iii. The system shall process a single batch of Inward and Outward instruments such as EFT, DDI and Cheque etc. iv. The system shall maintain a master list of FIs with their branches participating in the clearing along with the financial ID of the RTGS system. v. The system shall support immediate fund availability after receiving confirmation of clearing from the corresponding bank.
1.6.2	Outward Clearing via Bank(s)	i. The system shall capture outward instruments details such as payee name, instrument date and instrument amount etc. ii. The system shall mark void instrument and capture reasons for void.
1.6.3	Inward Clearing via Bank(s)	i. The system shall capture inward instruments details and process for the clearing via bank. ii. The system shall upload clearing data (Honor/Dishonor)provided by the corresponding bank using specified file formats or API. iii. The system shall mark returned instruments and collect charges from the related account based on parameterized values and capture reasons for return.
1.6.4	BEFTN (Instruction Base) via Bank(s)	i. Credit Instruction: The system shall capture the Credit Instruction details and credited to the client bank account through the BEFTN channel via bank, ii. Debit Instruction: The system shall capture the Direct Debit Instruction (DDI) details and debited from the client bank account through the BEFTN channel via bank.
1.6.5	RTGS	i. The system shall handle incoming and outgoing RTGS operations for (i) clients and (ii) financial institutes to financial institutes like Government Securities, including Islami Bond Transactions, Money Market Transactions, etc. ii. The system shall be capable of processing the transactions in both Currencies. iii. The system shall have the facility to avail of an Intraday Liquidity Facility (ILF) in the form of an intraday REPO transaction mechanism

Sl	Item	Description
		against Bangladesh Government Treasury Bonds (BGTB), Treasury Bills, and Bangladesh Bank Bills during the operational hours of RTGS and settle the same daily. The transactional process shall be integrated with CBS.
1.6.6	Demand Draft/Pay Order (DD/PO) via Bank(s)	i. The system shall capture the DD/PO details and process the forwarding letters to the issuance bank for DD/PO. ii. The system shall ensure UNSCR and Local Sanction Screening.
1.6.7	Cheque	i. The system shall support the maintenance of stock/inventory of client instruments (PDC, UDC)

1.7 Account Transaction

Sl	Item	Description
1.7.1	Other Bank Cheque Deposits for Clearing	The system shall comply with all Bangladesh Bank-defined procedures.
1.7.2	Account Transfers	i. The system shall perform internally, maintaining the same currency. i. The system shall show restrictions/risks at the account level during transaction performing. ii. The system shall check fund availability during transaction approval. iii. The system shall update the customer balance status immediately. iv. The system shall not allow transactions, if a reject marker (court order/freeze order) is attached to the account.
1.7.3	Account Closing	i. The system shall be able to mark accounts as closed without deletion from the system. ii. The system shall produce a sufficient audit log. iii. The system shall not allow any A/C closing if it is linked with other existing live account(s). iv. The system shall not allow any A/C closing if it has an unapplied interest/profit in the provision field.
1.7.4	Automated Settlement and Clearing Functions	According to dual-entry accounting standards, the system shall automatically match all inter- and intra-bank journal entries.
1.7.5	Blocking Options	i. The system shall be flexible to associate pledging, earmarking, fraud detecting, and collecting with any account or sub-account with sufficient reason and audit log details. ii. The system shall be able to realize the block amount while the fund is available.
1.7.6	Stop Payment via Bank	The system shall be able to reconcile pending stop-payment requests, including insert, amend, inquiry, and delete, with account status (e.g., no stop-payment requests for closed accounts) and standard functionality.
1.7.7	Back/Forward Value Date Validation	The system shall be able to validate the back value and ensure the correct date.
1.7.8	Limit Expiration	The system shall have the option to make automatic expiration of corporate limits.
1.7.9	Dormancy Rules	i. The system shall be able to set rules for dormant accounts (manually or automatically). i. The system shall place rules to automatically set accounts dormant or restrict action if rules and regulations are not met. ii. The system shall generate letters notifying the dormant account holders about the dormancy state of their accounts. iii. The system shall be able to restrict signature card showing. iv. The system shall be able to disallow different transactions per the

Sl	Item	Description
		parameter setup.
1.7.10	File upload facility	A file upload facility is required for bulk uploading of transactions, e.g., salary, dividends, refund warrants, etc.
1.7.11	Alert	i. Credit Transaction alert based on a threshold value. ii. Debit Transaction alert based on a threshold value. iii. Periodic alert (Monthly/Quarterly/Half-Yearly/Yearly based on FI's policy (product-wise separate period). iv. The system shall be able to set triggers for early warning signals or red flags to identify specific account which needs special attention.

1.8   Standing Instructions

Sl	Item	Description
1.8.1	Automatic Sweep/ Standing Instruction Facilities	i. The system shall be able to transfer funds from one to many, many to one, many to many, and one-to-one based on clients' instruction (maintaining minimum Balance/Fixed Amount) or tenure-wise. ii. Sweep transactions may be both push and pull (i.e., sweep-in and sweep-out) iii. Frequency of sweep / SI shall be daily/weekly/fortnightly/ monthly/ set date or in transaction event-based.
1.8.2	Template for Payment Processing	The system shall allow users to define templates for incoming and outgoing payment processing. The template shall include credit and debit payment instructions.
1.8.3	Charges Details	The system shall have a separate screen for charge realization for each account with parameter setting options at product and account levels.
1.8.4	Product-to-Product Transfer Facilities	The system shall allow transfer facilities within various product categories of the same client.
1.8.5	Volume-based Customer Segmentation	The system shall support volume-based customer segmentation to identify the customer class and provide variable interest /profit or charges based on the daily balance.
1.8.6	Flexible Interest /profit Payable Period	The system shall link interest/profit payable to other deposit accounts.
1.8.7	Customer Status Inquiry	The system shall be flexible to group and analyze accounts according to status. It may be included in the report module.
1.8.8	Nationwide Collection	The system shall have the option to view the list of instruments and cash deposited through bank or any other legal channel processed nationwide. Any transaction nationwide shall immediately update the customer account, and funds can be withdrawn from any branch.
1.8.9	Payment Transfer Service	The system shall be able to track the list of payments in various modes (Cash/TT/PO/DD etc.) made as per clients' instructions for fee calculation.

2. Module: Deposits

2.1 General Characteristics

Sl	Item	Description
2.1.1	Customer Eligibility	a) Autonomous b) Club/Society/Association c) Employee-Others d) Government Account e) Individual f) Joint Account g) Liquidator's Account h) Local Authority i) Non-Govt. Organization j) Non-Profit Organization k) Other Public Bank Accounts l) Partnership Company m) Private Bank Account n) Private Company o) Private Ltd. Company p) Proprietary Company q) Public Ltd. Company r) Semi-Autonomous s) Staff t) Trustee Account u) Minor Account v) Non-Resident w) Any customer as per the law of the land. For example, a foreign contractor cannot open an interest /profit-bearing deposit account.
2.1.2	Account Opening Procedure	The system shall store customers: a. Photograph b. Specimen Signature c. Copy of NID and other Specific papers/documents based on the type of the customer d. Contact phone/mobile no. with contact person details, especially for corporate customer e. Email-id if available f. UNSCR and Local Sanction Screening. g. The number of Joint accounts.
2.1.3	Master File Information	KYC compliance
2.1.4	Introducer	The system shall ensure the following: a. Introducer Information b. UNSCR and Local Sanction Screening for introducer.
2.1.5	Joint Account Concept	The system shall allow this option for individuals only and a. Operate as per instruction: Joint/Any/All b. Pay to either or survivor c. Ensure joint account holder(s) is/are not listed in UNSCR and local sanction.
2.1.6	Nominee Inclusion	i. The system shall allow this option for individuals only and ensure the nominee is not listed in UNSCR and local sanction. ii. The system shall allow nominee Inclusion For proprietorship concerns.
2.1.7	Operation by Power of Attorney	The system shall allow this option and ensure the PA holder is not listed in UNSCR and local sanctions.

Sl	Item	Description
	Holder	
2.1.8	Account No. Format	The system must ensure that the account number is 13 or mapped to 13 as per Bangladesh Bank Format.
2.1.9	Deposit Procedure, Transaction Nature, Restrictions	i. Random by the depositor. ii. Time deposit for TDR and monthly deposit for DPS.
2.1.10	Withdrawal Procedure	The system shall ensure withdrawal: a. By cheques supplied by the bank. b. By letter of authority with verification, e.g., assurance of confirmation needed. c. Debit by FI through voucher/withdrawal slip with verification, e.g., assurance of confirmation needed, through alternate delivery channels, which Bangladesh Bank approves. d. If Bearer/Beneficiary is not listed in UNSCR and local sanction.
2.1.11	Return of Cheques	i. The system shall record returned cheques in Cheque Return Register. ii. The system shall be able to provide details of the cheque return, especially the reason for the return. iii. The system shall be able to recover charges for dishonored cheques for insufficient funds.
2.1.12	Stop payment	i. The system shall maintain Stopped Cheque Register with instruction letters inserting time and date. ii. The system shall be able to store/view the stop payment of the Cheque Audit Log. iii. The system shall be able to realize Charge for stop payment.
2.1.13	Standing Instruction	i. The system shall maintain Standing Instruction Register. ii. The system shall be able to generate transactions through standing instruction with date, amount, and source from/to account, amount, etc. iii. The system shall hold the amount of instruction in case of insufficient balance in the Payee/Source account. It automatically shall transact and release the hold amount when the fund becomes available. iv. The system shall ensure the beneficiary is not listed in UNSCR and local sanctions.
2.1.14	Restraints	i. The system shall be able to prevent all transactions with a suitable kind of restraint. ii. The system shall be able to restrain customers [restrain all accounts under one customer ID]. iii. The system shall be able to restrain products (all customers under one product). iv. The system shall be able to restrain the account. v. The system shall be able to restrain debit transactions. vi. The system shall be able to restrain credit transactions. vii. The system shall be able to restrain the legal instruments and cash deposited through bank or any other legal channel and so on for a particular account, customer, and product. viii. The system shall be able to block amounts with expiry dates and multiple blocking options. ix. The system shall be able to block any amount irrespective of the account's available balance. x. The system shall be able to provide reason details and reason categories for Freeze/Dormant/Lien so that MIS can be generated.
2.1.15	Signature and	i. The system shall obtain the signature and photograph of each

Sl	Item	Description
	Photograph	account holder on the signature card.
		ii. The system shall store the signature and photograph of each account holder in the central database.
		iii. The system shall store specimen signatures and photographs in the central database or on the signature card.
2.1.16	Account Statement	i. The system shall be able to generate account statements on demand. Charges can be levied for generating such ad-hoc reports.
		ii. The system shall have a bulk account statement generation process without any fee for periodic statements, especially on half-yearly/yearly basis, commonly for all customers.
		iii. The system shall be able to generate a balance confirmation letter on demand.
		iv. The system might generate MT940/MT942/MT950/MT900/MT910 for the enrolled customers.
2.1.17	Minimum Balance	Following the FI's internal policy, the system may or may not restrict the customer from drawing funds without keeping a minimum balance but may generate a report for FI's inner purpose.
2.1.18	Source Tax, Excise Duty, Incidental/ Account Maintenance Fee, and Closing Charge	i. The system shall be able to configure source tax and excise duty per NBR's guidelines.
		ii. The system shall collect source tax for interest /profit earned during interest /profit payment.
		iii. The system shall collect excise duty (charges) yearly as per instructions of the concerned authority.
		iv. The system shall collect account maintenance fees and closing charges from the account (except term deposit account) as per the guideline of Bangladesh Bank.
		v. The system shall be able to parameterize/configure all charges.
		vi. The system shall have a hovering option to deduct charges.
2.1.19	Dormant Account	i. The system shall mark accounts as dormant as per Bangladesh Bank rule. Bangladesh Bank may provide a common definition for all FIs.
		ii. The system shall have a feature to apply (as per Bangladesh Bank guidelines) dormancy on any account if there is no customer-made transaction for the defined period. For dormant accounts, only credit postings may be allowed.
		iii. The system shall bring the first deposit/withdrawal to the notice of the Branch Manager for permission.
		iv. The system shall normalize accounts before allowing any transaction.
		v. The system shall be able to accrue and capitalize interest /profit like a regular account.
		vi. The system can levy annual charges on this account like the standard account.
		vii. The system shall be parameterized/ configurable.
		viii. Credit may be allowed without changing account status. No debit transaction shall be authorized.
		ix. The system shall generate dormant marking register.
2.1.20	Inoperative Account	i. The system shall mark accounts inoperative as per Bangladesh Bank guidelines.
		ii. The system shall automatically mark accounts daily.
		iii. The system shall bring the first deposit/withdrawal to the notice of the Branch Manager for permission.
		iv. The system shall transfer the balance to Bangladesh Bank if the account is inoperative for ten years. However, it shall serve 3 (three) notices during these ten years. The system shall be able to prepare a report for such accounts with ageing.

Sl	Item	Description
		v. The system shall mark the account as deceased in case of the death of the customer. The system shall not debit any charge from this account and only allow credit postings. For such operations, the system shall have an audit log with the maker/checker, date, reason, etc. vi. The system shall be parameterized/configurable.
2.1.21	Monthly Provision for Accrued Interest	The system shall keep monthly provisions for accrued interest /profit (based on product type) at a given frequency.
2.1.22	Duplicate Statement	The system shall be able to charge for the issuance of duplicate statements.
2.1.23	Classify client deposit	The system shall be able to classify clients' deposits according to the following: a. 2008 System of National Accounts (2008 SNA) b. Monetary And Financial Statistics Manual And Compilation Guide 2016 c. 2019 Financial Soundness Indicators Compilation Guide

2.2 Term Deposit Receipt (TDR)

Sl	Item	Description
2.2.1	Withdrawal	The system shall pay on maturity or premature encashment.
2.2.2	Interest Withdrawal	i. The system shall allow the option to withdraw the accrued interest/profit, retaining the principal amount on or after maturity. ii. If the customer requests, the system shall have an interest transfer option to operative A/C on maturity. iii. The system shall have the option to withdraw interest upfront when opening TD and Renewal on a product basis.
2.2.3	Premature Encashment	i. The system shall have the option to configure if it changes by FI/regulatory authority. ii. The system shall have the option of premature encashment penalty/charges iii. The system shall have the opportunity to configure the slab for premature encashment
2.2.4	Renewal Procedure	i. The system shall allow renewal on maturity if the depositor desires. ii. The system shall obtain instruction from the customer when TDR is issued whether to be renewed for the same period at the prevailing rate. iii. The system shall not allow renewal after the death of the depositor. iv. The system shall be capable of allowing Principal only or Principal with Interest renewal.
2.2.5	Auto-Renewal	i. Without any instruction from the depositor, the system shall treat the TDR as renewed after maturity for the same period of the said TDR at a prevailing rate of the same period. It will continue unless any instruction is received from the customers. ii. Shall have the facility of auto closure option at maturity and proceed the maturity amount to operative account as mentioned by the customer at the time of account opening iii. This option shall be configurable at the product level. iv. The system shall be able to auto-collect due excise duty at the time of auto-renewal or at the time of interest/profit payment. v. The system shall be able to auto-collect insurance premiums when account opening and auto-renewal for insurance-tied-up TDR accounts.
2.2.6	Overdue TDR	i. The system shall treat all TDRs as auto-renewed unless other

Sl	Item	Description
		instructions are received from customers.
		ii. The system shall make continuous profit accrual.
2.2.7	Interest Rate	i. The system shall implement different period and slab-wise interest rates.
		ii. The system shall change the interest rate from time to time with the effective date on the renewal date of the deal and as per the agreement with the Client.
		iii. Generally, the Interest rate shall not change during its current tenor.
		iv. The system shall allow account-wise separate interest rates.
2.2.8	Interest Calculation	i. The system shall calculate interest on Daily Product Basis.
		ii. The system shall calculate interest as per Bangladesh Bank Guideline.
2.2.9	Interest Application	i. The system shall apply interest on the maturity date.
		ii. The system shall apply interest periodically based on the product.
2.2.10	Interest Compounding	i. The system shall apply a simple interest rate.
		ii. In case of auto-renewal, interest shall be capitalized.
2.2.11	Monthly Provision for Accrued Interest	The system shall be made monthly provisions for accrued interest.
2.2.12	Transfer of Account	The system shall not allow the transfer of TDR accounts.
2.2.13	Lien	The system shall allow loan against a TDR after marking that TDR as a lien, and TDR may be marked lien against multiple loans. Multiple TDRs might be marked as a lien against a single loan.
2.2.14	Term Deposit (TD) Advice	i. The system shall be able to generate TD advice in a format the FI decides. The advice shall be printed directly or created in a pdf file.
		ii. The system shall control the sequence of printing/generation of TD advice.
		iii. If more than one piece of advice is generated for a particular TD, The system shall mention/mark it as duplicate.
		iv. The system shall support to issue of electronic instrument/advice.
2.2.15	Loan Facility	The system shall be able to provide a loan facility as per FI's rule.
2.2.16	Customer Communication	The system shall initiate SMS and email notification to customers for TDR account opening, renewal, interest payment, and encashment.

2.3   Mudaraba Term Deposit Receipt (MTDR)

Sl	Item	Description
2.3.1	Withdrawal	The system shall pay on maturity or premature encashment.
2.3.2	Profit Withdrawal	i. The system shall allow the option to withdraw the accrued profit retaining the principal amount on or after maturity.
		ii. If the customer requests, the system shall have a profit transfer option to operative A/C on maturity.
2.3.3	Premature Encashment	i. The system shall have the option to configure if it changes by FI/regulatory authority.
		ii. The system shall have the option of premature encashment penalties/charges.
		iii. The system shall have the option to configure the slab for premature encashment.
2.3.4	Renewal Procedure	i. The system shall allow renewal on maturity if the depositor desires.
		ii. The system shall obtain instruction from the customer when the MTDR is issued whether to be renewed for the same period at the prevailing rate.
		iii. The system shall not allow renewal after the death of the depositor.

Sl	Item	Description
		iv. The system shall be capable of allowing Principal only or Principal with Profit renewal.
2.3.5	Auto-Renewal	i. Without any instruction from the depositor, the system shall treat the MTDR as renewed after maturity for the same period of the said MTDR at a prevailing rate of the same period. It will continue unless any instruction is received from the customers. ii. The system shall have the facility of auto closure option at maturity and precede the maturity amount to the operative account as mentioned by the customer at the time of account opening. iii. This option shall be configurable at the product level. iv. The system shall be able to auto-collect due excise duty at the time of auto-renewal or profit payment. v. The system shall be able to auto-collect insurance premiums when account opening and auto-renewal for insurance-tied-up MTDR accounts.
2.3.6	Overdue MTDR	i. The system shall treat all MTDRs as auto-renewed unless other instructions are received from customers. ii. The system shall make continuous profit accrual.
2.3.7	Profit Rate/Provisional Profit Rate	i. The system shall implement different period and slab-wise profit rates. ii. The system shall change the profit rate from time to time with the effective date on the renewal date of the deal and as per the agreement with the Client. iii. Generally, the Profit rate shall not change during its current tenor. iv. The system shall allow account-wise separate profit rates.
2.3.8	Profit Calculation	The system shall calculate Profit on Daily Product Basis per Bangladesh bank Guidelines.
2.3.9	Profit Application	i. The system shall apply Profit on the maturity date. ii. The system shall apply Profit periodically based on the product.
2.3.10	Profit Compounding	i. The system shall apply a simple Profit rate. ii. In the case of auto-renewal, Profit shall be capitalized.
2.3.11	Monthly Provision for Accrued Profit	The system shall be made monthly provisions for accrued Profit.
2.3.12	Transfer of Account	The system shall not allow the transfer of MTDR accounts.
2.3.13	Lien	The system shall allow an investment against an MTDR after marking that MTDR as a lien, and MTDR may be marked lien against multiple investments. Multiple MTDRs might be marked as a lien against a single investment.
2.3.14	Mudaraba Term Deposit (MTDR) Advice	i. The system shall be able to generate MTDR advice in a format decided by the FI. The advice shall be printed directly or created in a pdf file. ii. The system shall control the sequence of printing/generation of MTD advice. iii. If more than one piece of advice is generated for a particular MTD, The system shall mention/mark it as duplicate. iv. The system shall support to issue of electronic instruments/advice.
2.3.15	Quad/Withdrawal Facility (Sahabul Fulus)	The system shall allow a quad/withdrawal facility against MTDR without encashment. The system shall accrue the profit as per the daily balance/netting balance.
2.3.16	Customer Communication	The system shall initiate SMS and email notification to customers for MTDR account opening, renewal, profit payment, and encashment.
2.3.17	Weightage for all	i. The system shall be able to calculate and distribute weightage

Sl	Item	Description

	types of mudaraba depositors	average profit either in the following ways:
		  a) Extended /enhanced profit
		  b) Profit Sharing Ratio (PSR)

2.4 Monthly/Quarterly/Other term Profit Based Term Deposit (TDR/MTDR)

Sl	Item	Description
2.4.1	Term/Period	i. One year, three years, five years, or as per the FI definition. ii. The system shall have the capability to parameterize.
2.4.2	Interest/Profit Rate/Provisional Profit Rate	The system shall charge interest/Profit rate from time to time with the effective date.
2.4.3	Principal Withdrawal	The system shall allow principal withdrawal on maturity or at any time as premature encashment.
2.4.4	Interest/Profit Withdrawal	i. The system shall transfer on a monthly/quarterly/any period as per FI's product feature basis to the Settlement Account of the depositor or through RTGS/BEFTN/Cheque. ii. The system shall transfer on a monthly/quarterly/any period as per FI's product feature basis to the Settlement Account of the depositor through Mobile Financial Services.
2.4.5	Interest/Profit Calculation	The system shall calculate daily product basis.
2.4.6	Interest/Profit Application	Monthly/Quarterly/others as per product feature.
2.4.7	Interest/Profit Compounding	Simple interest/Profit
2.4.8	Monthly Provision for Accrued Interest/Profit	The system shall keep monthly provisions for accrued interest/Profit.
2.4.9	Premature Encashment	i. The system shall have the option to configure the premature encashment rules per FI's policy. Excess interest/Profit, if paid earlier, is to be recovered. It shall be configurable at the product level. ii. The system shall have the option to configure the above per FI's rule.
2.4.10	Transfer of Account	The system shall not allow the transfer of TDR/MTDR accounts.
2.4.11	Lien	It shall allow a loan/investment against a TDR/MTDR after marking that TDR/MTDR as a lien, and TDR/MTDR may be marked lien against multiple loans/investments. Multiple TDRs/MTDRs might be labeled as a lien against a single loan/investment.
2.4.12	Term Deposit (TD) Advice/ Mudaraba Term Deposit (MTD) Advice	i. The system shall be able to generate TD/MTD advice in a format decided by the FI. The advice shall be printed directly or created as a pdf file. ii. The system shall control the sequence of printing/generation of TD/MTD advice. iii. If more than one piece of advice is generated for a particular TD/MTD, the system shall mention/mark it as duplicate.
2.4.13	Customer Communication	The system shall initiate SMS and email notification to customers for TD/MTD account opening, renewal, interest/profit payment, and encashment.

2.5 Deposit Multiplication Scheme (Double, Triple, etc.)

Sl	Item	Description
2.5.1	Term/Period	i. The system shall be able to change the required tenor of deposits

Sl	Item	Description
		for double/triple/other schemes from time to time, depending on the rate of interest/profit, which varies from FI to FI. i. The system shall be able to configure at the product level per FI's policy.
2.5.2	Withdrawal Procedure	The system shall pay on maturity or premature encashment.
2.5.3	Interest/profit Calculation	i. The system shall calculate interest/profit on a daily product basis. ii. The system shall fix product-wise interest /profit rates.
2.5.4	Loan/Quad Facility	The system shall be able to provide a loan/Quard facility as per FI's rule.
2.5.5	Transfer of Account	The system shall not allow the transfer of TDR/MTDR accounts.
2.5.6	Auto-Renewal	The system shall not allow an auto-renewal facility for this scheme product.

2.6 Mudaraba Cash Waqf Deposit

Sl	Item	Description
2.6.1	Term/Period	The system shall have open Waqf for lifetime and deposit amount can be on a one-time or installment basis.
2.6.2	Profit Rate/Provisional Profit Rate	The system shall change the profit rate from time to time.
2.6.3	Withdrawal Procedure	The system shall not allow such facility as per product definition. In lifetime profit may draw on a monthly/quarterly/ half yearly/ yearly basis and payment to the beneficiary as per clients.
2.6.4	Profit Calculation	i. The system shall calculate profit on a daily product basis. ii. The system shall fix product-wise profit rates. iii. The system shall keep monthly provisions for accrued profit.
2.6.5	Auto-Renewal	The system shall not allow an auto-renewal facility for this scheme product.

2.7 Deposit Scheme

Sl	Item	Description
2.7.1	Scheme and Tenure	i. The system shall be able to configure Pension Scheme, Millionaire Scheme, Hajj Scheme, Education Scheme, Marriage Scheme, Mohor Scheme, Women Entrepreneurship Scheme etc. ii. The system shall be able to configure for any specified period. iii. The system shall allow Deposit Pension Schemes under conventional banking.
2.7.2	Deposit Amount	Any amount set by the FI.
2.7.3	Deposit Date	The system shall input on any day of the month per FI's policy.
2.7.4	Interest /profit Rate and Type/Provisional Profit Rate	The system shall be able to parameterize as per FI's policy.
2.7.5	Premature Encashment	The system shall have the option to configure as per FI's rule.
2.7.6	Scheme Amount	The system shall calculate the scheme amount based on installment size, interest/profit rate, and tenor.
2.7.7	Closing Procedure	The system shall be able to block/close accounts for due installments as per FI's policy.
2.7.8	Withdrawal Procedure	The system shall have the option to configure the withdrawal procedure as per scheme basis.

3. Module: Loans/Credit/Investment

3.1 General Characteristics

Sl	Item	Description

3.1.1	Basic Features	i. If the loan amount is paid through BEFTN, RTGS, or DD/PO, the name and account number from which the money has been paid must be mentioned in the loan account statement and ledger.
		ii. The system shall allow EMI-based Loans against TDR lien.
		iii. The system shall have Loan and Adjustment facilities for all products.
		iv. The system shall have an adjustable loan facility with lien deposits at maturity.
		v. The system shall be able to incorporate and validate account wise value of eligible collateral of loan customers;
		vi. The system shall be able to generate account-wise details of general provisions and specific provisions kept against all Standard, SMA, and Non-performing loans, leases, and advances.
		vii. The system shall be able to generate account-wise accrued interest and interest suspense for every loan account.
		viii. The system shall be able to categorize loans by economic activity based on the UN International Standard Industrial Classification of All Economic Activities, Rev. 4 (ISIC Rev.4).
		ix. The system shall be able to classify clients' loans according to the following:
		  a. System of National Accounts (2008 SNA)
		  b. Monetary and Financial Statistics Manual and Compilation Guide 2016.
		  c. Financial Soundness Indicators Compilation Guide 2019.

3.2 Fixed Term Loan

Sl	Item	Description
3.2.1	Loan Proposal Initiation	Application with supporting documents in favor of Business/Trade License, Audited Balance Sheet, Tax Clearance, Legal Documents, Statement of Affairs with Cash Flow Statements, CIB Clearance, Authenticity of Collaterals, Preparation of Loan Proposal as per format (checklist).
3.2.2	Loan Approval Process	Every detail, i.e., amount, interest rate, tenure, collateral value, applicable schedule of charges, terms, and conditions, etc., of the Sanction Advice shall be input into the system.
3.2.3	Checking Collateral Coverage	Respective Collateral items shall be acceptable as per respective BB Circulars and recorded with proper valuation.
3.2.4	Loan Calculator	Calculates the installment amount and prepares the amortization schedule based on information like loan amount, interest rate, tenor, etc.
3.2.5	Loan Booking	Books a loan in the system with all the financial information and static data for a customer and generates a loan account
3.2.6	Loan Creation	i. Loans are disbursed by creating a loan identification number under the Loan/Credit/Investment module. ii. Ability to store loan appraisal and initiate information (e.g., loan proposal, risk grading, credit worthiness, and origination). iii. Approval number, approval amount, approval date, authority, expiry, tenor, interest rate, drawing power, etc., shall be maintained in the system. iv. Sanction advice/letter, sanction amount, sanction date, borrower acceptance date, etc., shall be maintained in the system.

Sl	Item	Description
		v. Borrower shall not be listed in UNSCR and local sanction.
		vi. Dynamic Classification Rule setup process shall align with the changing BB circulars and Variable interest rate setup options, especially with external indicators, i.e., T-Bill, T-Bond rate, etc.
3.2.7	Disbursement	i. After receiving the approval from CRM, CAD shall prepare sanction advice and hand over the same to the branch. The branch shall also issue a sanction letter to the client, maintaining consistency with sanction advice duly accepted by the concerned client; a copy shall be sent to the CAD. CAD shall reconcile the same with the sanction and upload all relevant information/ identification in the system. CAD shall inform the branch to make the final disbursement after satisfaction.
		ii. Disbursements occur as per loan request and loan approval.
		iii. Phase-by-phase disbursement may be allowed.
		iv. The limit tree concept shall be enabled. So that one can find all the allowed finances from a single point, most likely from 'CIF.'
3.2.8	CRM Limit Checking	i. Approved CRM limit, purpose with code, and identified CL category shall be loaded into the system by CRM/CAD division. After checking the loaded limit in line of approval, CRM/CAD division shall authorize it. The disbursed loan amount shall not exceed the approved credit limit at any point. The user shall check all the parameters, i.e., loan type, start date, maturity date, interest rate, fees, interest frequency, repayment schedule, etc., before completion of the process.
		ii. Identified CL category shall be dynamic.
		iii. The sanction/Approved amount shall not be exceeded at any point.
		iv. The system shall have an option for the Step up / Step down automatic schedule-making option and the Manual Schedule option considering capitalized interest amount for a grace period.
3.2.9	Interest	i. Daily accrual (simple) against outstanding debit balance as per applied rate input and Interest charged periodically or per regulatory guidelines. The principal amount, Interest amount, and outstanding balance shall be shown separately per Bangladesh Bank guidelines.
		ii. For Islamic Financing, Term Financing, rental basis/markup profit is charged.
3.2.10	Arrears Processing	The system shall input Penal interest (as per BB guidelines and FI's policy). The system shall be able to calculate penal interest on the overdue interest and overdue principal separately.
3.2.11	Payment	i. The maturity date and accounts shall be input during the creation of the deal.
		ii. The system shall be flexible to keep the deal alive even after maturity.

		iii. The system shall have the flexibility to set up the sequence, which may be followed as under:
		  a. Charges/Duties
		  b. Penal Interest, Overdue Interest, Interest
		  c. Principal
		  d. total outstanding

		iv. Track receivable can also be introduced in case of a shortage of instalment amounts. As a result, whenever fund is available in the source account, the system shall adjust the tracked amount for installment first.
		v. The system shall have the feature to realize the due amount from the assigned account. If there are insufficient funds, then the system shall create a HOLD for the unrealized amount, and the system

Sl	Item	Description
		shall recurrently try to realize the due amount subject to the availability of funds during EOD. vi. The system shall be capable of managing EMI collection through Direct Debit Instructions.
3.2.12	Provisioning	The system shall have a product-wise provisioning facility.
3.2.13	Redemption	On-demand subject to sufficient funds in the maturity account. After the pay-off, the system shall generate a loan pay-off confirmation.
3.2.14	Financial Data Amendment	Financial data like Interest rates can be amended if required.
3.2.15	Static Data Amendment	Static data like MIS codes can be amended as and when needed.
3.2.16	Repayment Processing	i. Instalment-based repayments are processed through standing instructions between the customer and loan accounts. Instalment amounts are collected monthly from customers, and loan balances are reduced as per the schedule. ii. Based on the product, the system shall have the facility to set different repayment schedules like Equated Payment, Uneven Payment, etc. iii. The system may have upload facility in case of uneven repayment schedule.
3.2.17	Part Settlement	Part settlement is possible to reduce the debt and also reduce either the tenor or instalment amount accordingly. Anytime repayment information like instalment amount and the number of instalments can be changed per customer request with partial or without partial payment.
3.2.18	MIS Information	MIS information is captured in the system to prepare different management reports.
3.2.19	Loan Enquiry	The loan enquiry module is used to view the status of the loans. Information like start date, amount, instalment, payment, etc., can be viewed.
3.2.20	Reversal	Any fee reversal is managed in this module.
3.2.21	Principal Movement/Top-Up	Limit increase or decrease for refinancing. The system shall allow phase-by-phase disbursement.
3.2.22	Property Details	Property details like FSV, valuation date, and property address are captured here for the Mortgage loans.
3.2.23	Reports	Various loan-related reports are generated in the reports module.
3.2.24	Reprising Facility	Reprising of loans on a given frequency.
3.2.25	Credit Administration	Loan limit control and documentation shall be maintained.
3.2.26	Classification	i. Considering overdue status and the customer's financial condition, appropriate classification status shall be ensured for the respective facility through the system. i. The system shall be able to apply to classify marking, loan provisioning, and transaction generation as per Bangladesh Bank guidelines which can be set at the product level. ii. Considering Qualitative Judgment (QJ) for non-performing loans/investment, interest provisioning and application shall follow regulatory guidelines.
3.2.27	Rescheduling and Restructuring	i. The system shall have the capability to capture rescheduling and restructuring-related MIS information. ii. The system shall be able to apply non-accrual interest treatment for rescheduled loans. iii. Reschedule/restructuring shall be mapped to the original account.
3.2.28	Early Settlement	i. The system shall be able to make early finance settlements as per Bangladesh Bank's guidelines and FI's policies. ii. The system shall have the option to calculate early settlement charges (If any).

3.3 Bai-Modes (Bai-Muajjal, Bai-Murabaha, Bai-Salam, Bai-Istisna etc)

Sl	Item	Description
3.3.1	Investment/Financing Proposal Initiation	Application with supporting documents in favour of Business/ Trade License, Audited Balance Sheet, Tax Clearance, Legal Documents, FI Statement, Statement of Affairs with Cash Flow Statements, CIB Clearance, Supplier(s) Information with Price Quotation, Authenticity of Collaterals, Preparation of Investment Proposal as per format (checklist).
3.3.2	Investment Approval Process	Every detail, i.e., amount, profit rate, sale price, tenure, collateral value, applicable schedule of charges, payment process (supplier(s)/ buying agent), terms and conditions, etc., of the Sanction Advice shall be input in the system.
3.3.3	Checking Collateral Coverage	Respective Collateral items shall be acceptable as per respective BB Circulars and recorded with proper valuation. a. Respective Collateral, e.g., Payment assignment from buyers, personal guarantee, safety net deposit, managed and recorded as per authority circular. b. Mortgage collateral (if any) will be recorded with proper valuation. c. Securities kept as collateral should be kept as configurable values since the price of shares are dynamic and needs to be adjusted as per MTM at regular interval market value (shares, debentures, bonds, etc.)
3.3.4	Investment Calculator	Calculates the installment amount and prepares the amortization schedule based on the given information like investment amount (Cost of the goods purchased), profit rate, tenor, GP (if any), payment frequency, holidays (weekend), etc.
3.3.5	Investment Booking	i. Books and Investment in the system with all the financial information and static data for a customer and generates investment account. ii. Investment Booking shall be made in three steps: 　a. Proposal – From Business 　b. Commitment – From IRM. 　c. Loan Account Opening/Disbursement- IAD/ Operations.
3.3.6	Investment Creation	i. Investments are disbursed by creating an investment identification number under the Investment module. ii. Ability to store investment appraisal and initiate information (e.g., investment proposal, risk grading, credit worthiness, and origination). iii. Approval number, approval amount, approval date, authority, expiry, tenor, GP (if any), profit rate, drawing power, etc., shall be maintained in the system. iv. Sanction advice/letter, sanction amount, sanction date, borrower acceptance date, etc., shall be maintained in the system v. Borrower shall not be listed in UNSCR and local sanction.
3.3.7	Disbursement	i. After receiving the approval from IRM/IAD/competent authority shall prepare sanction advice and hand over the same to the branch. The branch shall also issue a sanction letter to the client, maintaining consistency with sanction advice duly accepted by the concerned client; a copy shall be sent to the IRM/IAD/ competent authority. IRM/IAD/

Sl	Item	Description
		competent authority shall reconcile the same with the sanction and upload all relevant information/identification in the system. IAD /competent authority shall inform the branch to final disburse after satisfaction.
		ii. Disbursements occur as per investment approval.
		iii. Phase-by-phase disbursement may be allowed.
		iv. The system shall be able to calculate markup/ unearned profit and charge/debit to the investment account during disbursement.
		v. The system shall have a Detail Checklist of documents as a checklist so that documentation status and deferral status can be observed from any point before disbursement.
		vi. Upon documentation fulfillment, the system shall have the option to raise an automatic green flag for the branch for disbursement processing.
		vii. Single borrower and group exposure shall be considered.
		viii. Non-funded facilities like Payment Guarantee/Bank Guarantee shall be tagged with a Facility Limit tree.
		ix. In case of phase disbursement partial automatic amortization schedule may be generated and uploaded.
		x. In the amortization schedule, profit shall be calculated day-wise for a grace period.
3.3.8	IRM Limit Checking	i. Approved IRM limit and purpose with code and identified CL category should be loaded in the system by IRM/IAD/ competent authority division. After checking the loaded limit in line of approval, IRM/IAD division shall authorize it. The disbursed amount shall not exceed the approved credit limit at any point. The user shall check all the parameters, i.e., investment type, start date, maturity date, profit rate, fees, profit frequency, repayment schedule, etc., before completion of the process.
		ii. All the BB required codes shall be mentioned, including NBFI-II and NBFI-III, BB Sector code, Economic Purpose Code, Industry Category/ SME/Non-SME Code, NBDC, SBS, etc.
3.3.9	Profit	i. Daily accrual (simple) against principal outstanding debit balance as per applied rate input and unearned/markup (booked during disbursement) profit realized periodically or per regulatory guidelines. The principal amount, profit amount, and outstanding balance shall be shown separately per Bangladesh Bank guidelines.
		ii. Profit is charged on a markup basis as per product nature.
		iii. The system shall be able to stop profit/compensation charges in the A/C.
3.3.10	Arrears Processing Overdue and compensation	i. The system shall input Penal profit (as per BB guidelines and FI's policy). The system shall be able to calculate penal profit on the overdue principal only.
		ii. As per the nature of the product, no penalties will be charged in the A/C before expiry. After expiry, compensation shall be calculated and charged in the A/C based on the principal outstanding only, and the charged compensation will not be transferred to the profit A/C. After the realization of the compensation, it will be transferred to the charity/foundation A/C.

Sl	Item	Description

3.3.11	Payment	i. The maturity date and accounts shall be input during the creation of the deal.
		ii. The system shall be flexible to keep the deal alive even after maturity.
		iii. The system shall have the flexibility to set up the sequence, which may be followed as under:
		   a. Charges/Duties
		   b. compensation
		   c. Overdue profit
		   d. Profit
		   e. Principal
		   f. Total outstanding

3.3.12	Provisioning	The system shall have a product-wise provisioning facility per BB Guidelines/circulars.
3.3.13	Redemption	After the pay-off, the system shall generate an investment pay-off/settlement confirmation.
3.3.14	Financial Data Amendment	Financial data like profit rate can be amended if required by the authority's approval.
3.3.15	Static Data Amendment	i. Static data like MIS codes can be amended with the authority's approval. ii. All the BB required codes shall be mentioned, including NBFI-II and NBFI-III, BB Sector code, Economic Purpose Code, Industry Category/SME/Non-SME Code, NBDC, SBS, etc.
3.3.16	Repayment Processing	i. Repayments are processed in the system through standing instructions (per customer instructions) set between the customer's suitable payment channel and investment account. Instalment amounts are collected monthly from the customer, reducing the investment balances as per the schedule/ realization method. ii. The system shall have the facility to set different repayment schedules like Equated Payment, Uneven Payment, etc. iii. The system may have upload facility in case of uneven repayment schedule. iv. The system shall have a Step up/Step down automatic schedule-making option and a Manual Schedule option considering capitalized profit amounts for a grace period.
3.3.17	Part Settlement	Part settlement is possible to reduce the debt and also reduce either the tenor or instalment amount accordingly. Anytime repayment information like the instalment amount and the number of instalments can be changed per customer request with partial or without partial payment.
3.3.18	MIS Information	MIS information is captured in the system to prepare different management reports.
3.3.19	Investment Enquiry	The investment Enquiry module is used to view the status of the investment account. Information like start date, amount, instalment, payment, etc., can be viewed.
3.3.20	Reversal	Any fee reversal is managed in this module.
3.3.21	Property Details	Property details like FSV, valuation date, and property address are captured here for the Mortgage investment. i. The system shall have a detailed collateral report with all tagged facilities and shared security value. ii. The collateral report shall be downloaded with TPA, Sale Deed, Mortgage, IGPA, and Undertaking status.

Sl	Item	Description
		iii. Multiple Title Deeds may be given as entries. iv. Cross-collateral function needs to be implied. v. Cross-collateral with different CIF may be made. vi. Cross-collateral with different branches may be made
3.3.22	Reports	Various investment-related reports are generated in the reports module.
3.3.23	Reprising Facility	Reprising of investment on a given frequency.
3.3.24	Investment Administration	i. Investment limit control and documentation shall be maintained. ii. An integrated document checklist system aligned with the investment limit shall be incorporated into the CBS.
3.3.25	Classification	i. Considering the overdue status and the customer's financial condition, appropriate classification status shall be ensured for the respective facility through the system. ii. The system shall be able to apply to classify marking, investment provisioning, and transaction generation as per Bangladesh Bank guidelines which can be set at the product level. iii. Considering Qualitative Judgment (QJ) for non-performing investment, profit provisioning, and application shall be as per regulatory guidelines.
3.3.26	Rescheduling, Restructuring and Deferment	i. The system shall be able to capture rescheduling, restructuring, and deferment-related MIS information. ii. The system shall be able to apply non-accrual profit treatment for rescheduled investments. iii. Reschedule/restructuring shall be mapped to the original account.
3.3.27	Rebate	The system shall be able to calculate the rebate amount for early closing in investment A/C.
3.3.28	Profit calculation method	The system shall calculate Profit as per BB guideline
3.3.29	Early settlement	i. The system shall be able to make early finance settlements as per Bangladesh Bank's guidelines and FI policies. ii. The system shall have the option to calculate early settlement charges (If any).

3.4 Hire Purchase under Shirkatul Melk (HPSM)

Sl	Item	Description
3.4.1	Investment Proposal Initiation	Application with supporting documents in favor of Business/Trade License, Audited Balance Sheet, Tax Clearance, Legal Documents, FI Statement, Statement of Affairs with Cash Flow Statements, CIB Clearance, Supplier(s) Information with Price Quotation, Estimated cost, Authenticity of Collaterals, Preparation of Investment Proposal as per format (checklist).
3.4.2	Investment Approval Process	Every detail of the Sanction Advice shall be input in the system, i.e., amount, profit rate, tenure, collateral value, applicable schedule of charges, payment process (supplier(s)/ buying agent), terms and conditions, etc., of the Sanction Advice.
3.4.3	Checking Collateral Coverage	i. Respective Collateral, e.g., Payment assignment from buyers, personal guarantee, safety net deposit, managed and recorded as per authority circular.

Sl	Item	Description
		ii. Mortgage collateral (if any) will be recorded with proper valuation. iii. The system Securities kept as collateral should be kept as configurable values since the price of shares is dynamic and needs to be adjusted per market value (shares, debentures, bonds, etc.)
3.4.4	Investment Calculator	Calculates the instalment amount and prepares the amortization schedule based on information like investment amount, profit rate, tenor, payment frequency, etc.
3.4.5	Investment Booking	Books an Investment in the system with all the financial information and static data for a customer and generates an investment account.
3.4.6	Investment Creation	i. Investment is disbursed by creating an investment identification number under the Investment module. ii. Ability to store investment appraisal and initiate information (e.g., investment proposal, risk grading, credit worthiness, and origination). iii. Approval number, approval amount, approval date, authority, expiry, tenor, profit rate, drawing power, etc., shall be maintained in the system. iv. Sanction advice/letter, sanction amount, sanction date, borrower acceptance date, etc., shall be maintained in the system. v. Borrower shall not be listed in UNSCR and local sanction.
3.4.7	Disbursement	i. After receiving the approval from IRM, IAD/competent authority shall prepare sanction advice and hand over the same to the branch. The branch shall also issue a sanction letter to the client, maintaining consistency with sanction advice duly accepted by the concerned client; a copy shall be sent to the IRM/IAD/ competent authority. IRM/IAD/ competent authority shall reconcile the same with the sanction and upload all relevant information/identification in the system. IAD / competent authority shall inform the branch to final disburse after satisfaction. ii. Disbursements occur as per investment approval. iii. Phase-by-phase disbursement may be allowed.
3.4.8	IRM Limit Checking	Approved IRM limit and purpose with code and identified CL category should be loaded in the system by IRM/IAD/ competent authority division. After checking the loaded limit in line of approval, IRM/IAD division shall authorize it. Disbursed investment amount shall not exceed the approved credit limit at any point. The user shall check all the parameters, i.e., investment type, start date, maturity date, profit rate, fees, profit/rental frequency, repayment schedule, etc., before completion of the process.
3.4.9	Profit	i. Daily accrual (simple) against principal outstanding debit balance as per applied rate input and profit charged periodically or per regulatory guidelines. The principal amount, profit amount, and outstanding balance shall be shown separately per Bangladesh Bank guidelines. ii. As per the nature of the product, profit charges are on a rental basis.
3.4.10	Arrears Processing Penal profit	The system shall be able to calculate penal profit on the overdue principal only as per BB guidelines and FI's policy.
3.4.11	Payment	i. The maturity date and accounts shall be input during the deal

Sl	Item	Description
		creation.
		ii. The system shall be flexible to keep the deal alive even after maturity.
		iii. The system shall have the flexibility to setup the sequence, which may be followed as under:
		a. Charges/Duties
		b. Penal profit
		c. Overdue profit
		d. Profit
		e. Principal
		f. Total outstanding
3.4.12	Provisioning	The system shall have a product-wise provisioning facility.
3.4.13	Redemption	On-demand subject to sufficient funds in the maturity account. After the pay-off, the system shall generate an investment pay-off confirmation.
3.4.14	Financial Data Amendment	Financial data like profit rate can be amended if required.
3.4.15	Static Data Amendment	Static data like MIS codes can be amended as and when needed.
3.4.16	Repayment Processing	i. Installment-based repayments are processed in the system through standing instructions (per customer instructions) set between the customer's (suitable payment channel) and investment account. Installment amounts are collected monthly from the customer, and the investment balances are reduced as per the schedule/realization method. ii. The system shall have the facility to set different repayment schedules like Equated Payment, Uneven Payment, etc. iii. The system may have upload facility in case of uneven repayment schedule.
3.4.17	Part Settlement	Part settlement is possible to reduce the debt and also reduce either the tenor or instalment amount accordingly. Anytime repayment information like the instalment amount and the number of instalments can be changed per customer request with partial or without partial payment.
3.4.18	MIS Information	MIS information is captured in the system to prepare different management reports.
3.4.19	Investment Enquiry	The enquiry module is used to view the status of the investment account. Information like start date, amount, instalment, payment, etc., can be viewed.
3.4.20	Reversal	Any fee reversal is managed in this module.
3.4.21	Principal Movement/Top-Up	Limit increase or decrease for refinancing. The system shall allow phase-by-phase disbursement.
3.4.22	Property Details	Property details like FSV, valuation date, and property address are captured here for the Mortgage loans.
3.4.23	Reports	Various investment-related reports are generated in the reports module.
3.4.24	Reprising Facility	Reprising of investment on a given frequency.
3.4.25	Investment Administration	i. Investment limit control and documentation shall be maintained. ii. Revising rental of invested property.
3.4.26	Classification	i. Considering the overdue status and customer's financial condition, appropriate classification status shall be ensured for the respective facility through the system. ii. The system shall be able to apply to classify marking,

Sl	Item	Description
		investment provisioning, and transaction generation as per Bangladesh Bank guidelines which can be set at the product level. iii. Considering Qualitative Judgment (QJ) for non-performing investment, profit provisioning, and application shall be as per regulatory guidelines.
3.4.27	Rescheduling and Restructuring	i. The system shall be able to capture rescheduling, restructuring, and deferment-related MIS information. ii. The system shall be able to apply non-accrual profit/rental treatment for rescheduled investments. iii. Reschedule/restructuring shall be mapped to the original account.
3.4.28	Profit calculation method	The system shall calculate Profit as per BB guideline
3.4.29	Early settlement	i. The system shall be able to make early finance settlements as per Bangladesh Bank's guidelines and FI policies. ii. The system shall have the option to calculate early settlement charges (If any).

3.5 Quard (Islamic Finance) QTDR, QHG, QPF, QBF, QACA

Sl	Item	Description
3.5.1	Facility Booking	Book in the system with all financial information and static data for a customer and generate an account.
3.5.2	Disbursement	Disburse the finance as per the limit for a finance account; partial disbursement is also possible.
3.5.3	Payment Processing	Monthly payments are processed in the system through standing instructions (per customer instructions) set between the customer's suitable payment channel and investment account. Every month instalment amounts are collected from the customer, and reduce the investment balances as per the schedule/realization method. The system shall have the option to receive a fractional repayment amount.
3.5.4	Financial Data Amendment	Financial data like profit rate can be amended if required. No additional profit is allowed in Quard.
3.5.5	Static Data Amendment	Static data like MIS codes can be amended as and when needed.
3.5.6	Provisioning	The system handles provisioning. Finances are impaired after reaching a certain DPD.
3.5.7	Early Settlement	Premature/early settlements of finances are managed in this module.
3.5.8	Part Settlement	Part settlement is possible to reduce the debt and also reduce either the tenor or installment amount accordingly.
3.5.9	Arrears Processing	Arrears and associated bucket movements are handled.
3.5.10	Fee Processing	Fees associated with the finances are tagged and charged to the customer.
3.5.11	MIS Information	MIS information is captured in the system to prepare different management reports.
3.5.12	Finance Enquiry	Finance enquiry module is used to view the status of the finances. Information like start date, amount, installment, payment, etc., can be viewed.
3.5.13	Property Details	Property details like FSV, valuation date, and property address are captured here for the Mortgage finances.

Sl	Item	Description
3.5.14	Lien	The system shall have the lien facility of the MTDR with the finance account.

3.6 Short-Term Agricultural and Micro-Credit Loan

Sl	Item	Description
3.6.1	Loan Proposal Initiation	Application with supporting documents National ID, preparation of Loan Proposal as per format (checklist).
3.6.2	Loan Approval Process	Every detail, i.e., amount, interest rate, tenure, applicable schedule of charges, terms and conditions, etc., of the Branch sanction Advice shall be input into the system at the branch level.
3.6.3	Other Securities	Witness confirmation (individual or Union Parishad), Hypothecation of goods, Equity Margin, Porcha (CS, SA, RS, DS), or lien of TDR, etc.
3.6.4	Loan Calculator	The total or partial amount can be deposited at any time within the period. Interest rate is calculated at the year-end simply (simple interest rate).
3.6.5	Loan Creation	i. Loans are disbursed by creating a loan identification number under the Loan/Credit/Investment module. ii. Ability to store loan appraisal and initiate information (e.g., loan proposal, credit worthiness, and origination). iii. Approval number, approval amount, approval date, authority, expiry, tenor, interest rate, etc., shall be maintained in the system. iv. Sanction advice/letter, sanction amount, sanction date, borrower acceptance date, etc., shall be maintained in the system. v. Borrower shall not be listed in local sanction.
3.6.6	Disbursement	i. The branch shall issue a sanction letter to the client, maintaining consistency with sanction advice duly accepted by the concerned client. ii. Disbursements occur as per loan request and loan approval.
3.6.7	Interest/Profit	Daily accrual (simple) against principal amount as per applied rate input and interest charged periodically or per regulatory guidelines.

3.6.8	Payment	i. The maturity date and accounts shall be input during the creation of the deal.
		ii. The payment sequence may be as under:
		    a. Charges/Duties
		    b. Interest
		    c. Principal
		iii. Track receivable can also be introduced in case of a shortage of installment amounts. As a result, whenever fund is available in the source account, the system shall adjust the tracked amount for installment first.
		iv. The system shall have a feature to realize the due amount automatically from the assigned account. If there is an insufficient fund, the system shall create a HOLD for the unrealized amount, and the system shall recurrently try to realize the due amount subject to fund availability during EOD.

3.6.9	Provisioning	The system handles provisioning. Loans are impaired after reaching a certain DPD (Day Past Due).
3.6.10	Financial Data Amendment	Financial data like Interest rates can be amended if required.
3.6.11	Static Data Amendment	Static data like MIS codes can be amended as and when needed.
3.6.12	Payment Processing	The total or partial amounts can be deposited at any time within the

Sl	Item	Description
		period.
3.6.13	MIS Information	i. MIS information is captured in the system to prepare different management reports. ii. The system shall be able to separate fresh mobilization and product migration/retention both partially and entirely from the number of total account openings. iii. The system shall be able to separate or distinguish between cash and non-cash transactions of all accounts partially and fully at any given date. iv. The system shall be able to classify account openings and withdrawals at actual value Daily/Monthly/Half-Yearly/Yearly/On a Specific Date for MIS management/Dashboard management. v. Portfolio data and trends shall be able to depict and identified by the system on a specific date.
3.6.14	Loan Enquiry	The loan enquiry module is used to view the status of the loans. Information like start date, amount, installment, payment, etc., can be viewed.
3.6.15	Reversal	Wrong loan amount posting reversal is managed in this module.
3.6.16	Reports	Various loan-related reports are generated in the reports module.
3.6.17	Credit Administration	Loan limit control and documentation module through the branch.
3.6.18	Classification	i. Considering the overdue status and the customer's financial condition, the branch shall ensure the appropriate classification status for the respective facility through the system. ii. The system shall be able to automatically classify marking, loan provisioning, and transaction generation as per Bangladesh Bank guidelines which can be set at the product level.
3.6.19	Rescheduling and Restructuring	i. The system shall have the capability to capture rescheduling and restructuring-related MIS information. ii. The system shall be able to apply non-accrual interest treatment for rescheduled loans. iii. Reschedule/restructuring shall be mapped to the original account.

3.7 Non-Installment/Revolving Loan (Factoring, Work-order Financing, Reverse Factoring, and Distributor Financing Facility)

Sl	Item	Description
3.7.1	Loan Proposal Initiation	Application with supporting documents in favour of Business/Trade License, Audited Balance Sheet, Tax Clearance, Legal Documents, Statement of Affairs with Cash Flow Statements, CIB Clearance, Authenticity of Collaterals, Buyer sales ledger analysis, distributor lifting analysis, payable position analysis, FI Statement, Preparation of Loan Proposal as per format (checklist).
3.7.2	Loan Approval Process	Every detail (amount, interest rate, tenure, collateral value, applicable schedule of charges, Payment assignment status from Buyers, terms, and conditions, etc.) of the HO Sanction Advice shall be input into the system at the HO level. Upon receipt of the loan proposal from the branch, the concerned department shall prepare the highlights for the credit committee and onward approval for the Board of Directors. The system shall accommodate the Delegation of Authority (DOA) per FI's policy.
3.7.3	Checking Collateral Coverage	i. Respective Collateral, e.g., Payment assignment from buyers, personal guarantee, safety net deposit, managed and recorded as per authority circular.

Sl	Item	Description
		ii. Mortgage collateral (if any) will be recorded with proper valuation.
		iii. Securities kept as collateral should be kept as configurable values since the price of shares is dynamic and needs to be adjusted per market value (shares, debentures, bonds, etc.)
3.7.4	Loan Creation	i. The facility limit will be active in the system as per credit approval which is reviewed annually. ii. Ability to store loan appraisal and initiate information (e.g., loan proposal, risk grading, credit worthiness, and origination). iii. Approval number, approval amount, approval date, authority, expiry, tenor, interest rate (requires further discussion like T-Bill, T-Bond and how to configure their inclusion since they have a floating rate), grace period, drawing power, etc. shall be maintained in the system. iv. Sanction advice/letter, sanction amount, sanction date, payment assignment confirmation, borrower acceptance date, etc., shall be maintained in the system.
3.7.5	Disbursement	i. After receiving the approval from CRM, CAD shall prepare sanction advice and forward the same to the branch. The branch also shall issue a sanction letter to the client, maintaining consistency with sanction advice duly accepted by the concerned client, a copy of which shall be sent to the CAD. CAD shall reconcile the same with the sanction and upload all relevant information/identification in the system. CAD shall inform the branch to make the final disbursement after satisfaction. ii. Issuance of sanction letter, inputting limit, disbursement of loan, etc., shall be a separate function, and access rights shall be given in the users' role level as per the policy of the FI. iii. Disbursement occurs per the customer's withdrawal request against the submitted invoice/ lifting order from Facility Account through Cheque/Transfer within the approved Limit. iv. For Islamic FIs, deal-wise disbursement is applied. Sale-Purchase is the essence of Shariah Financing, so Pay Order is given to the supplier/seller of goods. With few exceptions (agency arrangement), the fund transferred by the FI in the current a/c of the customer is a violation of Shariah (as no sale-purchase has occurred).
3.7.6	CRM Limit Checking	Approved CRM limit, purpose with code, and identified CL category shall be loaded in the system by respective divisions. After checking the loaded limit in line of approval, CRM/CAD division shall authorize it. The disbursed Loan amount shall not exceed the approved credit limit at any point. The user shall check all the parameters, i.e., loan type, start date, maturity date, interest rate, grace period, fees, interest frequency, repayment schedule, etc., before completion of the process.
3.7.7	Interest	i. The system shall be able to calculate daily accrual (simple) against outstanding debit balance as per facility rate input and Interest charged quarterly (compound) or as per company policy considering the regulatory guideline. ii. For Islamic Financing, mark-up profit is charged.
3.7.8	Provisioning	As per Central Bank guidelines.
3.7.9	Arrears Processing	i. Penal interest (as per company policy) input shall be in place. Daily accrual against outstanding over the approved credit period as per Penal interest rate realized on a monthly/quarterly rest basis and will be realized on the point of collection from buyer, adjustment, or any other suitable time/period.

Sl	Item	Description
		ii. Factoring discount as per the approved rate will be accrued in the system and realized at the invoice's collection adjustment point.
3.7.10	Adjustment/ Liquidation	i. As per the collection credit from the Buyer or own sources of the client in the facility account, outstanding along with other interest and charges shall be adjusted. ii. The order of adjustment is interest, and charges will be in the first steps; secondly, if there was any buildup security and lastly, the principal amount.
3.7.11	Classification	i. Considering the overdue status and customer's financial condition, the branch shall ensure appropriate classification status per Bangladesh Bank guidelines for the respective facility through the system. ii. The system shall be able to auto-classify marking, loan provisioning, and transaction generation as per Bangladesh Bank guidelines which can be set at the product level. iii. Considering Qualitative Judgment (QJ) for non-performing Loans/ Investments, Interest calculation shall be ceased (Unaccounted/ Unearned) for BL loans.
3.7.12	Rescheduling, Restructuring and Deferment	The system shall have the rescheduling, restructuring, and deferment facility with relevant history and audit trail. Reschedule/restructuring shall be mapped to the original account. For the mentioned facilities, creating a new account shall not be allowed. Only the existing account shall be considered the only account of the facilities.

3.8 Term Loan (Discounted)

Sl	Item	Description
3.8.1	Loan Creation	i. The system shall have a unique product code for discounted loans. i. For each discounted loan, there shall be separate unique loan references. ii. The system shall be able to capture different MIS codes. iii. All the BB required codes shall be mentioned, including NBFI-II and NBFI-III, BB Sector code, Economic Purpose Code, Industry Category/ SME/Non-SME Code, NBDC, SBS, etc.
3.8.2	Interest	i. Interest realized upfront for the deal tenor shall be reported in PL on a daily product basis. ii. In case of early pay-off/settlement, the system can reverse unearned interest. iii. The system shall have a separate mechanism to monitor repayment of the revolving/demand amount (90/120 days etc.) to ensure collection within due time.
3.8.3	Provisioning	As per Central Bank guidelines.
3.8.4	Adjustment/ Liquidation	Through cash/clearing/transfer deposit.

3.9 Write Off

Sl	Item	Description
3.9.1	Write Off	i. The system shall provide write-off facilities with all related information such as litigation, Board approvals, Special Waivers (if any) as per BB guideline. ii. The system shall capture the written-off amount details such as Principal, Interest/Profit, late payment Interest/Charge and Litigation Cost etc.

Sl	Item	Description

		iii. System shall adjust the recovered amount against Written-off account on W/O Revenue GL.
		iv. System shall have the capacity to display the following information in the dashboard and generate reports accordingly:
		    a) Branch
		    b) Facility
		    c) Product
		    d) Year of Write off
		    e) Client
		    f) CIF
		    g) Account No
		    h) W/O A/C status (Active: WO balance > Nil ,Closed: WO Balance = Nil)
		    i) WO amount
		    j) Previous month closing write off balance
		    k) Collection amount
		    l) Total credited collection in current year
		    m) Excise duty
		    n) Legal Cost
		    o) Write-off Date
		    p) Current Balance
		    q) Credited Collection Amount
		    r) Credited Amount after write off
		    s) Details of credited collection (Collection to Write-off Revenue GL)

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4. Module: Treasury

4.1 Products

Sl	Item	Description
4.1.1	Money Market	The system shall provide facilities for the following: i. Deposits/Placements and borrowing – Fixed, Notice, and Call ii. Discount instruments iii. Refinancing Fund iv. Commercial Papers v. Repo/Reverse Repo
4.1.2	Securities	The system shall provide the facility for (on behalf of FI and customer): i. Discounted instruments ii. Fixed-rate instruments iii. Floating rate instruments iv. All kinds of bonds (e.g., coupon bonds, zero coupon bonds, asset-backed/Islamic bonds, etc.) iv. Shares, Equities and Warrants v. Debentures vi. Preference shares vii. Securitization viii. Share trading on stock exchanges ix. Issuance of all kinds of money and capital market bonds x. Primary Dealership of securities from Bangladesh Bank
4.1.3	Term Borrowing from FIs and other Borrowings	The system shall be able to perform: i. Scheduled-based Long Term Loans/Investments taken from Banks and FIs. ii. Scheduled-based Short-Term Loan/Investments taken from Banks and FIs. iii. Revolving Loan /Investment iv. Syndicated Term Loan /Investment v. Schedule-based Foreign Currency Loan vi. Overdraft Facility

4.2 Front Office

Sl	Item	Description
4.2.1	Basic Feature	i. The system shall be able to perform Straight Through Processing with level-wise authorization as per regulatory guidelines. ii. The system shall have a money market position blotter. iii. The system shall have an Individual dealer-wise login screen and monitoring system. iv. The system shall show the total limit, counterpart limit, and dealer-wise limit.
4.2.2	Online Real-Time Facilities	i. The system shall perform intraday positions and profitability analysis for deal/currency/dealer-wise. ii. The system shall process funding position iii. The system shall monitor central bank regulatory limits. iv. The system shall have interest/yield/profit and NPV calculator based on parameterized methods (e.g., with or without upfront tax impact, tax at maturity, in case of tax change, discounted value, premature encashment, etc.). v. The system shall have a credit analyzer for the counterparty limit. vi. The system shall have an exception event handling option.
4.2.3	Trades	i. The system shall be capable of making amendments, cancellations, and deleting trades captured in the system with proper authorization

Sl	Item	Description
		and notification to the mid-office.
		ii. The system shall be able to provide data for monitoring, e.g., VAR limit, notional limit, regulatory limit, ALCO set limit, and other limits set at the divisional level.
		iii. The system shall have a built-in currency converter and calculator to facilitate all kinds of interest/yield/profit, discounted, present value, and accrual basis.
		iv. The system shall be able to generate fund transfer instructions to related offices.
		v. The system shall be able to match deals, discounted instruments for profitability analysis, or liquidation of contracts.
		vi. The system shall perform maintenance of static data like standing instruction, sweep facility, event, and holiday calendar.

4.3 Middle Office

Sl	Item	Description
4.3.1	Basic Feature	i. The system shall be able to cover the following middle office features:
		a. Credit risk exposure monitoring and control
		b. Product limit for primary and sub-limit
		c. Limits by tenors
		d. Counterparty Limit
		e. Dealer's limit
		f. Dealing-room limit
		g. Inter-day limit
		h. Settlement limit
		i. The mandatory limit for SLR/CRR
		j. Off-Market Rate Monitoring
		k. Secured/Unsecured Credit Lines
		l. Secured/Unsecured Investment Lines
		m. Online excess overrides and Audit Trail reports
		n. Authorization of deal captured at the front office
		ii. The system shall generate P/L according to the dealer, product, deal, counter-party, and for a specific period.
		iii. The system shall perform mark-to-market, revaluation, and forward revaluation.
		iv. The system shall be able to set internal trading limits and monitor at various levels, e.g., Product, Dealer, Trading Books, etc.
		v. The system shall have the facility of Revaluation Reserve Securities wise.
		vi. The system shall have the facility of Revaluation Loss Securities wise.

4.4 Back Office

Sl	Item	Description
4.4.1	Basic Feature	i. The system shall monitor outstanding trade tracking.
		ii. The system shall track confirmed/unconfirmed trades (incoming and outgoing).
		iv. The system shall have features for Standard Settlement Instruction and Incomplete Settlement Instructions.
		v. The system shall have a Historical Trades Analysis.
		vi. The system shall have trade confirmation and settlement processing.
		vii. The system shall provide mark-to-market revaluation, Coupon accruals and alerts.
		viii. The system shall have a standard control process – Maker-Checker "4-

Sl	Item	Description
		eyes principle".
		ix. The system shall perform Dealer and or Settlement Verification.
		x. The system shall prepare the regulatory report.
		xi. The system shall perform treasury reconciliation.
		xii. The system shall issue BB cheques/electronic payments.

4.5 Other Features

Sl	Item	Description
4.5.1	Deal Capture	i. The system shall be able to capture any deal in the front office for local Currency. ii. The system shall perform real-time online monitoring of dealer-wise/counterpart-wise limits, show the open limit, and then pass the deal to the mid-office after proper authorization. After mid-office verification, the deal will be passed to the back office for settlement. iii. The system shall have a flexible dealing screen to capture all local market features of all standard products (e.g., deal passing without mentioning rate).
4.5.2	Interest/Profit Calculation	i. The system must perform all possible methods of interest /Profit calculation (e.g.360/365 days and if any other). ii. The system shall have the facility to change interest/profit rate with effect from a prior/future date, the re-computation of interest/profit to be done globally, and the dues to be adjusted in the affected accounts. Shall keep a history of interest /profit changes globally and at the account level. iii. The system shall support various methods of charging/paying/ calculating interest/profit (e.g., Flat, Floating, Tiered, Mixed, Compounding, Grace period, Add on the facility, Holiday marking with the feature of in advance/after a holiday, Premature encashment, Renewal, Premature encashment of interest/profit and Renewal of principal with or without accrual, Penal charge implication, etc.). iv. The system shall be able to give effect to back value to interest/profit change and all related effects to concerned accounts. v. The system shall provide calculators for all kinds of interest/yield/profit rate and amount calculation like flat, fixed, compound, tiered, mixed, discounted values, NPV based on the grace period, with or without accruals, and all other possible methods. vi. The system shall calculate all kinds of SWAPs and their legs. vii. Shall have the facility to tag spread margin (+/-) with any product rate to other product/individual accounts.
4.5.3	Accounting	i. The system shall generate accounting entries for treasury contracts (off and on balance sheet items) in a flexible and parameterized manner, supporting the generation of multi-currency general ledger entries. The accounting entries shall be defined based on product type, client type, and business event. ii. The system shall be able to automatically generate the "Accrual" of all kinds of treasury products. (e.g., Swap Profit/Loss, Income/Expense) accounting entries for the duration between the value dates. iii. The system shall automatically generate premium-related accounting entries on value date for Options Contracts.
4.5.4	Maker-Checker Process	i. The system shall be able to run the Maker Checker process in which one user captures the contract or settlement details, and a different user validates/verifies/authorizes the contract or settlement details. ii. The system shall make the contract active only after the maker checker process.

Sl	Item	Description
4.5.5	Settlement Processing	i. The system shall allow the users to maintain default settlement instructions by the counterparty. ii. The system shall also allow split settlement. iii. The system shall be able to produce confirmation, payment and receive messages based on the settlement instructions.
4.5.6	Contract Reversal	The system shall automatically generate the accounting entries to reverse the initial entries posted to the General ledger and generate a cancellation message.
4.5.7	Brokerage Commission Calculation	i. The system shall be able to calculate the amount of brokerage commission automatically. i. The system shall also be able to maintain the currency in which the brokerage commission is calculated.
4.5.8	Amendment of Money Market Contracts	The system shall be able to perform the following amendments on Money Market Contracts with level-wise predefined authorization: a) Increase principal , Decrease principal, Rate change b) Change in interest/profit frequency c) Change in rollover frequency, Maturity change etc.
4.5.9	Before Maturity adjustments of Money Market Contracts	The system shall allow the users to perform the following adjustments before the maturity of money market trades: i. Deposit and withdrawal entries from Call/Notice accounts ii. Early withdrawal of fixed-term deposits with or without penalty and tax effect iii. Rollover of outstanding trades iv. Changes in settlement instructions
4.5.10	Back Valuation of Contracts	The system shall be parameterized to allow the users to maintain the maximum period for which a contract can be backdated.
4.5.11	Charges on Contracts	The system shall maintain and automatically generate the charges and the charge-related accounting entries for treasury contracts as defined by the users.
4.5.12	Auto-Renewal of Money Market Contracts	The system shall support the followings: a. Money market deals could be configured to be auto-renewed upon maturity. b. The auto-renewal attribute of a money market contract shall be set up at a product level. c. Upon deal creation, the auto-renewal attribute shall be defaulted. The user could manually override the auto-renewal setting for each contract. d. User shall be able to override any renewed contract with level-wise authorization.
4.5.13	Deal Matching of Security Transactions	The system shall be able to perform the rules given below: a. Matching will be possible only for transactions with the same security and trading book code. b. A new deal being matched (the sale deal) needs to be matched entirely against the buy(s). c. It is possible to match a sale deal against multiple buys; buy deals likewise can have numerous sale deals matched with them. d. The value date of the sale deal shall be greater than or equal to the value date (s) of the buy deals with which it is being matched. e. If a sale deal is reversed, all the match records with the buy deal shall be deleted after proper authorization.
4.5.14	Security Lending	i. The system shall be able to support security lending. It shall allow the users to input collateral as security for lending. The cash and security can be used as collateral. ii. The system shall validate the position before security can be lent out.

Sl	Item	Description
4.5.15	Coupon and Maturity Redemptions	i. The system shall be able to generate the automatic accounting entries for Coupon and Maturity Redemptions of securities contracts. ii. The system shall also be able to generate coupon payment deals automatically. The coupon alert shall be generated on a given specified time before the coupon date.
4.5.16	Custodian Information	The system shall be able to capture the "own" and "counter-party" custodian information for securities.
4.5.17	Security Delivery Types	During the settlement of bonds and security contracts, the system shall be able to specify the following delivery types: a. Receive against payment (RVP) b. Receive free of payment (RFP) c. Deliver against payment (DVP) d. Deliver free of payment (DFP)
4.5.18	Fixed vs. Floating and Floating vs. Floating for Interest /profit Rate SWAP Transactions	The system shall be able to handle both Fixed vs Floating and Floating vs Floating (basis swap) transactions for Interest /profit Rate SWAP.
4.5.19	Online Updates	Once the treasury contracts are done, the system shall be able to perform the following online updates: a) Updates to the FI-wide overall cash flow b) Intra-day positions c) Estimated P/L.
4.5.20	Limit Exposure Checking	The system shall monitor/track the following limits/exposures online in real time: a) Counterparty b) Product, Settlement , Dealer
4.5.21	Revaluation and Related Accounting Entries	Based on the pre-agreed method, the system shall automatically generate the revaluation accounting entries for all the treasury products.
4.5.22	Automatic or Manual Generation of Deal Numbers	The system shall have both options of automatically generating deal tickets with numbers or manually entering the deal numbers depending on the treasury department's policies.
4.5.23	Interfaces	The system shall be able to interface and manage messages to the following external systems: a) Central Depository Bangladesh Ltd. b) Stock exchange c) Bangladesh Bank
4.5.24	STP Processing	The system shall support Straight Through Processing from the deal entry to settlement and accounting.
4.5.25	Deal Modification	The system shall facilitate the following online operations for treasury deal modification: a) Approval, Corrections, Amendments b) Reversals, Cancellations
4.5.26	Maturity Diary	The system shall be able to generate diary reminders for expiry dates and interest/profit due dates against all treasury contracts.
4.5.27	Cash Flow Management	i. The system shall perform daily fund requisitions from Retail and Corporate through the system. ii. The system shall automatically update the relevant accounts with the funds expected to be received/paid once a transaction is processed with prior approval.

Sl	Item	Description
4.5.28	Messages	The related deal confirmation notices to be sent to the counterparty shall also be automatically generated.
4.5.44	Budget	The system shall monitor the variance between the actual P/L and other positions with budget figures in various areas.
4.5.45	Work Flow Process	The system shall show the workflow process in every working area of the treasury.
4.5.47	Asset Liability Management	The system shall be able to support the following features/ analysis/ reports: a. Product-wise cost/yield for asset and liability b. Capital Management c. BIS Ratios (Capital Adequacy Ratio etc.) d. Gearing Ratio, Leverage etc. e. Gap Analysis, Structural Liquidity Gap (bucket-wise and cumulative gap against set limit) f. Interest/profit Rate Sensitivity (reprising, bucket wise and cumulative gap against set limit) g. Dynamic Liquidity, Dynamic Gaps, Duration Analysis, Duration Gap h. Economic Value of Equity i. Duration calculation for every product (asset and liability) and cumulative duration j. Sensitivity Analysis k. Trend Analysis of all asset and liability products. l. Ratio Analysis, ROA, ROE m. Earning Asset /paying liability n. The yield on earning asset, Equity/Total Asset o. Break-even yield on earning asset p. Undrawn commitment as % of unused WBC q. Net Interest/profit Margin and Risk adjusted Margin cc. Forecasted effect on NIM and RIM, ROA, ROE dd. Balance Sheet trend analysis r. Forecast Vs. Actual, Forecast Vs. Budget and Budget Vs. Actual business segment-wise position (rolling 6/12 months) s. Concentration analysis as per product/customer/maturity-wise t. Liquidity Stress Testing, Scenario Analysis u. Back testing Assumptions in Trend Analysis v. Liquidity Ratios, SNAP Liquidity Ratio w. Short-term borrowing/liquid asset x. Volatile liability/total asset y. Liquid asset/short-term liabilities z. All other standard ALM reports aa. Options to add new ratios as when required by the BB
4.5.48	ALCO Process	The system shall support the following: a. ALCO limit setting and monitoring b. ALCO pack preparation based on committee requirement c. Interest/profit rate fixation by ALCO at the product level
4.5.49	Apps Integration	Related API and Banking Apps (MFS and DFS) shall be connected to CBS for real-time client account information access and difference request placement points.

5. Module: System Administration

5.1 User Management

Sl	Item	Description
5.1.1	User Group Maintenance	User groups shall be maintained as per FI's and regulatory bodies' FI policies, such as a. Manager b. Supervisor c. Officer d. Administrator, etc.
5.1.2	User Creation/ Modification	User creation, update/modification, disabling, and transfer shall be done with proper documentation.
5.1.3	User Information	User information shall be maintained properly with a minimum of: a. User ID b. Employee ID c. User Name d. User Cell Number e. User Email Address f. User Role g. User Branch h. Prime Menu i. User Type (HO User, Approval Authority, Relationship Manager, Manager, Officer, Supervisor) j. User Terminal IP, Operating Time, Application Server IP k. User Division l. User Department
5.1.4	User Administration	The administrator shall be able to do the followings as per FI's policy: a. User Management b. Menu Options/Functions Management c. Set access controls to meet the application security d. Transaction limit setup as per approved DOA
5.1.5	Ordinary Users	An Application User shall be able to do the following: a. Access menus as allowed by the application security setup for each unit/branch user b. Perform transactions and other input as allowed by the application security setup for each unit user c. Perform overrides, if permitted d. Perform enquiries as allowed by the application security setup for each unit user

5.2 Role Management

Sl	Item	Description
5.2.1	Application Access Control	i. Users are granted or revoked for the Application. ii. Each Menu Option/Function is granted or revoked for each user. iii. Special security features are provided for certain inquiry functions, such as the Account Balance of a Specific Branch, Account, or Customer. iv. User cannot have dual roles (Maker and Checker)
5.2.2	User Role	i. Creation of different role names for different types of users. ii. Addition/deletion of functions in a role.

Sl	Item	Description
		v. Selection of user right for each function under a role, e.g., add/modify/cancel/delete/inquiry/view/print, etc.
		vi. Allowing single or multiple roles with a user ID.
5.2.3	Transaction Limit for Group	i. Branch Code
		ii. Group Code
		iii. Max amount for credit
		iv. Max amount for debit
		v. Max amount for inter-branch credit
		vi. Max amount for inter-branch debit
		vii. As per the approved DOA for Customers and GL/Profit and Loss Account
5.2.4	Transaction Authorization	i. Max amount for credit
		ii. Max amount for debit
		iii. Max amount for inter-branch credit
		iv. Max amount for inter-branch debit
		v. As per the approved DOA for Customers and GL/ Profit and Loss Account
5.2.5	Transaction Limit for Individual User	i. User ID
		ii. Max amount for credit
		iii. Max amount for debit
		iv. As per the approved DOA for Customers and GL/ Profit and Loss Account
5.2.6	Transaction Authorization	i. Max amount for credit
		ii. Max amount for debit
		iii. As per the approved DOA for Customers and GL/ Profit and Loss Account
5.2.7	Transaction Limit (Inter-Branch)	i. Assigning branch
		ii. Max amount for inter-branch credit
		iii. Max amount for inter-branch debit
		iv. As per the approved DOA for Customers and GL/ Profit and Loss Account
5.2.8	Authorization Password	i. Authorization Password Maintenance
		ii. As per FI and regulatory bodies' FI's policy and procedure, the user password shall be reset, maintaining a periodic gap
5.2.9	Supervisor Overrides	i. Whether or not the warning requires supervisor override
		ii. Supervisors can override the warning
5.2.10	Availability Codes	Availability codes define which users are available for authorizing warnings remotely.

5.3 Application Administration

Sl	Item	Description
5.3.1	Application Environment Setup	i. Library List Setup
		ii. User Password Rule
5.3.2	FI Parameters	i. Maintain Rates
		ii. Charges Configuration
		iii. Yearly Calendar
		iv. Maintain Holidays
		v. FI Name
		vi. Currency
		vii. Chief Local Office
		viii. Profit period start day
		ix. The profit period starts the month

Sl	Item	Description
		x. Automatically balance the system
		xi. Length of account number
		xii. Unique customer number
		xiii. Maintain reporting defaults.
		xiv. Operating time
5.3.3	Inquiry Security	i. Account Enquiries
		ii. Statistics Enquiries
		iii. Account Services Enquiries
		iv. Additional Information Enquiries
5.3.4	Account Maintenance Control Security	i. Setting up menu options for users to perform account maintenance.
		ii. Defining account detail fields which may be maintained using specific menu options
		iii. Authorizing individual users to these menu options
5.3.5	Administration	i. Apply parameter and control system tailoring upgrades to the application
		ii. Run the Application Start and End of Day processing for the unit
		iii. Backup and Restore files as required
		iv. Housekeeping activities
		v. Option to run EOD/SOD/EOM/EOY at the Head office level for all Units/Branches
5.3.6	Audit Trail	i. Journal Report for User Profile Management Activity
		ii. Journal Report for all Types of Transaction
		iii. Journal Report for all Types of Overrides
		iv. Journal of Enquiry Usage Security
		v. Journal Report of all parameter changes and configuration level changes.
		vi. Report of Database Alter/Delete/Update.
		vii. Report of user activity monitoring.
5.3.7	Transaction Monitoring	The system shall use a transaction monitoring system to identify unusual transactions based on FI's policy and customer behavior.

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6. Module: Reporting

1) FI's Reporting System(s) shall be capable of generating all regular MIS Reports, Regulatory Required Reports, and so on. There shall be some essential business and regulatory reports such as detailed transaction records of any accounts, Daily Affairs, Monthly Affairs, FICLs, NBFI 1,2 and 3, RITs, PNL, AML (CTR, STR), CIB Reports, SME Reports, Audit Trail, ALM Maturity Profile, List of Risk Limits, Risk Ratios suggested by various guidelines of regulators, etc.

2) Various category-wise reporting facilities shall be available, such as Financial Collateral, Immovable Collateral, Rescheduled Loan, Defaulted Loan, Accounts under Legal Action, Rated Assets, Borrower Net Worth, etc.

3) For various solution usage in the FIs for different business portfolios, the report generation process shall be automated, transparent, and reconciled with the host system. Manual intervention shall be prohibited.

4) Audit Trail reports shall be available to illustrate the changes history for any parameter and configuration level changes.

5) FIs may use Reporting Tool for automated data capturing from different solutions.

6) In the case of these reports preparation, a clear segregation of entity portion viz. branch and centralized corporate entities shall be ensured by the system, especially for the FI's which have adopted centralized accounting system and centralized business unit.

7) The system shall be capable of producing the chart of accounts and the detailed transaction records of each of these account heads and sub-heads with date, description, debit, credit, balance, etc.

8) The account heads, product name, etc. shall resemble the forms of the First Schedule of the Bank- Companies Act, 1991 (amended up to 2013) and any amendments to the stated schedule made by BRPD.

9) The layout of various reports shall resemble Bangladesh's business and regulatory practices.

10) Each Report should be preserved with a date/time stamp and document ID.

11) The system shall be able to generate and automate the submission of returns by the FIs to Bangladesh Bank without any manual intervention.