Banking Regulation and Policy Department
Bangladesh Bank
Head Office
Dhaka

30 Baishakh 1431

BRPD Circular No. 12   Date : ----------------------

13 May 2024

Managing Directors/Chief Executive Officers
All Scheduled Banks functioning in Bangladesh

Dear Sirs,

Guidelines on Core Banking Solution (CBS) Features and Controls

Please refer to BRPD Circular No. 08, dated 01 December 2016 on the captioned subject.

2. Guidelines on Core Banking Solution (CBS) Features and Controls (Version 1.0) was issued to formulate a uniform set of instruction as minimum requirements for CBS through the said circular. To adapt to constantly evolving technology-driven environment, the above mentioned guidelines has been updated recently.

3. The updated Guidelines on Core Banking Solution (CBS) Features and Controls (Version 2.0) is available in Bangladesh Bank website (www.bb.org.bd). This guidelines shall come into force with immediate effect. However, its full compliance must be ensured by 30 June 2025.

4. In case of any query arising in the process of implementation, banks are advised to communicate with ICT Audit, Inspection and Compliance Wing of Information & Communication Technology Department, Bangladesh Bank.

5. BRPD Circular No. 08, dated 01 December 2016 is hereby repealed.

Yours Sincerely,

(Md. Harun-Ar-Rashid)
Director (BRPD)
Phone: 9530095

Core Banking Solution (CBS) Features and Controls

May, 2024

Version 2.0

BANGLADESH BANK

Technical Committee

Chairman
> Mohammed Ishaque Miah
> Chief Information Security Officer (CISO)
> Cyber Security Unit (CSU), Bangladesh Bank

Members
> Md. Wahidul Islam Sarker
> Additional Director (ICT)
> Information and Communication Technology Department, Bangladesh Bank
>
> Md. Khairul Anam
> Additional Director
> Payment Systems Department, Bangladesh Bank
>
> Shadril Ahmed
> Additional Director
> Banking Regulation and Policy Department, Bangladesh Bank
>
> S. M. Tofayel Ahmad
> Joint Director (ICT) and Member Secretary
> Information and Communication Technology Department, Bangladesh Bank
>
> Abu Sadat Mohammad Sayem
> Joint Director
> Department of Banking Inspection-1, Bangladesh Bank
>
> Md. Towfiqul Islam
> Joint Director
> Department of Banking Inspection-3, Bangladesh Bank
>
> Md. Rafiqul Islam
> General Manager
> Sonali Bank PLC, Khulna GM Office
>
> Hossain Ahmad
> Senior Executive Vice President (SEVP) and Chief Information Officer (CIO)
> ICT Division, Bank Asia PLC
>
> Endra Mohan Sutradhar
> General Manager
> Software Development Department, Pubali Bank PLC
>
> Md. Mashfiqur Rahman
> Head of IT
> The Hongkong and Shanghai Banking Corporation Limited (HSBC) Bangladesh
>
> Mohamamd Rezaul Karim
> Executive Vice President (EVP)
> Software Division, Islami Bank Bangladesh PLC

Shajeed Md Shafique
Executive Vice President
Project Head, CBS Upgradation Project
Dutch-Bangla Bank PLC

Md. Mushfiqur Rahman,
SVP and Chief Information Technology Officer (CITO)
First Security Islami Bank PLC

Md. Soeb Ul Islam
Vice President (VP)
ICT Division, Social Islami Bank PLC

Uttam Adhikari
Senior Vice President (SVP) and Head of Core Banking Applications,
Technology Division, BRAC Bank PLC

In addition, the following officials also contributed to preparing this guideline:

Md. Munirul Islam Masud, Assistant General Manager, Information Technology Division (Business IT), Sonali Bank PLC

Kashef Rahman, Executive Vice President and Head of IT, Information Technology Division, United Commercial Bank PLC

Mohammad Anamul Huq, Senior Vice President and Head of Export, Brac Bank PLC

Sharif Ahmed, Head of Core Banking Systems and Technology Projects, Vice President, Digital Banking Division, Mutual Trust Bank PLC

Kazi Mohammad Sadik, Vice President (Head of ICT Operation), ICT Wing, Al-Arafah Islami Bank PLC

Mohammad Nazmul Alam, Principal Officer, Information Technology Division (Business IT), Sonali Bank PLC

Table of Contents

[This page is intentionally left blank]

I. Introduction

The banking industry in Bangladesh is the core driver in economic development of the country. The focus on inclusion and the aim for sustainability have advanced the industry to grow with a faster pace and in a well- structured manner. The industry has undergone many changes on providing the services to their customers. Most of the banks have adopted automated banking environment for faster services, better control in operations and established alternative delivery channels to facilitate services at door-steps. Core Banking Solution (CBS) is playing a vital role for this technology driven banking services. Today, the role of CBS is not just as a transaction processing engine; it is the key repository of information to further analyze and detect risks. A standard and flexible CBS is a significant contributor to a bank's ability to respond quickly to the diversified business including compliances with changing regulations.

Apart from the CBS, banks are using different important solutions for different business portfolios like Trade Finance, Remittance, Asset Liability Management, Anti-Money Laundering, Card Management, etc. Though these business operations may be done using separate solutions, the reporting to stakeholders and regulators is done in a consolidated manner. Most of the commercial banks have already implemented CBS and the rests are on the way of implementation. Different commercial banks of Bangladesh are using different outsourced or self-developed CBS. Due to the variations in development architecture, support service, modality and flexibility in these systems, stakeholders are facing challenges in collecting the necessary and intended information at the right time. This 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 commercial banks in Bangladesh in maintaining the minimum required features and controls in their CBS and other related banking solutions so that the banks can comply with most of the stakeholders' requirements. The document covers the necessary features and controls of banking services like General Banking, Bills and Remittance, Deposits, Loans/Credit/Investment, Trade Service, Treasury, System Administration and Reporting. Each bank has its own way of management reporting and regulators also have their different query and reporting requirements which are changing over time, as such fixed reporting formats and demands could not be stated in the reporting module. It is expected that the reporting tools used in the banking system shall be capable and flexible enough to generate new format of reports as required. Bangladesh Bank reserves the right to amend or review this document as and when necessary. In case of Islamic Banking, for all kinds of operations including profit and loss calculation will be based on Shariah principles and relevant guidelines of Bangladesh Bank.

I (A). Objectives

Core banking operations involve managing transactions, processing payments, handling loans, and many other activities. It facilitates online banking, automated teller machines (ATMs), telebanking, and immediate or remote fund transfers through mechanisms like immediate payment service (IMPS), electronic fund transfer (EFT), and real-time gross settlement (RTGS).

Application Programming Interfaces (APIs) are becoming more common in core banking systems to facilitate easy integration with third-party services. It facilitates a broader range of services and enhances the customer experience. For instance, through APIs, banks can integrate with FinTech services, payment gateways, or even other banks for seamless interbank and inter platform transactions.

As the banking industry continues to evolve, these systems are increasingly adopting innovative technologies like AI, cloud computing, and blockchain, paving the way for more advanced, secure, and customer-centric banking services. However, choosing and implementing a CBS is a significant undertaking. It requires a thorough understanding of the organization's needs, a comprehensive evaluation of potential solutions, and careful planning and management of the implementation process. The rise of digital banking will shape the future of CBS, making this an exciting space to watch in the years to come. Some basic objectives of this guideline are:

a) Ensuring proper due diligence while using Core Banking Solutions.
b) Ensuring quicker services at the bank counters for routine transactions like cash deposits, withdrawal, passbooks, statements of accounts, demand drafts, etc.
c) Ensuring anywhere banking by eliminating dependency with branch banking.
d) Ensuring provision of banking services 24 X 7.
e) Ensuring fast payment processing through Internet banking, mobile banking.
f) Ensuring anytime anywhere banking through ATMs, CRMs.
g) Ensuring that all branches access applications from central servers/datacenter, so deposits made in any branch reflect immediately and the customer can withdraw money from any other branch throughout the world.
h) Ensuring easy transfer of funds from the cities to the villages and vice versa.
i) Ensuring process standardization within bank & branches.
j) Ensuring retention of customers through better customer service.
k) Ensuring accuracy in transactions & minimization of errors.
l) Ensuring improved management of documentation & records – having centralized databases results in quick gathering of data & MIS reports.
m) Ensuring ease in the submission of various reports to the Government & Regulatory body.
n) Ensuring convenience in opening accounts, processing cash, servicing loans, calculating interest, implementing changes in policies (i.e change in interest rates).
o) Ensuring security and data privacy requirements.
p) Ensuring interoperability and portability of data and services between intra system environments.
q) Ensuring roles and responsibilities of the relevant parties.
r) Ensuring organizational security, privacy and its computing requirements.
s) Ensuring a secure environment for data processing.
t) Ensuring awareness of stakeholder's roles and responsibilities for protection of information in CBS environment.
u) Ensuring business continuity, resilience and recovery capabilities.
v) Ensuring effective Customer Service Provider (CSP) management.
w) Ensuring best practices (industry standard) in the use of technology etc.

I (B). Scope and Applicability

This guideline is applicable to all Banks of Bangladesh. It addresses the approach and principles necessary for adoption of Core Banking Solution by the Bank. However, this guideline does not prescribe or recommend any specific Core Banking Solution, service arrangement, service agreement, service provider or deployment models. The Bank must perform their own analysis to determine if CBS meets their strategic aims whilst managing any associated risks and compliance with regulatory requirements.

I (C). Compliance and Dispensation

a) The bank shall assign a Team/Committee/Entity to monitor compliance with this guideline. A Team/Committee/Entity shall provide the initial observation of any non-compliance issue to the competent authority.

b) The bank shall take initiatives to rectify the non-compliance activities as per guidelines within a specific time frame.

c) For non-compliance issues, compliance plans shall be submitted to Bangladesh Bank. If any non-compliance issue persists due to exceptional cases, then **dispensation can be taken from Bangladesh Bank for a specific period.**

d) If the bank fails to rectify the non-compliance activities within the time frame, the bank shall seek permission for dispensation from Bangladesh Bank. After the compliance failure multiple times, a penalty may be imposed on the bank depending on the impact of business or any adverse impact on customers' interest.

I (D). List of Abbreviations

ACH	:Automated Clearing House
ACU	:Asian Clearing Union
AD	:Authorized Dealer
AFS	:Annual Financial Statement
ALM	:Asset-Liability Management
AML	:Anti-Money Laundering
APR	:Annual Percentage Rate
ATM	:Automated Teller Machine
BACH	:Bangladesh Automated Clearing House
BCBS	:Basel Committee on Banking Supervision
BFIU	:Bangladesh Financial Intelligence Unit
BGTB	:Bangladesh Government Treasury Bonds
BoP	:Balance of Payments
CBS	:Core Banking Solution
CC	:Cash Credit
CCY	:Currency
CD	:Certificate of Deposit
CMSME	: Cottage Micro Small and Medium Enterprise
CRG	:Credit Risk Grading
CRM	:Cash Recycling Machine
CDR	:Credit Deposit Ratio
CFRA	:Combined Finance and Revenue Accounts
CGRA	:Currency and Gold Revaluation Account
CL	:Classified Loan
CO	:Capital Outlay
CPI	:Consumer Price Index
CRAR	:Capital to Risk-Weighted Asset Ratio
CRR	:Cash Reserve Ratio
CPV	:Cost per view
CTR	:Cash Transaction Report
DD	:Demand Draft
DPD	:Day Past Due
EFT	:Electronic funds transfer
EnvRR	:Environmental Risk Rating
ERQ	:Exporter Retention Quota
Exp	:Export
FATCA	:Foreign Account Tax Compliance Act
FCCB	:Foreign Currency Convertible Bond
FCNRA	:Foreign Currency Non Resident Account
FCY	:Foreign Currency
FDI	:Foreign Direct Investment
FDIC	:Federal Deposit Insurance Corporation
FF	:Flow of Funds
FPI	:Foreign Portfolio Investment
FPP	:Fixed Personal Pay
GDP	:Gross Domestic Product
GL	:General Ledger
GRR	:Global Repository Receipt
IBAN	:International Bank Account Number
iBAS	:Integrated Budget and Accounting System
ICC	:Internal Control and Compliance
ICRR	:Internal Credit Risk Rating
ILF	:Intraday Liquidity Facility

IFC   :International Finance Corporation
Imp   :Import
LCY   :Local Currency
MPO   :Monthly Payment Order
NPA   :Non Performing Account
NTR   :Non-profit transaction reports
OD   :Over Draft
OFAC   :Office of Foreign Assets Control
OTC   :Over The Counter
PKI   :Public Key Infrastructure
RWA   :Risk Weighted Asset
RTGS   :Real Time Gross Settlement
SCB   :Scheduled Commercial Bank
SG   :Shipping Guarantee
STR   :Suspicious Transaction Report
SLR   :Statutory Liquidity Ratio
SWIFT   :Society for Worldwide Interbank Financial Telecommunications
TB's   :Treasury Bills
TIN   :Tax Identification Number
TT   :Telegraphic Transfer
TTP   :Trade Transaction Profile
UDF   :User Defined Fields
UNSCR   :United Nations Security Council resolution
VAT   :Value Added Tax
WPI   :Wholesale Price Index

1. Module: General Banking

1.1 Bank and Branch Setup

Sl. No.	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. Use check digit to ensure integrity. ii. Account Number length shall be 13 digits or mapped to 13 Digits. (Length may change as per regulatory requirement). iii. Ability to setup configurable Chart of Accounts [shall have tree format]. iv. Ability to setup remittance (PO/DD and so on). v. Ability to setup configurable Products. vi. Ability to set up configurable customer segment (Sector, Sub Sector and Business type wise etc) vii. Ability to setup Static Code/Reference Codes. viii. Ability to configure back dated interest/profit rate with amount slab, term with prior approval from management. ix. Ability to setup inter-branch transaction. x. Ability to setup Cost Center & Profit Center Code. xi. Ability to setup User Defined Fields, Customizable & Flexible System Defined Fields, MIS Codes. xii. Ability to configure the financial year start and end date.
1.1.2	Configuration Management and System Architecture	i. Ability to setup all services like interest calculation and applying process, EMI service, charging services (periodic and adhoc) etc. ii. Configuration management shall have role based option to add/activate/deactivate/view of any functionality. iii. Ability to ease branch setup with sub branch, booth and outlet. iv. Ability to maintain branch wise open/closure. v. Deployable in 365*24*7 mode for delivery channels. vi. Interoperable communication to the external (3rd party) system using standard protocols like ISO 8583 (including updated messaging format), web services or APIs. vii. Shall have well thought and architected security framework. viii. Ability to interface with required third-party applications. ix. System setup architecture shall be scalable. x. System shall have single sign on mechanism to access any module of CBS maintaining Standard protocol. xi. System shall have Role based User Management. xii. Calendar configuration facility shall have holiday information. xiii. System shall have data archiving and housekeeping facility. xiv. If any branch remains closed, online transactions, ATM, POS transactions and Internet Banking to be facilitated keeping the system up and running. xv. System shall have ability of 2FA/ OTP for signing into the system. xvi. Configurable option for setting up delivery channels and mapping them with accounts/ GLs. xvii. Ability to implement comprehensive audit trails to track system activities and changes. xviii. Scalability to accommodate increased transaction volumes and new functionalities.

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

Sl. No.	Item	Description
1.2.1	Initial Configuration	i. Batch Job Creation and Scheduling. ii. EOD/BOD parallelization configuration facility. iii. Load balancing in parallel job. iv. Logs generation in every-step of EOD execution. v. Log creation configuration facility. vi. Usage of standard messaging format. vii. Centralize EOD/BOD with branch wise options. viii. Defined log level, frequency, etc. for log capacity management.
1.2.2	Book Closure Activity	i. Daily interest accrual/daily interest provisioning/monthly interest provisioning, monthly/quarterly/half-yearly interest payment and collection or profit/loss sharing, interest 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. Besides, system shall be smart enough to collect charges and disburse interest on scheduled dates. These dates may be monthly, quarterly, half-yearly or yearly. iii. Transfer of amount from income & expenditure GL heads to retained earnings account through voucher formation as part of year end process. System shall produce audit trail report. iv. The year-end/half year-end process shall be as simple as the day close with certain charge computation at the year-end/half year-end. In fact, all processes shall be parameterized setting with frequency (Daily/Monthly/Quarterly/Half-Yearly/Yearly etc.). v. There shall be options so that the system can flag the inoperative/unclaimed deposit accounts for necessary actions. vi. The system shall flag for dormant account. vii. In case of Islamic Banking, system shall support Profit Calculation and Distribution Method as per regulatory guidelines. viii. Depreciation calculated of different assets shall be parameterized.

1.3 General Ledger

Sl. No.	Item	Description
1.3.1	Chart of Accounts	i. System shall provide a complete, comprehensive and bank definable chart of accounts aligned with Bank Company Act/IAS/IFRS/BAS which 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 transaction, individual branch transaction, transaction for subsidiaries and corporate house/centralized trade house transaction. System shall have capacity to put restriction on particular branch(es) or all. To ensure that banks are advised to take more layers for chart of accounts on granular basis.
1.3.2	Multi Currency GL/Accounts	i. System shall have multi currency transaction based General ledgers/Accounts and shall be able to produce separate currency wise report. ii. System shall carry both original transaction currency and equivalent base currency balances in General Ledger/Account.

Sl. No.	Item	Description
		iii. System shall be able to provide revaluation functionality for General Ledger/Accounts with Foreign Currency balances.
1.3.3	Accounting Rules Setup	i. System shall be able to setup accounting rules in different business modules based on product type, customer type and business event type. ii. System shall be able to freeze/limit account-wise transaction (Debit/Credit) setup in single transaction and daily/ monthly amount in the online transaction option, system generated or both system & manual transaction option. Transaction shall be allowed from any branch. iii. System shall be able to define different fees/charges/interest rate/Tax/ Excise Duty setup at product level.
1.3.4	Back Value Entry	i. 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. There should be approval flow (maker & checker) for back dated transaction. ii. System shall be able to adjust interest and issue charges for back dated entries in customer accounts and for product. iii. System shall have high supervision methodology (e.g. EOD report verified by independent person) for any type of back value entry process. Shall be able to accommodate historical archive for those entries. iv. Dual control (maker/checker) shall be required to make any back value entry. Approved Delegation of Authority (DOA) shall particularly mention the control authorities.
1.3.5	Self Balance for Manual General Ledger Entries	i. System shall be able to perform self-balancing check to ensure that the debit and credit totals tally for manually entered general ledger batch entries.
1.3.6	Reversal Accounting Entries	i. System shall be able to auto-generate the reversal entries once the original transaction is being reversed. It shall exclude those reversals during data analysis and MIS but there shall be audit trail for all reversals. ii. System shall reverse all related entries (charges and commission, VAT, etc.) too with back value dated options. iii. System shall have ability to identify all reversal entries.
1.3.7	Interest Accruals and Suspense Entries	i. System shall ensure that the entries for interest accruals generated from business module automatically will be posted to the respective interest accrual General Ledger accounts as per product /Cost Center and Profit Center/Branch/Division. ii. System shall be able to provide account-wise interest calculation details for any period of time. iii. System shall have suspense register with creation and adjustment date.
1.3.8	Layer	i. System shall have ability to handle the business center concept with multiple layers, e.g.- *HO>Division>Region>Cluster>Branch>Subbranch>Collection Booth>etc.* ii. System shall be able to analyze profitability in all layers. Separate/Consolidated trial balance, profit and loss account, balance sheet shall be generated for all layers and subsidiaries. iii. System shall comply with all accounting/general ledger entries,

Sl. No.	Item	Description
		reports, modules with the cost center and profit center concept.
1.3.9	Revaluation of Foreign Currency Positions	i. System shall perform the revaluation of foreign currency positions to convert to base currency, at user definable intervals such as- daily, weekly, monthly, quarterly, half-yearly or yearly.
1.3.10	Transaction Authorization to General Ledger	i. System shall capture 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. System shall be able to store transaction audit log including maker/checker with time-stamp.
1.3.11	Restrictions for Entry Generation and View	i. 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. System shall have ability to setup user-wise, product-wise and currency-wise detail transaction limit including entry/verify, debit/credit, cash/clearing/transfer, same branch/online branch as per delegation of authority. iii. System shall have ability to implement controls to validate the accuracy and completeness of transaction data before posting to the ledger.
1.3.12	Edit/ Reverse of Voucher	i. System shall be able to restrict edit/ reverse after authorization of any voucher. ii. System shall have option to reject any transaction during authorization.
1.3.13	Balance Restriction/Prompt / Reminder Option	i. System shall raise an override flag at the time of entry generation of the transaction when balance mismatch is occurred and do not allow to close the batch without balancing. ii. System shall not allow any transaction without matching contra balance. Tellers shall not be allowed to send any transaction with balance mismatch to the authorizers.
1.3.14	Auto Provision for Expenses	i. System shall make cost center/profit center/branch-wise automatic provision for expenses as per user defined rules (fixed/floating/average/percentage). ii. 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).
1.3.15	Day Close with Unauthorized Voucher	i. System shall not close the day with unauthorized voucher. ii. Day closing shall be checked branch-wise. If EOD runs centrally, it shall be taken care of by central team. iii. System shall provide a branch-wise report for unauthorized or deleted transactions.
1.3.16	VAT & TAX and Other Charges Compliant	i. 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. ii. This shall be configurable.
1.3.17	Integration with Other Software/Modules	i. System shall integrate the general ledger with all the transactional modules of other banking systems as per cost center/profit center/branch concepts. ii. System shall ensure to auto reconciliation of the Bridge/settlement GLs
1.3.18	Maker-Checker Functionality	i. System shall support maker-checker functionality on real time basis for allowing entry, verification, editing, committing, post

Sl. No.	Item	Description
		commit verification and audit by different users based on Account type, Product type, Transaction type.
1.3.19	Authorization	i. System shall support multiple levels/parallel levels of authorization (based on a predefined number as per delegation of authority).

1.4 Reconciliation and Settlement

Sl. No.	Item	Description
1.4.1	Inter Branch/Inter Office/Nostro/Vostro	i. System shall provide a complete auto reconciliation of all inter branch/inter-office/Nostro/Vostro/ATM/CRM/POS/SMS /Internet/ Call Centre/Credit Card/RTGS/BEFTN. ii. System shall provide reports for all unmatched items as per inter branch/inter office/cost center/profit center/Nostro/ Vostro with aging analysis and shall have export facility to Excel/PDF/RTF/DOC/Access. iii. Reconciliation shall be defined and there shall be options for daily/weekly/monthly reconciliation. iv. System shall be able to send statement of un-reconciled entries to the respective branches/offices with provisioning. v. System shall able to provide user wise activity report with summary. vi. System shall cross-match transactions with other connected systems or switches or networks and generate mismatched transaction list, report, rectification entries etc. vii. System shall have the option to reverse/ refund deposit/ withdrawal disputes with the same trace no./ reference no. etc.

1.5 Clearing

Sl. No.	Item	Description
1.5.1	General	i. System shall support all categories of clearing instruments including MICR and Non-MICR. ii. System shall handle clearing operation of more than one clearinghouse in an area if required. iii. System shall have ability to maintain a master list of banks with their branches participating in the clearing along with MICR code, Bank code, financial ID, etc. iv. System shall process single or batch of Inward and Outward instruments. v. System shall support immediate fund availability after clearing settlement. vi. System shall support holding/suspending clearing house due to any unavoidable situations. vii. System shall maintain comprehensive audit trails for all clearing activities.
1.5.2	Outward Clearing	i. System shall capture details of multiple instruments of same or different banks/branches for outward clearing for credit to a single account in a single batch. ii. System shall have ability to allow/disallow withdrawal from an account based on status of the instruments presented in the clearing with multi-level approval. iii. System shall have ability to use external utilities such as and not limited to Scanner, MICR Reader, and Sorting Machine.

Sl. No.	Item	Description
		iv. System shall have ability to upload clearing data online or from files in a specified format from other branches/customers. v. System shall have ability to mark returned instruments and to collect charges from the related account automatically based on parameterized values and to capture reasons for return. vi. System shall have ability to enter clearing instruments for future clearing dates with facility to capture entry date, clearing date and realization date. vii. System shall set realization date for a clearing based on category of clearing - Clearing session, Number of days.
1.5.3	Inward Clearing	i. System shall support Electronic Clearing Services to debit/credit customers' accounts. ii. System shall have ability to enter data inward items to customer accounts based on the data received from clearinghouse manually, upload data from a specified file formats, or input the data generated by the MICR reader at the service branch. iii. System shall have ability to generate and print advice (return memo) for return instruments with the following details among others- a. Reason of return b. Instrument details c. Bank/branch details d. Charges iv. System shall have ability to pay off dividend warrants/interest warrants/refund warrants presented through clearing. System shall be able to show both inward and outward clearing cheque details at account level including cheque amount, date, status etc. v. System shall have ability to generate partial instrument-wise /module-wise/product-wise batch. vi. System shall have ability to segregate cheques in instrument wise and value wise, so user can perform verification as per their delegation of authority with dual control.
1.5.4	**EFT** (Instruction base)	i. **Credit Instruction:** System shall process the Credit EFT instruction to the client account of other bank through EFT channel by debiting the local client account (who will give instruction). System of responding bank shall be able to receive the instruction and credit the same to designated client account. If Bank/Branch/Account No. does not match, system of responding bank shall process the return. ii. **Debit Instruction:** System shall process the outgoing Debit EFT instruction of originating bank, response of incoming EFT debit instruction of responding bank by debiting the respective account and crediting the account of originating bank. If Bank/Branch/Account No. does not match, system of responding bank shall process the return. Authorization of account debit through EFT shall be taken from the customer "by the originator" which account will be debited through EFT Debit Instruction. iii. EFT operational hours shall be configurable in CBS or EFT application middleware for incoming and outgoing instruction separately.

Sl. No.	Item	Description
1.5.5	RTGS	i. System shall be able to handle incoming and outgoing RTGS operations for (i) client and (ii) financial institute to financial institute like Government Securities including Islami Bond Transactions, Money Market Transactions, and Fund transfer between Two Currencies etc. ii. Bangladesh Bank- can send and receive transactions as system operator and participant of the system. iii. System shall be capable to process the transactions in both Local Currency and Foreign Currencies. iv. System shall have the facility to avail Intraday Liquidity Facility (ILF) in the form of intraday REPO transaction mechanism against Bangladesh Government Treasury Bonds (BGTB), Treasury Bills and Bangladesh Bank Bills during the operational hours of RTGS and settle the same on daily basis. Transactional process shall be integrated with the CBS. v. System shall be capable of processing Govt. transactions like VAT, Customs duty etc. vi. RTGS operational hours should be configurable in CBS for incoming and outgoing instructions separately. vii. System should have the capacity to communicate calendar dates with BACH, EFT, RTGS, etc. as per operation schedule. viii. System shall have the facility to process net settlement files of BACH, IDTP, NPSB etc.
1.5.6	Demand Draft/Pay Order (DD/PO)	i. System shall support operations like issue, payment, refund and cancellation, issue of duplicate, etc. in branches. ii. System shall support maintenance of stock and operation of PO/DD instruments. iii. System shall support DD/PO having pre-printed identification numbers in numeric as well as numeric with alpha prefix. iv. System shall allow realization of charges along with applicable VAT and Tax. v. System shall calculate the PO amount and Charge amount and deduct the same from source account separately at the time of transaction. vi. System shall store Name, Photo ID No., NID No. of the sender and/or receiver and reason of transaction for walk-in customer in case of transaction above a certain limit as per BFIU circular. vii. System shall ensure UNSCR & Local Sanction Screening.
1.5.7	Cheque	i. System shall support maintenance of stock and operation of cheque books. ii. System may have interface with 3rd party for outsourcing printing. iii. System shall support recording details of cheque series and numbers of cheque leaves issued/utilized to customer for each account separately. iv. System shall support classification of accounts as cheque issued and not issued accounts. v. System shall have mail provision to mark confirmation of delivery and may send SMS to client. vi. System shall support recovering (and waiving) charges concurrent with issue of cheque books on predefined parameters. vii. System shall have facility to cancel cheque book/leaves and stop Payment/Revoke.

Sl. No.	Item	Description
		viii. System shall accept stop payment/revoke instruction from any branch with detail reasons.
		ix. System shall generate stop payment advice for the customer indicating cheque numbers and charges debited, stop payment reference number etc.
		x. System shall disallow payment of a cheque under stop payment instruction. Notify teller if cheque number is marked as "Stop payment".
		xi. System shall have ability to mark stop payment for a series of cheques or various leaves under same books. This option shall maintain the change log having details of changes.
		xii. System shall not accept paid and cancelled cheque leaves for any transaction and notify teller if cheque number is marked as "paid off/cancelled".
		xiii. System shall provide facility to view the status/fate of a cheque leaf/range of cheques/cheque books for a particular account.
		xiv. System shall store Name, Photo ID No., NID No. of the bearer and reason of transaction in case of (over the counter) deposit/withdrawal amounting above a certain limit as per BFIU circular.
		xv. Undelivered cheque book report with ageing shall be generated from the system.

1.6 Account Transaction

Sl. No.	Item	Description
1.6.1	Other Bank Cheque Deposit for Clearing	i. System shall comply with all Bangladesh Bank defined procedures.
1.6.2	Account Transfers	i. System shall perform internally maintaining same currency. ii. System shall show restrictions/risk in account level during transaction performing. iii. System shall check fund availability during transaction approval. iv. System shall update customer balance status immediately. v. System shall not allow transaction if reject marker (court order/freeze order/ block amount) attached in the account. vi. System shall have the ability to support standing instructions for stopping, blocking, marking 'no debit/ no credit' etc. account temporarily. vii. System shall have the ability to handle transaction reversals and corrections in the event of errors or customer disputes.
1.6.3	FC Draft Sale	i. System shall support it for Cash to Account.
1.6.4	Account Closing	i. System shall have ability to mark accounts as closed without deletion from system. ii. System shall produce sufficient audit log. iii. System shall not allow any A/C closing if it is linked with other existing live account(s). iv. System shall not allow any A/C closing if it has unapplied interest in provision field.
1.6.5	Automated Settlement and Clearing Functions	i. System shall match all inter- and intra-bank journal entries automatically according to dual-entry accounting standards.
1.6.6	Blocking Options	i. 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.

Sl. No.	Item	Description
		ii. System shall have functionality to realize block amount while fund is available.
1.6.7	Stop Payment	i. System shall have ability to reconcile pending stop-payment requests including insert, amend, inquiry and delete with account status (e.g. no stop-payment requests for closed accounts) in addition to standard functionality.
		ii. System shall have auto tracking of identifying cheque numbers of requested stop cheques. If paid, stop payment order will be rejected by system/if not paid system will execute automatically.
1.6.8	FC Travelers' Cheques	i. System shall have option to sale FC Travelers' Cheques on Cash, Account, Against FC cash, FC Accounts.
		ii. System shall have ability to purchase/sell Travelers' Cheques using Account Cheques or Cash.
1.6.9	Purchase of FC Cash with Local Cash	i. System shall have ability to purchase FC Cash with local Cash.
1.6.10	Check Clearing Processing	i. System shall have ability to inward cheque-clearing processing.
1.6.11	Fund Transfers with connection to SWIFT	i. System shall have ability to generate fund transfers with automatic connection to SWIFT and proper formatting in SWIFT format maintaining proper security protocols.
1.6.12	Back/Forward Value Date Validation	i. System shall have ability to validate the back value and ensure the correct date.
1.6.13	Limit Expiration	i. System shall have option to make automatic expiration of corporate limits.
		ii. System shall have the ability to validate limit and set up specific accounts' wise transaction limit for debit/credit entry.
1.6.14	Dormancy Rules	i. System shall have ability to set rules for dormant account (manually or automatically).
		ii. System shall place rules to automatically set account dormant or restrict action if rules are not met.
		iii. System shall generate SMS/E-mail notifying the inoperative accountholders about the dormancy state of their accounts.
		iv. Shall have ability to restrict signature card showing.
		v. Shall have ability to disallow different transactions as per parameter setup.
1.6.15	Cross Currency Transaction	i. System shall have ability to support cross currency transaction.
		ii. System shall have flexibility to restrict cross currency transaction at the global parameter level as per foreign exchange policy.
1.6.16	File upload facility	i. File upload facility is required for bulk uploading of transactions, e.g. salary, dividends, refund warrants etc. with the facility for account transfer, NPSB, EFT, RTGS, etc. Validation for account number should be in place during upload and detail report for both success and fail transactions.
1.6.17	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 bank's policy (product wise separate period).
		iv. System shall have the ability to configure account/product wise alert supersede Product setup.
		v. Transaction monitoring process shall be implemented (Online/Offline).
		vi. System shall have the ability to store STR/SAR report separately for future reference.

1.7 Teller Transaction

Sl. No.	Item	Description
1.7.1	General Characteristics	i. System shall perform automated transaction generation and generate unique batch/serial/identification number for future reference. ii. System shall move to supervisor queue for onward approval if teller limits are crossed. iii. System shall monitor stock of cash on the following counts: a. Holding of cash in a branch b. Holding of cash, cashier-wise c. Cashier-wise stock d. Cash stock in vault, denomination-wise iv. System may support denomination-wise exchange of cash. v. System shall support collection of charges for cash remittances/ withdrawal. vi. System shall support withdrawal of cash using a. Cheque b. Withdrawal form c. Bank's internal voucher vii. System shall support cash payments of remittance instruments. viii. System shall provide support to allow/restrict withdrawal of cash. ix. System shall provide multi-level approval for cash withdrawal exceeding clear balance. x. System shall check Transaction Profile (TP) & generate appropriate Override/Alert messages before any teller transaction is saved. Moreover system shall generate TP violation report at any point of time. xi. Transaction shall be identified by transaction types.
1.7.2	Denomination	i. System might support denomination-wise capture during any cash transaction, remittance, withdrawal, etc. ii. System may support denomination swapping with tellers.
1.7.3	Available Balance	i. System shall show account balances/shadow balances to authorized users (role based).
1.7.4	Account Information	i. System shall show contact number, address, personal identification number, profession, date of birth, email address, spouse/ children/ parents' information, nominee information etc. ii. There shall be automated KYC update prompt (if required) in the system as per relevant BFIU circular iii. System shall have the ability to define KYC based transaction limit applicable for all channels including OTC.
1.7.5	Meaningful Reference Number	i. System shall use traceable reference numbers.
1.7.6	Signature & Photo	i. System shall show A/C holder's signature in teller screen. ii. System shall show A/C holder's photograph (on request) with signature card.
1.7.7	Priority Customer	i. System shall notify the teller about the priority customer as well as any remarks or notification.
1.7.8	Customer/Bearer	i. System shall notify the teller about the customer/bearer if he/she is enlisted in UNSCR or local sanction.
1.7.9	Approval	i. System shall ask for approval in case of transaction exceeding TP.
1.7.10	Payment Instruments	i. System shall issue, print and clear PO/DD.
1.7.11	OD Limit	i. System shall have the ability to check the OD limit and expiry date.

Sl. No.	Item	Description
1.7.12	Evening banking	i. System shall have feature to provide evening banking facilities for the authorized branches in line with guideline.

1.8 Standing Instructions (SI)

Sl. No.	Item	Description
1.8.1	Automatic Sweep/Standing Instruction Facilities	i. System shall be able to transfer fund 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. iv. System shall be able to transfer amount as per Standing Instruction (SI). v. System shall have the facility of SI modification such as Hold for a certain period with tenor & amount.
1.8.2	Template for Payment Processing	i. System shall allow user to define template for incoming and outgoing payment processing. The template shall include credit and debit payment instruction such as default Nostro Account by currency and others.
1.8.3	Charges Details	i. System shall have separate screen for charge realization for each account with parameter setting options at product level, account level. Account level setup will supersede product level setup.
1.8.4	Product to Product Transfer Facilities	i. System shall be capable of providing client a new account under the same product category, i.e. Std to Std, CA to CA etc. If customer requires opening a new account under same product, the account number shall be different.
1.8.5	Volume based Customer Segmentation	i. System shall support volume based customer segmentation to identify class of customer and provide variable interest or charges based on the daily balance.
1.8.6	Flexible Interest Payable Period	i. System shall link interest payable to other deposit accounts.
1.8.7	Customer Status Inquiry	i. System shall be flexible to group and analyze accounts according to status. It may be included in report module.
1.8.8	Nationwide Collection	i. System shall have the option to view the list of instruments and/or cash that have been processed nationwide. Any nationwide transaction shall immediately update customer account and funds can be withdrawn from any branch.
1.8.9	Payment Transfer Service	i. System shall be able to track the list of payments in various modes (Cash/TT/PO/DD etc.) as per clients' instruction for the purpose of fees calculation. ii. System shall have denomination information. iii. System shall have the option to issue instruments and/or cash payments that have been processed nationwide. Any nationwide transaction shall immediately update customer account and fund can be withdrawn from any branch.

2. Module: Bills and Remittance

2.1 Local Remittance

Sl. No.	Item	Description
2.1.1	Demand Draft (DD)	i. Issuance of Demand Draft against Account/GL/Walk-in Customer. For walk-in DD, some basic information (Name, NID, Mobile number, etc.) needs to be recorded and there shall be report for Walk-in DD. ii. Issuance of Duplicate Draft keeping the original instrument number as reference in the system. iii. Cancellation of Demand Draft. iv. Commission Structure of DD Issuance. v. DD Payment against Account/GL/Walk-in Customer. vi. DD Advice Receive Entry. vii. DD Payment without Advice verifying DD's authentication shall not be allowed. viii. DD Payment with Advice/DD Advice Receive Entry. ix. DD Stop Payment/Remove Stop payment with narration x. View DD transactions. xi. View and Print DD Status and Details (generate reports of unpaid DD's on a certain date). xii. Name, NID/Photo ID No., Mobile number of the sender and/or receiver and reason of transaction in case of transaction above a certain amount as per BFIU Circular. xiii. Validate DD number, amount, issuing date during payment. xiv. Sanction Screening (UNSCR, OFAC, Local etc.)
2.1.2	Pay Order	i. Issuance of Pay Order against Account/GL/Walk-in Customer. ii. For walk-in PO, some basic information (Name, NID, Mobile number, etc.) needs to be recorded and there shall be report for Walk-in PO iii. Liquidation of PO against Account/GL/Walk-in Customer. iv. Issuance of Duplicate Pay Order keeping the original instrument number as reference. v. Cancellation of Pay Order with reason. vi. Stop Payment/withdrawal of stop payment of Pay Order with reason. vii. View Pay Order transactions. viii. View/Print Pay Order Status and Details [PO outstanding report] (generate reports of unpaid PO's on a certain date). ix. Close out withdrawal by PO. x. TD redemption by PO. xi. PO Data Entry to Upload. xii. Income Tiered Commission Structure for Pay order. xiii. Validate Pay Order number, amount, issuing date during payment. xiv. Name, NID No./ Photo ID No., Mobile Number, of the sender and/or receiver and reason of transaction in case of transaction above a certain limit as per BFIU Circular. xv. Sanction Screening (UNSCR, OFAC, Local, etc.)
2.1.3	Telegraphic Transfer (TT) or Mail Transfer (MT)	i. Issuance of Telegraphic Transfer. ii. Payment of Telegraphic Transfer. iii. Commission for Telegraphic Transfer. iv. Name, NID No./Photo ID No., Mobile Number of the sender and/or receiver and reason of transaction in case of transaction as per BFIU Circular.

Sl. No.	Item	Description
		v. Sanction Screening (UNSCR, OFAC, Local, etc.)
		vi. There shall be a provision of confirmation through email or SMS in the system.
2.1.4	Security Deposit Receipt (SDR)	i. Issuance of SDR.
		ii. Check Duplicate Issuance of SDR.
		iii. Cancellation Issuance of SDR.
		iv. Commission/Charges for SDR.

2.2 Foreign Remittance

Sl. No.	Item	Description
2.2.1	Outward Remittance (All kinds of Foreign Remittances are integrated with SWIFT Message System)	i. Outward Remittance-CUST (BDT to FCY) Used while taking BDT from Customer Account and remit the money in Foreign Currency.
		ii. Outward Remittance-CASH (BDT to FCY) Used while taking BDT from Internal/ Cash Account and remit the money in Foreign Currency.
		iii. Outward Remittance-CUST (SAME CCY – Charge in any CCY) Used while taking Foreign Currency from Customer Account and remit the money in Foreign Currency.
		iv. Outward Remittance - CASH (SAME CCY – Charge in any CCY) Used while taking FCY from Internal/Cash Account and remit the money in Foreign Currency.
		v. Outward Remittance - CUST (FCY to FCY) Used while taking FCY from Customer Account and remit the money in another Foreign Currency.
		vi. DRAFT ISSUE – (BDT to FCY) Used while taking BDT from Customer Account and remit the money in Foreign Currency through a Foreign Draft.
		vii. Outward Remittance Functions shall have: a. Add Outward Clean Payments b. Review Outward Clean Payments c. Authorize Outward Clean Payments d. Confirm Outward Clean Payments e. Print Bank Cheque/Draft f. Request Outward CP Cancellation, it cannot be cancelled after authorization. g. Confirm Outward CP Cancellation, it cannot be cancelled after authorization.
		viii. Sanction Screening (UNSCR, OFAC, Local, etc.)
2.2.2	Process Inward Remittance	i. Same CCY for Exporters.
		ii. FCY to BDT- Customer Transaction.
		iii. FCY to BDT-Internal.
		iv. Same Currency.
		v. Same CCY- Internal.
		vi. Cross CCY- Customer Transaction.
		vii. Sanction Screening (UNSCR, OFAC, Local, etc.)
2.2.3	Inward Remittance Functions	i. Add Inward Clean Payments.
		ii. Review Inward Clean Payments.
		iii. Authorize Inward Clean Payments.
		iv. Request Inward CP Cancellation.
		v. Confirm Inward CP Cancellation.
2.2.4	Outward Clean	i. Receive payments from the collecting bank.

Sl. No.	Item	Description
	Collection (A transaction is created when a customer (the payee) presents foreign currency Cheque to a Bank (acting as the remitting bank) for payment)	ii. Collect charges (plus any charges debited by the collecting bank) especially in a case of a dishonored cheque. iii. Make payment (less charges) to the payee (our customer). iv. Use the funds received to settle the negotiated payment made to the payee if cheques were negotiated. v. Recall negotiated repayment from the payee if cheques are returned unpaid. vi. Return cheques unpaid to the payee if no further representation is to be made. vii. Refund auto payment if cheques returned unpaid. viii. Make adjustment to a payment already made as advised by the collecting bank. ix. Name, NID/Photo ID No., Mobile Number of the bearer and reason of transaction in case of online deposit/withdrawal amounting above a certain limit as per relevant circular of Bangladesh Bank. x. Sanction Screening (UNSCR, OFAC, Local, etc.)

2.2.5	Inward Clean Collection (A transaction is created when one bank (acting as the collecting bank) receives a cash letter accompanying Cheque denominated in local currency for payment)	i. Manually update relevant cheque details.
		ii. Process cheques drawn on own banks directly without involving a clearing bank.
		iii. Make payment to the remitting bank.
		iv. Return cheques unpaid to the remitting bank.
		v. Refund auto payment if cheques returned unpaid.
		vi. Make adjustment to a payment already made.
		vii. Collect charges from the remittance or by debiting the remitting bank's account if cheque is dishonored.
		viii. The system shall issue a notification to the principal party. Depending on the settlement action, the notification may be one of the following:
		  a. Credit Advice
		  b. Advice of Dishonor
		  c. Cheque Settlement Advice (either credit or dishonor)
		  d. Credit Adjustment.
		ix. Sanction Screening (UNSCR, OFAC, Local, etc.)

2.2.6	Advance TT(Outward)	i. From Current Deposit (CD) Account: Per instance and Yearly limit should be Checked Dynamically. ii. From Exporter Retention Quota (ERQ) account: Per instance limit should be Checked Dynamically. iii. Swift Message:MT103
2.2.7	Advance TT(Inward)	i. Receive register shall be maintained with distribution (Foreign and Local Currency)

3. Module: Deposits

3.1 General Characteristics

Sl. No.	Item	Description
3.1.1	Customer Eligibility /Category	i. System shall ensure the following Customer Eligibility /Category: 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 Account 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 type of customer as per law of land. For example, a foreign contractor is not allowed to open an interest bearing deposit account.
3.1.2	Account Opening Procedure	i. System shall store customer's: a. Photograph. b. Specimen Signature. c. Copy of NID and/or other Specific papers/documents on the basis of customer type. d. Contact phone/mobile no. with contact person details, especially for corporate customer. e. Email-id/address if available. f. UNSCR & Local Sanction Screening.
3.1.3	Master File Information	i. KYC compliance
3.1.4	Introducer	i. System shall ensure: a. Introducer Information b. UNSCR & Local Sanction Screening for introducer.
3.1.5	Joint Account Concept	i. 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 & local sanction.
3.1.6	Nominee Inclusion	i. System shall allow this option for individuals only and ensure nominee (May be multiple) is not listed in UNSCR & local sanction.
3.1.7	Operation by Power of Attorney Holder	i. System shall allow this option and ensure PA holder is not listed in UNSCR & local sanction.

Sl. No.	Item	Description
3.1.8	Account No. Format	i. System shall ensure that account number is 13 digits or mapped to 13 digits as per Bangladesh Bank guidelines. ii. Branch code may be tagged with account separately which can be transferred along with liability based on maker checker of both source and destination branch. iii. Product code may be included in the account number format.
3.1.9	Deposit Procedure, Transaction Nature, Restrictions	i. Random by the depositor. ii. There may be option for including depositor information, as required.
3.1.10	Withdrawal Procedure	i. 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 bank through voucher/withdrawal slip with verification, e.g. assurance of confirmation needed. d. Through alternative delivery channels which are approved by Bangladesh Bank. e. If Bearer/Beneficiary is not listed in UNSCR & local sanction. ii. There may be option for including withdrawer information, as required.
3.1.11	Return of Cheques	i. System shall record returned cheques in Cheque Return Register. ii. System shall be able to provide details of cheque return specially reason of return. iii. System shall be able to recover charges for dishonor of cheque for insufficient fund. iv. System shall be able to recover any type of penalty for return of cheque for insufficient fund.
3.1.12	Stop payment	i. System shall maintain Stopped Cheque Register with instruction letters inserting time & date. ii. System shall have facility to store/view stop payment of Cheque Audit Log. iii. System shall be able to realize charge for stop payment.
3.1.13	Standing Instruction	i. System shall maintain Standing Instruction Register. ii. System shall be able to generate transactions through standing instruction with date, amount, source from/to account, amount etc. iii. System shall hold the amount of instruction in case of insufficient balance in Payee/Source account and shall automatically transact and release the hold amount when fund becomes available. iv. System shall ensure beneficiary is not listed in UNSCR & local sanction.
3.1.14	Issue of Cheques	i. System shall issue cheque books. ii. System shall configure and validate number of leaves at product level. iii. System shall have ability to levy Charge for issuing cheque book as prescribed by the Bank. iv. System shall have ability to make requisition for cheques on demand.
3.1.15	Restraints	i. System shall be able to prevent all transactions with suitable kind of restraint. ii. System shall have ability to restrain customer [restrain all accounts under one customer ID].

Sl. No.	Item	Description
		iii. System shall have a dedupe (Deduplication) checking facility before creating a customer ID in the system.
		iv. System shall have ability to restrain products (all customers under one product).
		v. System shall have ability to restrain account.
		vi. System shall have ability to restrain debit transactions.
		vii. System shall have ability to restrain credit transactions.
		viii. System shall have ability to restrain cash transaction, cheque transaction, ATM transaction and so on for a particular account, customer and/or product.
		ix. System shall have ability to block amount with expiry date and multiple blocking options.
		x. System shall have ability to block any amount irrespective of the available balance of the account.
		xi. System shall have ability to provide detail reasons and reason category for Freeze/Dormant/Lien so that MIS can be generated.
3.1.16	Signature and Photograph	i. System shall obtain signature and photograph of each account holder in signature card.
		ii. System shall store signature and photograph of each account holder in the central database.
		iii. System shall store specimen signature and photograph in the central database or in the signature card.
3.1.17	Account Statement	i. System shall be able to generate account statement on demand. Charge can be levied for generating such ad-hoc statements.
		ii. System shall have bulk account statement generation process without any fee for period statement especially on half-yearly/yearly basis commonly for all customers.
		iii. System shall be able to generate balance confirmation letter on demand.
		iv. System might be able to generate MT940/MT942/MT950/MT900/MT910 for the enrolled customers.
3.1.18	Minimum Balance	i. In accordance with the banks' internal policy, system may or may not restrict the customer to draw fund without keeping minimum balance but may generate a report for bank's internal purpose.
3.1.19	Source Tax, Excise Duty, Incidental/ Account Maintenance Fee and Closing Charge	i. System shall be able to configure source tax and excise duty as per the guidelines of NBR.
		ii. System shall collect source tax for interest earned at the time of interest payment.
		iii. System shall collect excise duty (charges) on yearly basis as per instructions of concerned authority.
		iv. System shall collect account maintenance fee and closing charge from the account (except term deposit account) as per the guideline of Bangladesh Bank.
		v. System shall have ability to apply closing charge (except term deposit account).
		vi. System shall have ability to parameterize/configure all charges.
		vii. System shall have hovering option to deduct charges.
		viii. In the event of unavailability of balance during charge and fees deduction, system shall have the ability to collect them in the future when balance is available.
3.1.20	Dormant Account	i. System shall mark accounts as dormant as per Bangladesh Bank rule. Bangladesh Bank may provide a common definition for all banks.

Sl. No.	Item	Description
		ii. System shall have feature to apply (as per Bangladesh Bank guideline) dormancy on any CASA account if there is no customer made transaction for the defined period. For dormant accounts, only credit postings may be allowed.
		iii. System shall bring first deposit/withdrawal to the notice of Branch Manager (Role based) for permission.
		iv. System shall normalize accounts before allowing any transaction.
		v. System shall have ability to accrue and capitalize interest similar to normal account.
		vi. System shall have ability to levy annual charges on this account same as normal account.
		vii. System shall be parameterized/ configurable.
		viii. Transaction (CBS/Card/Internet Banking/Wallet etc.) may be allowed with changing account status.
		ix. System shall generate dormant marking /unmarking register.
		x. System shall have the ability to send auto mail/notice before making the account dormant.
3.1.21	Inoperative Account	i. System shall mark accounts inoperative as per Bangladesh Bank guideline.
		ii. System shall automatically mark accounts on daily basis.
		iii. System shall bring first deposit/withdrawal to the notice of Branch Manager for permission.
		iv. System shall transfer balance to Bangladesh Bank if the account is inoperative for a specific period or 10(ten) years. However, shall serve 3 (three) notices during this specific period or 10-years period. System shall be able to prepare a report for such accounts with ageing. (years should be configurable)
		v. System shall mark customer as deceased in case of the death of the customer. System shall not debit any charge from this account and only allow credit postings. System shall have audit log with maker/checker, date, reason etc. for such operations.
		vi. This shall be parameterized/configurable.
3.1.22	Monthly Provision for Accrued Interest	i. System shall keep monthly provision for accrued interest (at a given frequency based on product type).
3.1.23	Duplicate Statement	i. System shall have ability to charge for issuance of duplicate statement.
3.1.24	Special Features	i. System may be capable to offer product to customer as per age or Segment or Gender.(Example Senior Citizen/Female will get different facility).

3.2 Savings Deposit/Mudaraba Savings Deposit for Shariah based Islamic Banks

Sl. No.	Item	Description
3.2.1	Savings Deposit Account for Minors	i. System shall treat any customer below 18 (eighteen) years of age as minor. (Age configurable)
		ii. System shall store legal guardian information for minor accounts. System shall treat the account as normal account when the minor reaches the age of 18 and shall also generate a notification to inform the customer's guardian. In such cases, the account information shall be updated.
		iii. System shall ensure that the legal guardian is not listed in UNSCR & local sanction.

Sl. No.	Item	Description
3.2.2	Interest Calculation/Profit Calculation and Application	i. System shall perform interest calculation on the basis of daily balance/ minimum monthly balance/ average balance slab wise of the month with or without other restriction such as no. of withdrawal and/or deposit, amount of withdrawal and/or deposit, minimum or maximum amount of withdrawal or deposit, percentage of withdrawal amount and combination of such features. For example: a. Interest is calculated based on monthly minimum balance, i.e. minimum balance from 5th to last day of the month (Interest shall be calculated on daily basis). b. Ability to configure the maximum balance for interest calculation of Individual Account (e.g. Tk. 25,00,000) and Joint Account (e.g. Tk. 50,00,000). c. Interest is compounded half-yearly in June and December. d. The accounting entries for month end is: Dr- P&L Cr - Accrual e. The accounting entries for half-year/year end is: Dr- Accrual & P&L Cr- SB account sundry party ii. For banks operating under Islamic Shariah, profit calculation shall be followed as per BB guidelines. iii. All the above conditions shall be configurable so that if those conditions are changed, end user can configure using front end screen. iv. System shall have provision to apply Bangladesh Bank rule.
3.2.3	Account Maintenance Fee	i. System shall levy account maintenance fee based on average deposit of the account. ii. System shall apply it on half-yearly basis/Yearly as per configuration. iii. System shall collect account maintenance fee and closing charge from the account as per Bangladesh Bank guidelines. iv. System shall have charge waiver option at account level as well as customer level. v. System shall have provision to apply Bangladesh Bank rule. vi. System shall have the facility to hold charges/excise duty in case of insufficient balance and hovering option should be enabled.
3.2.4	Non-interest/Non-profit Bearing	i. System shall have ability to configure non-interest bearing savings account at the option of the depositor.
3.2.5	Withdrawal Allowed	i. System shall have options to configure this as per bank's internal circular/regulatory authority.
3.2.6	Initial Deposit	i. System shall have ability to configure at product level. ii. System shall be flexible as per bank's rule.
3.2.7	Transfer of Account	i. System shall have feature to transfer accounts. ii. System shall pay Interest up to last day (in case of transfer). iii. System shall realize actual postage.

3.3 Current Deposit/Al-Wadiah Deposit for Islamic Banks

Sl. No.	Item	Description
3.3.1	Category	i. Demand Deposit: While/During credit balance ii. Advance: While/During debit balance (Overdraft)
3.3.2	Initial Deposit	i. System shall have ability to configure at product level. ii. System shall be flexible as per bank's rule.

Sl. No.	Item	Description
3.3.3	Interest/Profit Calculation	i. System may or may not produce interest/profit on credit balance (flexible). ii. System shall recover daily product basis (reckoning 360) interest/profit for debit balances only (OD). iii. System shall have the option to make the Interest/profit calculation variable as per Regulatory/Bank Guidelines/Policy.
3.3.4	Account Maintenance fee	i. System shall recover these charges in June and December each year as per Bangladesh Bank guidelines. ii. System shall have ability to parameterize options. iii. System may have the option to assign reward points to account and provide benefit automatically (configurable) regarding fees and charges.
3.3.5	Transfer of Account	i. System shall be able to transfer all current deposit/Al-Wadiah deposit to other accounts if not categorized as over draft. ii. System shall realize transfer charge.
3.3.6	Closing Charge	i. System shall be able to configure closing charge at product level as per the guideline of Bangladesh Bank.
3.3.7	Balance Confirmation	i. System shall obtain balance confirmation from the account holders as on 30th June and 31st December each year. ii. This confirmation date shall be configurable.
3.3.8	Current and overdraft feature	i. System may have the facility of both current and overdraft feature in same account/product.

3.4 Special Notice Deposit/Mudaraba Special Notice Term Deposit

Sl. No.	Item	Description
3.4.1	Interest/Profit Calculation	i. System shall calculate interest/profit on daily product, accruals monthly & capitalize half-yearly. Daily/monthly accruals data shall be available. ii. System shall forfeit interest for that month if notice not received for transactions by the bank. iii. System shall consider notice date and transaction date as per central bank guideline (7 days notice which suppose to be parameterized). iv. System shall pay interest/profit yearly and when the account is closed. It can also be paid half-yearly. v. System shall have ability to differ interest/profit rate based on average monthly balance. vi. System shall fix slab wise interest/profit rate for each month and change it time to time. (As per Bangladesh Bank Guidelines) vii. System shall calculate interest/profit using following formula: (Daily balance X No. of days X Rate of interest/profit)/(360x100) (Shall be configurable at product level). Number of days shall be the actual number of days for a particular month. [366/360 may be flexible]
3.4.2	Withdrawal Allowed	i. System shall have the option to enter notice of previous date.

3.5 Fixed Deposit Receipt

Sl. No.	Item	Description
3.5.1	Withdrawal	i. System shall pay on maturity or premature encashment.
3.5.2	Interest/profit Withdrawal	i. System shall allow option to withdraw the accrued interest retaining the principal amount on or after maturity. ii. Shall have interest auto transfer option to operative A/C on maturity if customer requests.

Sl. No.	Item	Description
3.5.3	Premature Encashment	i. System shall have the option to configure if it changes by bank/regulatory authority. ii. In case of premature encashment interest rate should be configurable based on amount slab wise in product level.
3.5.4	Renewal Procedure	i. System shall be able to allow renewal on maturity if desired by the depositor. ii. System shall obtain instruction from the customer at the time of issuing of FDR whether to be renewed for the same period at the prevailing rate. iii. System shall not allow renewal after receiving death certificate/authentic information of death of the depositor. iv. System may allow partial closure or amendment during next renewal of term deposit product.
3.5.5	Auto Renewal	i. In absence of any instruction from the depositor, system shall treat the FDR as renewed after maturity for the same period of the said FDR at a prevailing rate of the same period and will continue unless any instruction received from the customers. ii. System shall have 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 product level and account level with compounding and without compounding. iv. System shall have the facility to auto renewal with /without interest based on customer request.
3.5.6	Overdue FDR	i. System shall be capable of FDR auto renewal as per customers request ii. System shall make profit accrual continuously.
3.5.7	Interest/profit Rate	i. System shall implement different period and slab-wise interest rate. ii. System shall change interest rate from time to time with effective date on the renewal date of the deal and as per agreement with the Client. iii. Generally Interest rate shall not change during its current tenor. iv. System shall allow account-wise separate interest rate.
3.5.8	Interest/profit Calculation	i. System shall calculate interest on Daily Product Basis (reckoning 360 days a year). ii. Interest = (Principal Amount x No. of days x Rate of interest)/ (360X100). [366/360 may be flexible] iii. System shall calculate interest as per Bangladesh Bank guideline. iv. System shall have the option to make the Interest Calculation/ Profit Calculation variable as per Bank profit/policy etc.
3.5.9	Interest/profit Application	i. System shall apply interest on maturity date. ii. System shall apply interest on anniversary date.
3.5.10	Interest/profit Compounding	i. System shall apply simple interest rate. ii. In case of auto renewal, interest shall be capitalized.
3.5.11	Monthly Provision for Accrued Interest//profit	i. System shall have monthly provision for accrued interest. ii. System shall allow loan facility against MTDR both in Quard & Bai-Murabaha form (for Islamic Banking).
3.5.12	Transfer of Account	i. System shall not allow transfer of FDR accounts.
3.5.13	Lien	i. System shall allow loan against an FDR after marking that FDR as lien and FDR may be marked lien against multiple loans. Multiple

Sl. No.	Item	Description
		FDRs might be marked as lien against single loan.
3.5.14	Fixed Deposit (FD) Advice	i. System shall have ability to generate FD advice as format decided by the Bank. The advice shall be printed directly or by creating pdf file. ii. System shall control sequence of printing/generation of FD advice. iii. If more than one advice is generated for a particular FD, system shall mention/mark it as duplicate.

3.6 Monthly/Quarterly/Other term Profit Based Fixed Deposit

Sl. No.	Item	Description
3.6.1	Term/Period	i. 1 year, 3 years, 5 years or as per the bank definition. ii. System shall have ability to parameterize.
3.6.2	Interest//profit Rate	i. System shall change interest rate from time to time with effective date.
3.6.3	Principal Withdrawal	i. System shall allow principal withdrawal on maturity or at any time as premature encashment.
3.6.4	Interest/profit Withdrawal	i. System shall transfer on monthly/quarterly/any period as per bank's product feature basis to savings/current/settlement account of the depositor or through cash.
3.6.5	Interest/profit Calculation	i. System shall calculate daily product basis. ii. System shall have the ability to calculate Interest/Profit as per Regulatory/Bank Guidelines/policy etc.
3.6.6	Interest Application	i. Monthly/Quarterly/others as per product feature.
3.6.7	Interest Compounding	i. Simple interest
3.6.8	Monthly Provision for Accrued Interest	i. System shall keep monthly provision for accrued interest.
3.6.9	Premature Encashment	i. System shall have the option to configure the premature encashment rules as per bank's own policy. Excess interest, if paid earlier, to be recovered. Shall be configurable at product level. ii. System shall have the option to configure the above as per bank's rule.
3.6.10	Transfer of Account	i. System shall not allow transfer of FDR accounts.

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

Sl. No.	Item	Description
3.7.1	Term/Period	i. System shall be able to change required tenor of deposits for double/triple/other schemes from time to time depending on the rate of interest which varies from bank to bank. ii. System shall be able to configure at product level as per bank's policy.
3.7.2	Withdrawal Procedure	i. System shall pay on maturity or premature encashment.
3.7.3	Interest Calculation	i. System shall calculate interest on daily product basis. ii. System shall fix product-wise interest rate.
3.7.4	Loan Facility	i. System shall be able to provide loan facility as per bank's rule.
3.7.5	Transfer of Account	i. System shall not allow transfer of FDR accounts.

3.8 Deposit Pension Scheme (DPS)

Sl. No.	Item	Description
3.8.1	Duration	i. System shall be able to configure for any specified period.
3.8.2	Deposit Amount	i. Any amount set by the bank.
3.8.3	Deposit Date	i. System shall input on any day of the month as per bank's policy.
3.8.4	Interest Rate and Type	i. System shall be able to parameterize as per bank's policy.
3.8.5	Premature Encashment	i. System shall have the option to configure as per bank's rule.
3.8.6	Pension Amount	i. System shall calculate pension amount based on installment size, interest rate and tenor.
3.8.7	Closing Procedure	i. System shall be able to block/close account for due installments as per bank's policy.

Sl. No.	Item	Description
3.8.8	Withdrawal Procedure	i. System shall be able to configure as single or monthly, quarterly, half-yearly, yearly pension basis.
3.8.9	Unique link ID	i. There may be a Link CASA account from where the installment amount can be deducted and deposited into the matured amount.
3.8.10	Automated lien	i. There should be automated lien marking ability to the DPS account where OD facility allowed against it and on maturity/pre-matured the amount should not transfer to the link account until OD is adjusted.

3.9 Continuous Loan Overdraft (OD) on Current Account

Sl. No.	Item	Description
3.9.1	Basic Features	i. System shall perform at most monthly interest bearing and accrual, shall make capitalization quarterly. ii. System shall have provision to provide overdraft facility and credit facility on the same account if approved and obtained. iii. System shall have provision to allow excess over limit if allowed by the competent authority. iv. System shall have provision to allow temporary overdraft if allowed by the competent authority. v. System shall fix overdraft interest and review it periodically. vi. System shall calculate interest based on daily ending balance (if balance is negative). vii. System shall have no repayment scheduling option for continuous loan. viii. System shall report overdraft balance to CL properly. ix. System shall report and monitor overdraft balance facility.
3.9.2	Accounting Entries	i. Accounting Entries for Interest Accrual Dr - Interest Receivable Cr - Income Account (for unclassified accounts) Cr - Interest Suspense Account (for classified accounts) ii. Interest/profit accrual/capitalization at quarter end. Interest capitalization on the overdraft amount shall be restricted for deceased and Non Performing Accounts (NPA).
3.9.3	Change of Interest Rate	i. System shall be configurable as per bank's policy.
3.9.4	Special Services	i. System shall be able to provide following special services: a) Loan Ledger Statements b) Interest Calculation Sheet c) Account Closure d) Loan Status maintenance and monitoring.
3.9.5	Operational Process after Expiry	i. System shall not impose any restriction for withdrawal in case of credit balance. ii. System shall allow withdrawal or restrict it for debit balance upon approval of competent authority. iii. System shall continue interest charge as per rule. iv. System generated transaction such as fees/charges, interest shall be allowed for both cases: expired loan and excess over limit.
3.9.6	Classification Status Change	i. System shall allow change of classification/declassification status automatically after following defined rules only. ii. System shall have option to change status as per Qualitative Judgment (manually).

Sl. No.	Item	Description
3.9.7	Movement of Interest Suspense	i. System shall allow movement of interest suspense on classification basis or upon actual realization of interest automatically.

3.10 Teller (Cash Counter) Transaction Services

Sl. No.	Item	Description
3.10.1	Products	i. All products of retail banking, loans and advances, and trade finance that deal with cash deposit and withdrawal.
3.10.2	Maker and Checker	i. System shall follow the concept of maker and checker for all Teller transactions having the posting limit for teller and authorization limit for checkers. Auto authorization may be imposed having transaction limits as per DOA. ii. System shall perform all validations such as account balance, account status (no. Dr, no. Cr, amount block, freeze, stop payment, stop cheque, valid instrument, transaction profile etc.) before submitting the transaction for authorization. iii. System shall check images (signature and photographs and/or thumb impression etc.) at teller and authorizer end.
3.10.3	Cash Deposit	i. Teller shall accept cash deposit/installment etc. for all products.
3.10.4	Cash Withdrawal	i. System shall allow account holder or bearer to withdraw cash by cheque or debit voucher or valid instrument. ii. System shall maintain contra cash in hand transaction automatically based on cash receipt/withdrawal. iii. System shall notify teller for Transaction Profile violation or system shall show the TP when teller toggle the enquiry screen. iv. System shall have centralized system for TP monitoring with proper audit log.
3.10.5	UNSCR & Local Sanction Screening	i. System shall store name, photo ID no. of the bearer and reason of transaction in case of online deposit/withdrawal amounting above a certain amount as per BFIU circular. ii. System shall perform UNSCR & Local Sanction Screening.

3.11 Payment Order (PO) Transaction Services

Sl. No.	Item	Description
3.11.1	Issue	i. System shall charge commission (fee) per Pay Order depending on amount and slab it belongs to. ii. System shall issue pay order with date, amount, payee name, purpose, mobile number, etc. Other information, e.g. remitter name and account no. is optional. iii. System shall enable Pay Order Book in system under dual control. iv. System shall keep inventory of Pay Order Book with joint custodian mechanism. v. System shall strictly follow KYC for walk-in customers. vi. System shall be able to generate Pay Order Leaf cancellation and stop payment report. vii. System shall generate Contra entry of Pay Order systematically. viii. System shall ensure that customer is not listed in UNSCR & local sanction. ix. System shall generate payment order outstanding report.

Sl. No.	Item	Description
3.11.2	Payment	i. System shall be able to make payment through cancellation with or without cancellation of charge as per bank's policy. ii. System shall generate Contra entry of Pay Order payment.

3.12 Demand Draft (DD) Transaction Services

Sl. No.	Item	Description
3.12.1	Issue	i. System shall charge Commission (fee) per Demand Draft depending on amount and slab it belongs to. ii. System shall issue Demand Draft with date, amount, issue branch, payee branch and payee name. Other information, e.g. remitter name and account no. is optional. iii. System shall generate DD test number. iv. System shall issue a DD Advice to payee branch with all information related to that DD. v. System shall issue Contra entry of DD systematically. vi. System shall endure that Customer is not listed in UNSCR & local sanction.
3.12.2	Payment	i. System shall charge Commission (fee) for paid by cancellation per Demand Draft depending on slab amount. ii. System shall issue Paid by Cancellation Advice to payee branch with all information related to that DD. iii. System shall generate Contra entry of DD payment.

3.13 Telegraphic/Telephonic Transfer (TT) Transaction Services

Sl. No.	Item	Description
3.13.1	Issue	i. System shall charge Commission (fee) per TT depending on amount and slab it belongs to. ii. System shall issue Telegraphic/Telephonic Transfer with date, amount, issue branch, payee branch and payee name. Other information, e.g. remitter name, purpose and account no. is optional. iii. System shall Generate TT test number. iv. System shall issue a TT Advice to payee branch with all information related to that TT. v. System shall transfer TT information to payee branch over phone. vi. System shall ensure that Customer is not listed in UNSCR & local sanction.
3.13.2	Payment	i. System shall respond/receive TT information over telephone from issuing/payee branch. ii. System shall verify TT Test No. (payee branch), if it is found OK, then shall credit TT amount to A/C or TTPO/Sundry. iii. System shall issue a TT Responding Advice to issuing branch.

4. Module: Loans/Credit/Investment

4.1 Continuous Loan (CC/OD)

Sl. No.	Item	Description
4.1.1	Loan Proposal Initiation	i. Application with supporting documents such as Business/Trade License, Audited Balance Sheet, Tax Clearance, Legal Documents, Statement of Affairs (Income & Expense) with Cash Flow Statements, CIB Clearance, Authenticity of Collaterals, Preparation of Loan Proposal as per format (check list) shall be maintained.
4.1.2	Loan Approval Process	i. Every detail, i.e. amount, interest rate, tenure, collateral value, applicable schedule of charges, terms and conditions etc. of the HO Sanction Advice shall be inputted in the system at HO level. Upon receipt of loan proposal from the branch, the concerned department shall prepare the highlights/memo for the credit committee and for onward approval of the same for the Board of Directors (if required). System shall accommodate Delegation of Authority (DOA) as per bank's policy.
4.1.3	Checking Collateral Coverage	i. Respective collateral items shall be acceptable as per respective BB Circulars and recorded with proper valuation authenticated by CAD (not branch). ii. System shall have the facility to map single collateral with more than one client. iii. System shall have the facility to map single collateral with more than one loan limits of a client. iv. System shall have the facility to keep godown and insurance coverage data of collaterals.
4.1.4	Loan Creation	i. Overdraft Limit (OD/CC) shall be activated in OD/CC Account of customer in CBS system as per Credit Approval which is reviewed annually. ii. Ability to store loan appraisal and initial information (e.g. loan proposal, risk grading, Credit Rating, EnvRR, credit worthiness, origination etc.). iii. Approval number, approval amount, approval date, approval 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. v. System shall ensure that the borrower is not listed in UNSCR & local sanction.
4.1.5	Disbursement	i. After receiving the approval from CRM, CAD shall prepare sanction advice and forward the same to the branch. Branch shall also issue a sanction advice/ 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 sanction and upload /input all relevant information/ identification in the system. CAD shall make final disbursement after satisfaction. ii. Issuance of sanction letter, inputting limit/disbursement of loan etc. shall be separate function and access right shall be given in the users' role level as per policy of the Bank. iii. Disbursement occurs as per customer's withdrawal from OD/CC account through Cheque/Transfer within the Overdraft Limit.

Sl. No.	Item	Description
		iv. For Islamic banks deal-wise disbursement is applied. Sale-Purchase is the essence of Shariah banking, so Pay Order is given to supplier/seller of goods. With few exceptions (agency arrangement), fund transferred by the bank in current a/c of the customer is violation of Shariah (as no sale-purchase is occurred).
4.1.6	CRM Limit Checking	i. Approved CRM limit, purpose with code, and identified CL category shall be loaded in the system by CRM division. After checking the loaded limit in line of approval, CRM division shall authorize it. Disbursed Loan amount shall not exceed the approved credit limit at any point of time. 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.
4.1.7	Interest/Profit	i. Daily accrual (simple) against outstanding debit balance as per OD/CC rate input & interest charged on quarterly (compound) basis or as per regulatory guideline. ii. For Islamic Banking, mark-up profit is charged.
4.1.8	Provisioning	i. As per Central Bank guidelines.
4.1.9	Arrears Processing	i. Penal interest (as per bank's policy) input shall be in place. ii. Daily accrual against outstanding over the OD/CC limit as per Penal interest rate shall be realized in quarterly rest basis. iii. Past due profit (for Islamic Banking) is termed as compensation and send to compensation or suspense A/C as per Bangladesh Bank guidelines. As income is uncertain here, so bank cannot take it into income A/C. Transfer the same to HO on quarterly basis.
4.1.10	Adjustment/ Liquidation	i. As per credit transaction in the OD/CC account, OD/CC outstanding shall be adjusted.
4.1.11	Classification	i. Considering overdue status and customer's financial condition, branch shall ensure appropriate classification status as per Bangladesh Bank guidelines for the respective facility through system. ii. System shall be able to auto classify marking, loan provisioning, transaction generation as per Bangladesh Bank guideline which can be set at product level. iii. Considering Qualitative Judgment (QJ) for non-performing Loan/Investment, Interest calculation shall be ceased (Unaccounted/Unearned) for BL loans. iv. All restructure and reschedule history data should be available in the system. v. Historical EMI wise overdue segregation needs to be considered during classification.
4.1.12	Rescheduling & Restructuring	i. System shall have the rescheduling and restructuring facility with relevant history and audit trail. For new account creation, the account shall be referenced with the previous account. ii. System shall have ability to apply non-accrual interest & interest suspense for loan rescheduling.
4.1.13	Renewal of Continuous Loan	i. System may continue the existing account with renewal. ii. If OD/CC remains on expired period, penalty shall be charged as per Regulatory/Bank's Policy and regular rate will be reinstated from renewal date. iii. System shall maintain OD/CC start date, Expiry Date, Renewal Date and renewal date history.

4.2 Fixed Term Loan

Sl. No.	Item	Description
4.2.1	Loan Proposal Initiation	i. Application with supporting documents such as Business/Trade License, Audited Balance Sheet, Tax Clearance, Legal Documents, Statement of Affairs (Income & Expense) with Cash Flow Statements, CIB Clearance, Authenticity of Collaterals, Preparation of Loan Proposal as per format (check list) shall be maintained.
4.2.2	Loan Approval Process	i. Every detail, i.e. amount, interest rate, tenure, collateral value, applicable schedule of charges, terms and conditions etc. of the Sanction Advice shall be inserted in the system.
4.2.3	Checking Collateral Coverage	i. Respective Collateral items shall be acceptable as per respective BB Circulars and recorded with proper valuation authenticated by CAD (not branch).
4.2.4	Loan Calculator	i. Calculates the installment amount and prepares the amortization schedule based on the given information like loan amount, interest rate, tenor etc.
4.2.5	Loan Booking	i. Books a loan in the system with all the financial information and static data for a customer and generates loan account.
4.2.6	Loan Creation	i. Loans are disbursed through creation of contracts/deals under the corresponding module of CBS under appropriate limit 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, approval 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. v. System shall ensure that the borrower is not listed in UNSCR & local sanction.
4.2.7	Disbursement	i. After receiving the approval from CRM, CAD shall prepare sanction advice and handover the same to the branch. Branch shall also issue a sanction advice/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 sanction and upload/input all relevant information/ identification in the system. CAD shall make final disbursement after satisfaction ii. Disbursements occur as per loan request as per approval and limit through creation of contract/deal under the corresponding module of CBS. iii. Phase by phase disbursement may be allowed.
4.2.8	CRM Limit Checking	i. Approved CRM limit, purpose with code, and identified CL category shall be loaded in the system by CRM/CAD division. After checking the loaded limit in line with approval, CRM/CAD division shall authorize it. Disbursed loan amount shall not exceed the approved credit limit at any point of time. 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.
4.2.9	Interest/Profit	i. Daily accrual (simple) against outstanding debit balance as per applied rate input & Interest charged on periodic basis or as per regulatory guideline. Principal amount, Interest amount and outstanding balance shall be shown separately as per Regulatory

Sl. No.	Item	Description
		guidelines.
		ii. For Islamic Banking Term Financing, rental basis/mark-up profit shall be charged.
		iii. Compounding/simple interest facility at moratorium period shall be maintained.
4.2.10	Arrears Processing	i. Penal interest (as per BB guideline and bank's policy as well) input in CBS system. System shall be able to calculate penal interest on the overdue interest and overdue principal separately.
4.2.11	Payment	i. The maturity date and settlement/maturity accounts shall be input while creation of the contract/deal. ii. System shall be flexible to keep the contract/deal alive even after its maturity. iii. System shall have flexibility to set up the sequence which may be followed as under: a) Charges/Duties b) Penal Interest c) Overdue Interest d) Interest e) Principal f) Total outstanding iv. Track receivable can also be introduced in case of shortage of installment amount. As a result, whenever fund is available in source account, system shall adjust the tracked amount for installment first. v. System shall have feature to realize due amount automatically from the assigned CASA account. If there is insufficient fund then system shall create a HOLD for the unrealized amount and system shall recurrently try to realize the due amount subject to availability of fund during EOD. vi. System shall support pre-payment with or without fee/charges. Also, advance payment shall be supported.
4.2.12	Provisioning	i. System shall have product-wise provisioning facility.
4.2.13	Redemption	i. On demand subject to sufficient fund in the settlement/maturity account. ii. After pay-off, system shall generate a loan pay-off confirmation.
4.2.14	Financial Data Amendment	i. Financial data like Interest rate can be amended if required.
4.2.15	Static Data Amendment	i. Static data like MIS codes can be amended in system as and when needed.
4.2.16	Repayment Processing	i. Installment based repayments are processed in the system through standing instructions set between customer account and loan account. Every installment amounts are collected from customer accounts and reduces the loan balances as per the schedule. ii. System shall have facility to set different types of repayment schedule like Equated Payment, Balloon Payment, Bullet Payment, Uneven Payment, etc. based on product. iii. Partial payment, full payment, prepayment, prepayment with fees or charges, Advanced schedule payment shall be supported. iv. System shall support to maintain moratorium period. v. Payment shall be supported at the time of Moratorium period.
4.2.17	Part Settlement	i. Part settlement is possible to reduce the debt and also reduce either the tenor or installment amount accordingly. Anytime

Sl. No.	Item	Description
		repayment information like installment amount, no. of installments can be changed as per customer request with partial payment or without any partial payment
4.2.18	MIS Information	i. MIS information is captured in the system for the preparation of different management report.
4.2.19	Loan Enquiry	i. Loan enquiry module is used to view the status of the loans. Information like start date, amount, installment, payment other loan information (if any), CIB status etc. can be viewed.
4.2.20	Reversal	i. Any type of fees reversal is managed in this module. ii. System shall have the flexibility to reverse any events like payment, modification when needed and can be repeated the same if required.
4.2.21	Principal Movement/Top-Up	i. System shall allow phase by phase disbursement for limit increase or decrease in refinance.
4.2.22	Top up/ enhancement	i. System may have the provision to TOP UP/Enhancement in existing LOAN account maintaining appropriate history and should be parameterized in product/ account level.
4.2.23	Property Details	i. Property details like Market Value (MV), FSV, valuation date, property address are captured here for the Mortgage loans.
4.2.24	Reports	i. Various loan related reports are generated in the reports module.
4.2.25	Repricing Facility	i. Repricing of loans on given frequency.
4.2.26	Credit Administration	i. Loan limit control and documentation shall be maintained.
4.2.27	Classification	i. Considering overdue status and customer's financial condition, appropriate classification status shall be ensured for the respective facility through system. Classification can be done based on overdue date or number of Overdue Installment. ii. System shall be able to apply classify marking, loan provisioning, transaction generation as per Bangladesh Bank guideline which can be set at product level. iii. Considering Qualitative Judgment (QJ) for non-performing loan/investment, interest provisioning and application shall be as per regulatory guidelines.
4.2.28	Rescheduling & Restructuring	i. System shall have ability to capture rescheduling and restructuring related MIS information. ii. System shall have ability to apply non-accrual interest treatment for reschedule loan.
4.2.29	Min Max interest rate	i. System shall have the provision for Min Max interest rate capping which can be parameterized in product level.
4.2.30	Auto repayment schedule generation	i. System shall have the provision for auto repayment schedule generation facility in case of schedule disbursement / rate change / tenure changes / advance payment.

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

Sl. No.	Item	Description
4.3.1	Facility Booking	i. System shall be able to book Islamic finance in the system with all financial information and static data for a customer and generate account.
4.3.2	Disbursement	i. Disburse the finance as per the limit for a finance account, partial disbursement is also possible.
4.3.3	Payment Processing	i. Monthly payments are processed in the system through standing instructions set between customer account and finance account. Every month installment amounts are collected from customer and reduces the finance balances as per the schedule.

Sl. No.	Item	Description
4.3.4	Financial Data Amendment	i. Financial data like interest rate can be amended if required. No interest/profit allowed in Quard.
4.3.5	Static Data Amendment	i. Static data like MIS codes can be amended in system as and when needed.
4.3.6	Provisioning	i. Provisioning is handled by system. Finances are impaired after reaching the certain DPD.
4.3.7	Early Redemption	i. Premature/early settlements of finances are managed in this module.
4.3.8	Part Settlement	i. Part settlement is possible to reduce the debt and also reduce either the tenor or installment amount accordingly.
4.3.9	Arrears Processing	i. Arrears and associated bucket movements are handled.
4.3.10	Fee Processing	i. Fees associated with the finances are tagged with the finances and charged to customer.
4.3.11	MIS Information	i. MIS information is captured in the system for the preparation of different management report.
4.3.12	Finance Enquiry	i. Finance enquiry module is used to view the status of the finances. Information like start date, amount, installment, payment etc. can be viewed.
4.3.13	Property Details	i. Property details like MV, FSV, valuation date, property address are captured here for the Mortgage finances.

4.4 Short Term Agricultural and Micro-Credit Loan

Sl. No.	Item	Description
4.4.1	Loan Proposal Initiation	i. Application with supporting documents National ID, Savings or Current account (10 taka account holder), Krishi Card, preparation of Loan Proposal as per format (check list).
4.4.2	Loan Approval Process	i. Every detail, i.e. amount, interest rate, tenure, applicable schedule of charges, terms and conditions etc. of the Branch Sanction Advice shall be input in the system at branch level.
4.4.3	Other Securities	i. Witness confirmation (individual or Union Parishad), Hypothecation of goods, Equity Margin, Porcha (CS,SA,RS/DS) or lien of FDR etc.
4.4.4	Loan Calculator	i. Total amount or partial amount shall be deposited at any time within the period or as per repayment schedule. Interest rate shall be calculated at the year-end simply (simple interest rate).
4.4.5	Loan Creation	i. Loans are disbursed through creation of contracts/deals under the corresponding module of CBS under appropriate limit as per Credit Approval. 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. System shall ensure that the borrower is not listed in UNSCR & local sanction.
4.4.6	Disbursement	i. Branch shall issue a sanction advice/letter to the client maintaining consistency with sanction advice, duly accepted by the concerned client. ii. Disbursements occur on loan request as per approval and limit through creation of contract/deal under the corresponding module of CBS.

Sl. No.	Item	Description
4.4.7	Interest/Profit	i. Daily accrual (simple) against principal amount as per applied rate input & interest charged on periodic basis or as per Regulatory Guideline.
4.4.8	Payment	i. The maturity date and settlement/ maturity accounts shall be inputted while creation of the contract/deal. ii. Payment sequence may be as under: a) Charges/Duties b) Interest c) Principal iii. Track receivable can also be introduced in case of shortage of installment amount. As a result, whenever fund is available in source account, system shall adjust the tracked amount for loan installment first. iv. System shall have feature to realize due amount automatically from the assigned CASA account. If there is insufficient fund, system shall create a HOLD for the unrealized amount and system shall recurrently try to realize the due amount subject to availability of fund during EOD.
4.4.9	Provisioning	i. Provisioning is handled by system. Loans are impaired after reaching the certain DPD (Day Past Due).
4.4.10	Financial Data Amendment	i. Financial data like Interest rate can be amended if required.
4.4.11	Static Data Amendment	i. Static data like MIS codes can be amended in system as and when needed.
4.4.12	Payment Processing	i. Total amount or partial amount can be deposited at any time within the period.
4.4.13	MIS Information	i. MIS information is captured in the system for the preparation of different management report.
4.4.14	Loan Enquiry	i. Loan enquiry module is used to view the status of the loans. Information like start date, amount, installment, payment etc. can be viewed.
4.4.15	Reversal	i. Wrong loan amount posting reversal is managed in this module.
4.4.16	Reports	i. Various loan related reports are generated in the reports module.
4.4.17	Credit Administration	i. Loan limit control and documentation module through branch.
4.4.18	Classification	i. Considering overdue status and customer's financial condition, branch shall ensure appropriate classification status for the respective facility through system. ii. System shall be able to automatically classify marking, loan provisioning, and transaction generation as per Bangladesh Bank guideline which can be set at product level.
4.4.19	Rescheduling & Restructuring	i. System shall have ability to capture rescheduling and restructuring related MIS information. ii. System shall have ability to apply non-accrual interest treatment for reschedule loan.

4.5 Demand Loan

Sl. No.	Item	Description
4.5.1	Loan Creation	i. System shall have unique product code for demand loans. ii. For each demand loan, there shall be separate unique loan reference. iii. System shall be able to capture different MIS codes.
4.5.2	Interest/Profit	i. Interest shall be accrued on the daily product basis on outstanding balance as per Bangladesh Bank guideline.

Sl. No.	Item	Description
		ii. System shall be able to apply interest suspense treatment for the interest receivable as and when required.
		iii. System shall be able to capitalize the interest schedule when applicable.
4.5.3	Provisioning	i. As per Central Bank guidelines.
4.5.4	Adjustment/ Liquidation	i. Through cash/clearing/transfer deposit.
		ii. System shall be flexible to allow partial adjustment.
		iii. System shall be flexible to set product wise repayment priorities considering overdue status.
4.5.5	Classification	i. System shall be flexible to apply classification rules as per Bangladesh Bank's guideline.

4.6 Discounted Loan

Sl. No.	Item	Description
4.6.1	Loan/ Investment Creation	i. System shall have unique product code for discounted loans.
		ii. For each discounted loan, there shall be separate unique loan reference.
		iii. System shall be able to capture different MIS codes.
4.6.2	Interest/Profit	i. Interest realized at upfront for the contract/deal tenor shall be reported in P&L on the daily product basis.
		ii. In case of early pay-off/settlement, system shall be able to reverse unearned interest.
4.6.3	Provisioning	i. As per Central Bank guidelines.
4.6.4	Adjustment/ Liquidation	i. Through cash/clearing/transfer deposit.

5. Module: Trade Service

5.0 UNSCR and Local Sanction Screening for International Trade

Before opening an L/C or making payment against an L/C, UNSCR and local sanction screening shall be conducted. Similar measures shall be made in case of inward as well as outward remittances.

5.1 Import

Sl. No.	Item	Description
5.1.1	Import Documentary Credit/Letter of Credit Issuance & Amendment	System shall support the following Critical features to Import DC function: i. System shall generate DC number as per BB guideline. ii. System shall store buyer-placed Proforma Invoice (PI) or information on the contract of buyer and seller. iii. System shall link this PI number to the DC number generated by the system for future Merchant Invoice (MI). iv. System shall store all the relevant SWIFT UI field of MT700 to MT799. v. System shall store buyer-seller information and relevant certificates/ documents /license number for local and foreign MI. vi. System shall store advising bank and advised through bank details with SWIFT code. vii. Shall store updated HSCODE and 71 main codes information as per BB Guideline. viii. System shall store fields for Central Bank instruments for import function like LCA, IMP. ix. System shall store fields for insurance details as per BB Guideline. x. System shall store fields for PSI. xi. System shall affect balance sheet for accounting ability . xii. System shall maintain register for any kind of information and their changes. xiii. System shall have marginal deposit field for holding customers' cash as security. xiv. System shall have simple logical coding for check flags. For example, DC validity, shipment validity etc. and relevant interaction with user. xv. System shall have facility or limit marking fields as per given facility for a customer and a control to show over limit or interact with user. xvi. System shall have a separate charges screen to be linked with a core charges control mechanism. xvii. System shall have charges control to enable standard and preferential charges. xviii. System shall have product control to the relevant fields or suppress it. For example, sight DC does not need to show usance/tenor fields. xix. System shall have built options to choose DC Tenor field and shall be linked with Bill Tenor and Loan Tenor. xx. System shall have draft Bill of Exchange Tenor. xxi. System shall have check on Bill of Entry Overdue. xxii. System shall have user control. xxiii. System shall have Help screen for users about the product, fields and DOs or DO NOTs.

Sl. No.	Item	Description
		xxiv. System shall have transaction history screening ability throughout the life cycle of a DC. This feature can be controlled with a retention control mechanism.
		xxv. System shall have remark marking ability in Transaction History screen.
		xxvi. System shall have special instruction marking ability during transaction in user interface customized for individual customer or common special instructions for all customers.
		xxvii. System shall have user friendly Transaction Voucher.
		xxviii. System shall generate DC Advice electronically or print for customers
		xxix. System shall generate report for outstanding DC, predefined margin and other required MI.
		xxx. System shall have high risk country and AML Blacklist Checking ability in all trade applications.
		xxxi. System shall have SWIFT interface with CBS for avoiding duplicate entry with appropriate security measures.
		xxxii. System shall generate Bangladesh Bank return report automatically from CBS. System shall support sync with middleware or interfacing between banking systems and Bangladesh bank systems.
		xxxiii. System shall incorporate document receive register module for avoiding wrong maturity date in the system.
		xxxiv. System shall incorporate discrepancy clause for finding either discrepant document or order document.
		xxxv. System shall incorporate pre-shipment inspection company list in import LC booking or issuing.
		xxxvi. Minimum mandatory parts of a DC: a) Buyer Name and Address b) Seller Name and Address c) Value and Currency d) Expiry e) Shipment f) Usance/Sight/Mixed payment g) Tenor Period(if Usance) h) Available with i) Advising Bank j) Advise through Bank k) Invoice Information l) Goods Description m) Required Documents n) Additional Conditions o) Confirmation Instruction p) Payment Instruction q) Auto generated LC no. with issue date r) Tolerance (if any) s) Port of loading t) Port of discharge/place of delivery u) Partial shipment v) Transshipment w) Incoterms
		xxxvii. System shall maintain common clauses in the system by marking a one or two word reference number against each. This

Sl. No.	Item	Description
		will enable users to recollect the long clauses in seconds. If any special clause is required they can always write down in the free field.
		xxxviii. System shall have dual authorization mechanism and check user limit for transaction making or authorizing to be linked with a core limit control mechanism.
		xxxix. System shall have facility or ceiling value marking fields of a customer for IRC and control to show over limit or interact with user.
		xl. At the time of DC opening and authorization of the LC opening transaction, system shall show warning message if any import bill payment is overdue or for any irregular liabilities.
		xli. System shall store mandatory import related license/certificate number like IRC, Trade License etc. with issue date and expiry date and control to show if expired or interact with user and also have the facility to monitor IRC value and DC value.
		xlii. System shall not permit opening DC against defaulter borrower.
		xliii. System shall have checking ability of whether the goods are permissible for import as per present IPO.
		xliv. System shall have permission/clause. For Example, HS Code 7207 requires Pre-Shipment Inspection.
		xlv. System shall tag the amendment(s) SWIFT and Voucher with the respective LC.
		xlvi. System shall tag the amendment(s) in the history of the respective LC.
		xlvii. System shall have facility to cancel and close the existing LC and return the margin to the customer's account and adjust the liabilities.
		xlviii. System shall ask confirmation of available approved limit, clean CIB report, required margin and compliance of conditions imposed by the approving authority.
5.1.2	Import Shipping Guarantee (SG)	i. System shall auto generate SG reference.
		ii. System shall tag Import DC against SG reference.
		iii. System shall transfer margin to SG (Shipping Guarantee) and taking remaining margin equal to SG value in local currency.
		iv. System shall create loan for at par facility.
		v. System shall automatically generate NOC by addressing port authority and customs.
		vi. System shall generate SG Advice.
		vii. System shall remove SG after arrival of original documents.
		viii. System shall receive more than one copy of document (like 2 copies) but after SG, receive one original document from exporter.
		ix. System shall generate reports on outstanding SG and other Import Bills.
		x. System shall tag single or multiple SG if any.
		xi. Shall have the ability to check Currency and amount of LC and SG Documents.
5.1.3	Import Lodgment/ Acceptance	i. System shall generate document received serial no. and register.
		ii. System shall preserve the Airway Bill number.
		iii. System shall generate import bill number.
		iv. System shall tag import bill with LC.
		v. System shall check flags for workability of import bill with LC,

Sl. No.	Item	Description
		like Value, Currency, Expiry, Shipment etc.
		vi. System shall generate overdue reports (after 05 working days) of import bill as per UCP 600.
		vii. System shall generate ageing for non-receipt of documents.
		viii. System shall tag payment, acceptance or discrepancy notification with bill as well as LC.
		ix. System shall generate report of payment, acceptance or discrepancy notification.
		x. In case of payment, special rate input facility shall be available in bills.
		xi. Margin release option required: Full or Proportionate amount shall be available.
		xii. LC amount shall be changed at the time of bills creation.
		xiii. Charge (i.e. SWIFT charge) realization facilities shall be available from account.
		xiv. Payment advice to be generated when the loans are auto liquidated.
		xv. Partial close option in BC shall be available.
		xvi. Splitting facilities in the same BC shall be available so that one BC shows several maturity dates.
		xvii. MT202, MT740 and MT752 shall be created like MT799 (Sometimes additional charges required to be paid along with bill value, for payment of discrepant documents).
		xviii. MT input format shall be same as SWIFT terminal so that neck message can be avoided.
		xix. Settlement currency shall remain as BDT at the time of EDF loans creation.
		xx. Shall have the ability to make payment of advising charge, confirmation charge and presenting bank's charge.
		xxi. Shall have the ability to accommodate UPAS/Mixed payment/Bullet payments related acceptance and payments and shall have the ability to reverse the liability up to proportionate bill amount.
		xxii. Shall have the ability to make payment through FDD, RTGS and Payment order.
		xxiii. Shall have the ability to close/cancel /Reverse lodgment/ acceptance account.
		xxiv. Shall have the ability to mark CL Status.
		xxv. System should generate related forwarding letter to Customs office.
5.1.4	Import Retirement	i. System shall create loan as financing to retire bills.
		ii. System shall make loan tenor as per given facility.
		iii. System shall have facility to make retirement by debiting customer cash account or Export Margin account.
		iv. Loan period = Facility Tenor – Bill Tenor.
		v. System shall calculate remitting amount.
		vi. Bill amount- Bank Charges (if on account of Beneficiary) + Confirmation fee (if any) + Interest (libor) (if any).
		vii. System shall have MT202 ability or DD/PO issuance ability .
		viii. System shall produce retirement advice.
		ix. System shall produce loan advice.
		x. System shall report on retired bills, outstanding loan.
		xi. System shall incorporate retirement of LC with Pay order, FDD,

Sl. No.	Item	Description
		A/C transfer, BDT plus FC etc.
5.1.5	Import Loan	i. System shall produce loan reports, due date and overdue. ii. System shall settle loan by debiting customer accounts. iii. System shall warn during loan settlement regarding facility line or cash availability. iv. System shall have loan register for performance. v. System shall have advanced Maturity List.
5.1.6	LC Issuance at Branches - Cash & BTB	i. Trade Services Department receives LC request letter along with other required documents from the branches duly signed by Head of Branch. Operation Manager along with a check list prepared in accordance with approved Standard Operating Procedure (SOP) duly filled in and signed by two authorized signatories of the branch.
5.1.7	Trade Services Department(TDS)	i. TDS checks limit of the respective applicant in the system: System shall not allow issuance of any LC if the limit is insufficient or expired or not yet loaded. Without having limit of LC, it cannot be drafted and cannot be committed or authorized in the system. Before committing an LC by the maker, commission/charges and margin amount are posted in the system as per sanction approved.
5.1.8	Transaction Authorization	i. System shall calculate the LC liability amount against respective LC and update the same to the system automatically upon authorization by the checker of the respective entry. System automatically generates a message data of LC to SWIFT department for onward transmission to the advising bank. After successful transmission, the status shall be ACK, otherwise, NACK or REPAIR is automatically stored in a folder of the SWIFT server of international division. For processing LC international competitive price and supplier's credit report is a must. All info shall be loaded to the Web Portal of BB and system shall ensure that.
5.1.9	Settlement of LC-Sight and Usance	i. System shall check/reconcile PAD/LTR/MBE etc. limit whether available in limit, insufficient or expired, LC number, exchange rate, documents value, currency code, month code, charges, related bank particulars, commodity code, reporting month of entry, etc. ii. After reconciliation of all necessary features and finding that they are in order, system shall update for authorization - generate SWIFT message (e.g. MT 202) for onward transmission to Nostro A/C. iii. In addition appropriate settlement rate shall automatically be tagged with message from the system. iv. In case of sight bills, date of receipt and date of lodgment shall clearly be reflected in the system. Info of ACK, NACK, repair shall be stored directly in SWIFT server. v. System shall have the ability to provide all info relating to this payment and settlement for fulfilling the requirements of regulators. vi. In addition Bill of Entry(Item, H.S Code, Bill value) and CRF (Clean Report of Finding) value and bill value is to be checked and matched mandatorily and any deviation (above tolerance level), shall be reported to Bangladesh Bank.
5.1.10	Advance Payment	i. System shall have the facility to register the data of advance

Sl. No.	Item	Description
		payment.
		ii. System shall have the facility to make payment (issuance of MT103).
		iii. System shall maintain a register.
		iv. System shall prepare/show overdue list.
		v. System shall check for the permission of regulator, where necessary.
		vi. System shall tag the inward bill and bill of entry.
		vii. System shall have the facility to execute transactions.
5.1.11	Documentary Collection	i. System shall have the facility to register the data.
		ii. System shall have the facility to make payment (issuance of MT202)/Acceptance/Advice of refusal. iii. Shall maintain a register.
		iii. System shall prepare/show overdue list.
		iv. System shall check for the permission of regulator where necessary.
		v. System shall tag the inward bill and bill of entry with the maturity register.
		vi. System shall have the facility to execute transactions.

5.2 Export

Sl. No.	Item	Description
5.2.1	Export Documentary Credit Advice and Lien	i. System shall advise Export DC.
		ii. System shall clearly mention bank's position and liability against DC advice and liability.
		iii. System shall confirm DC through swift or manual.
		iv. System shall verify DC as per International (UCP latest version)and Local (Foreign Exchange Policy) guideline.
		v. System shall have DC transfer feature.
		vi. System shall have options for substitution flag.
		vii. System shall have silent or open confirmation flag.
		viii. System shall have DC lien flag.
		ix. System shall have facility for DC transfer w/o substitution.
		x. System shall have facility for amendments or amendments transfer.
		xi. System shall have facility for SWIFT transfer as per message criteria.
		xii. System shall have Central Bank Permission Flag for allowing transfer.
		xiii. System shall apply Transfer Commission.
		xiv. System shall have Lien DC BBC allowance (sub system).
		xv. System shall have Export DC grouping ability .
		xvi. System shall produce reports on Export DC, BBC utilization, and Business MI.
		xvii.System shall store mandatory export related license/certificate number like ERC, Trade License etc. with issue date and expiry date and control to show if expired or interacted with user.
5.2.2	Export Bill Forwarding	i. System shall have EXP electronic registering (sub system).
		ii. System shall have number generation control of EXP. For example, local DC does not need to generate EXP number.
		iii. System shall have EXP certification (sub system).
		iv. System shall have EXP reporting and monitoring (sub system).
		v. System shall tag Export Bill with Lien DC/SC/PO.

Sl. No.	Item	Description
		vi. System shall negotiate Export Bill at the time of recording bill. vii. System shall have Export Bill discounting facility after acceptance. viii. System shall have acceptance flag. ix. System shall have currency conversion facility. x. System shall have Export Bill amendment facility. xi. System shall produce automatic bill advice. xii. System shall have reports and MI on Export Bills. xiii. System shall incorporate FBCA (Foreign Bills collection for advance). xiv. System shall incorporate margin of export. xv. At the time of Export Bill sent for collection, system shall warn users if any EXP is overdue. xvi. System shall calculate the total FDBC amount with the master DC. xvii. System shall calculate the difference (normally zero) between EXP certified amount and bill value. xviii. System shall have the facility to generate FDBC forwarding with documents count. xix. System shall have the facility to execute transactions to realize charges. xx. System shall have option to upload EXP details from Bangladesh Bank Portals.
5.2.3	Export Loan Creation Facility	i. System shall support pre-shipment and Purchase against Documentary Credit loan facility. ii. System shall mark DC/SC/PO at the time of pre-shipment financing. iii. System shall produce automatic loan advice. iv. System shall produce automatic loan reports. v. System shall create force loan if proceed not realized. vi. System shall calculate eligible loan amount considering obligations, like BTB liability, foreign agent commission, local agent commission, packing credit etc. against Export DC. vii. System shall check approval limit line for the loan facility.
5.2.4	Export Proceeds Realization	i. System shall have Nostro viewing and printing facility. ii. System shall support fund distribution. iii. System shall build fund for BBC liability and security. iv. System shall have EDF or incentive loan processing capacity and outstanding report. v. System shall process inward remittance as advance remittance for export. vi. System shall support electronic registering of ARV. vii. System shall produce automatic repayment advice. viii. System shall produce automatic paid bills report. ix. System shall produce automatic BBC margin account balance reports of various MI. x. System shall support repayment with DD, FDD, RTGS and accounts transfer. xi. System shall calculate sundry deposit amount for BTB payment, foreign agent commission amount and local agent commission amount. xii. System shall have the facility to give standing instruction (SI). xiii. System shall have facility of straight through processing (STP) with integration to SWIFT. User shall check documentation requirement and approve the transaction.

Sl. No.	Item	Description
		xiv. System shall have flexibility to accommodate Tax and VAT rule which is changeable time to time as per Govt. order.
5.2.5	Receiving and Checking of Export LC	i. On receipt of Export LC, all features shall be checked with authenticity and then forwarded to the exporter. In case of new buyer, credit report by the international credit rating is required, if satisfied the LC shall be recorded in the system with job no. and process to open BTB as mentioned in LC issuance condition. Export performance and contract shall be monitored/ traced through this job no. ii. System shall have facility to view the incoming Export L/C message received through SWIFT and subsequent SWIFT communication. iii. System shall have transaction history screening ability throughout the life cycle of an Export DC. iv. System shall have remark marking ability in Transaction History screen.
5.2.6	Receiving and Checking of Export Documents	i. Upon receipt of export documents, features shall be with export LC, and if in order all information relating to export bills shall be input into the system and documents shall be sent to abroad. If documents shall be found discrepant/not negotiated, those shall be sent instead for collection. At the time of negotiation, portion of BTB LCs, disbursed packing credit amount, foreign charges, local agent commission, etc., all the BTB & PC related data shall be directly reflected in the system through Export Performance Register. Disbursement of FDBP, Packing Credit & SOD (EDF) shall be checked with limit by the system. For purchase of local docs (IDBP), system shall ensure through SWIFT as well as be uploaded in BB web portal by the payee bank. For IDBP, sanction is required from HO and limit shall be loaded by Credit Administration Division/Competent authority for disbursement of loan.
5.2.7	Posting EXP Forms	i. EXP forms shall be posted in three phases: 1st - just after issuance, 2nd - after exporters submit original docs with EXP and other papers, 3rd - after proceeds realization.
5.2.8	Proceeds Realization	i. FC to be held and recorded for future payments of BTB obligations. All the information shall be in the system through Export Performance Register. Arrangement of checking of SWIFT messages -MT 103, 202, 910, and 756 for confirmation of proceeds.
5.2.9	PRC Issuance and BB Reporting	i. After receiving the Export Bill value, bank shall issue PRC adjust local taka with BTB and other facilities enjoyed. Triplicate copy of EXP shall be reported to BB indicating the PRC value in taka as well as in FC.
5.2.10	Overdue Export Bill	i. Within four months proceeds shall be realized, otherwise, the bill shall be treated as overdue and reported to BB. In case of Cash Subsidy Cases, Client has to raise claim within 6(six) months from the date of PRC issuance, and system shall ensure this.

5.3 Remittance

Sl. No.	Item	Description
5.3.1	General Characteristics	i. System shall issue LCY (Local Currency) pay order against LC payment. ii. System shall receive MT 103 message as Inward Remittance. iii. System shall generate MT 103 message as Outward Remittance. iv. System shall issue FCY (Foreign Currency) Demand Draft against LC payment.
5.3.2	Inward Remittance	i. It is processed and controlled through Centralized Foreign Remittance Centre (CFRC) of HO.
5.3.3	Other Sources-for Inward	i. EFT and DD through Secured Web Login, Secure tested key message and SWIFT through exchange houses and banks.
5.3.4	Outward Remittances	i. Customer A/C, respective banks, branches through EFT, as per payment instruction from exchange house and banks.
5.3.5	Reconciliation	i. At the end of the day CFRC reconcile and cross check the executed transactions.

5.4 Guarantee

Sl. No.	Item	Description
5.4.1	General Characteristics	i. System shall issue guarantee with effective date/date of issuance. ii. System shall amend guarantee for original return/without original return/by memo. iii. System shall cancel guarantee for original return/without original return/by memo. iv. System shall make/ensure encashment of guarantee. v. System shall support various types of guarantee, such as, advance payment, financial, bid bond, performance. vi. Applicant can be local, foreign. vii. Beneficiary can be local & overseas. viii. System shall support close-ended/open-ended expiry/counter guarantee expiry. ix. System shall use cash/FDR: Percentage of guarantee value as margin and shall be capable to check with collateral module. x. System shall support encashment of commission on operative A/C, Nostro A/C. xi. System shall support realize commission on one time, monthly/quarterly/etc like accrual passing. xii. System shall support holding cash margin and increase/decrease and release of cash margin. xiii. System shall support DPS/FDR lien/auto lien against margin and release lien on BG closure. xiv. System shall support MIS Code/UDF/etc.

5.5 Back-to-Back LC

Sl. No.	Item	Description
5.5.1	General Characteristics	System shall support the following critical features to b2b Import DC function: i. Shall generate DC number as per BB guideline. ii. Shall store buyer-placed Proforma Invoice (PI) or information on the contract of buyer and seller. Shall link this PI number to the DC number generated by the system for future Merchant Invoice (MI). iii. Shall store all the relevant field of MT700 to MT799.

Sl. No.	Item	Description
		iv. Shall store buyer-seller information for local MI.
		v. Shall store advising bank and advised through bank details.
		vi. Shall store fields for Central Bank instruments for import function like LCAF, IMP.
		vii. Shall store fields for insurance details.
		viii. Shall store fields for PSI.
		ix. Shall affect balance sheet for accounting ability .
		x. Shall have marginal deposit field for holding customers cash as security.
		xi. Shall be capable to pick up related export letter of credit information with minimum below fields:
		a) Export LC/SC No.
		b) Export LC/SC Date
		c) Value and Currency
		d) Expiry Date
		e) Shipment Date
		f) Tenure
		g) Applicant /Buyer Name
		h) Applicant /Buyer Country
		i) Available with- by
		j) Advising Bank
		k) Advise through Bank
		l) Service/Buying Commission Amount
		m) Penalty Clauses (if any)
		n) Approval of Clauses/Permission from BB
		o) Tolerance (if any)
		p) Goods description
		q) Discount clause
		xii. Shall have logical coding for check flags. For example, to check proposed b2b LC validity, shipment date, drawing power etc. are covered by that of the related export LC or SC.
		xiii. Shall have simple logical coding for check flags. For example DC Validity, Shipment validity etc and relevant interaction with user.
		xiv. Shall have facility or limit marking fields as per given facility for a customer and a control to show over limit or interact with user.
		xv. Shall have a separate charges screen to be linked with a core charges control mechanism.
		xvi. Shall have charges control to enable standard and preferential charges.
		xvii. Shall have product control to the relevant fields or suppress it. For example Sight DC does not need to show Usance/Tenor fields.
		xviii. Shall have built options to choose DC Tenor field and shall be linked with Bill Tenor and Loan Tenor.
		xix. Shall have draft Bill of Exchange Tenor.
		xx. Shall have user control.
		xxi. Shall have Help screen for users about the product, fields and DOs or DO NOTs.
		xxii. Shall have transaction history screening ability throughout the

Sl. No.	Item	Description
		life cycle of a DC. This feature can be controlled with a retention control mechanism.
		xxiii. Shall have remark marking ability in Transaction History screen.
		xxiv. Shall have special instruction marking ability during transaction in user interface customized for individual customer or common special instructions for all customers.
		xxv. Shall generate DC Advice electronically or print for customers
		xxvi. Shall generate report for outstanding DC, predefined margin and other required MI.
		xxvii. Shall have high risk country and AML Blacklist Checking ability in all Trade applications.
		xxviii. Shall have SWIFT interface with CBS for avoiding duplicate entry with appropriate security measures.
		xxix. Shall generate Bangladesh Bank return report automatically from CBS.
		xxx. Shall incorporate document receive register module for avoiding wrong maturity date in the system.
		xxxi. Shall incorporate discrepancy clause for finding either discrepant document or order document.
		xxxii. Shall incorporate pre-shipment inspection company list in import LC booking or issuing.
		xxxiii. Minimum mandatory parts of a DC:
		a. Buyer Name
		b. Seller Name
		c. Value and Currency
		d. Expiry
		e. Shipment
		f. Usance/Sight
		g. Available with
		h. Advising Bank
		i. Advise through Bank
		j. Goods Description
		k. Required Documents including Suppliers' Credit Report
		l. Additional Conditions
		m. Confirmation instruction
		n. Payment Instruction
		o. Related export letter of credit or contract no. and date
		p. Tolerance (if any)
		q. Port of loading
		r. Port of discharge/place of delivery
		s. Partial shipment
		t. Transshipment
		u. Incoterms
		xxxiv. Shall maintain common clauses in system by marking a one or two word reference number against each. This will enable users to recollect the long clauses in seconds. If any special clause is required they can always write down in the free field.
		xxxv. Shall have the facility to match shipment date / expiry date with the BTB DC.

Sl. No.	Item	Description
		xxxvi. Shall have the facility to view the full history of the master DC at a glance including total BTB, FDBC, Fund realized, EXP issued.
		xxxvii. Shall have the facility to tag the SG with the Master LC and produce notification.
		xxxviii. Shall generate exception reports.

5.6 Master LC/Contract

Sl. No.	Item	Description
5.6.1	Master LC/Contract	i. The system shall maintain reference number for Master LC/Contract (MLC) lien which will be linked with replaced LC/Contract (RLC) lien.
		ii. The system shall set the limit of BTB LC opening value under Master LC/Contract as per regulatory requirement.
		iii. The system shall accommodate /validate value decrease amendment of Master LC / Master contract to ensure value addition requirement.
		iv. The system shall accommodate /validate value decrease amendment of Master LC / Master contract to ensure total financing limit as per regulatory requirement.
		v. The system shall ensure that expiry date of Back to Back LC cannot be later than or equal to expiry date of Export LC/Contract.
		vi. The system shall ensure that shipment date of Back to Back (BTB) LC cannot be equal to or later than shipment date of Master LC/Contract.
		vii. The system shall ensure restriction on BTB LC opening if master LC/contract expires.
		viii. The System shall not allow closing Export LC / Contract if any BTB LC tagged which is not yet closed.
		ix. All BTB import loans (i.e. EDF, LATR, UPAS, PAD, Force Loan etc.) and Export Loans (i.e. Revolving Loan (RL), working capital loan, Pre-shipment finance, bill purchase/discount, invoice financing etc.) need to be tagged directly or indirectly with the master LC/Contract for monitoring total liability position against single master contract/LC.
		x. To validate pre-shipment financing limit against Master Export LC/Contract value at the time of disbursement as per regulatory requirement.
		xi. The system shall maintain full history report of a master LC/Contract at a glance that shows all BTB import data (LC opening, bill lodged, EDF, LATR, UPAS, bill paid, accepted bills etc.), export data (Export bill lodgement, export proceeds received, receivable, to be exported, etc.), Export loan (pre-shipment loan, bill purchase/discounting, invoice financing etc.) .

5.7 Trade Based Money Laundering (TBML)

Sl. No.	Item	Description
5.7.1	Trade Transaction Profile (TTP)	i. The system shall ensure Trade Transaction Profile (TTP) features as per Guidelines for prevention of TBML and Bank's approved TTP policy.
5.7.2	Customer's Risk Scoring Model	i. The system shall ensure Trade Customers' Risk Assessment as per Guidelines for prevention of TBML and Bank's approved policy.

Sl. No.	Item	Description
5.7.3	TBML Alert Analysis	i. The system shall ensure TBML alert analysis as per Guidelines for prevention of TBML and Bank's approved policy.
5.7.4	Sanction Screening	i. Banks shall have Sanction Screening software in place as per Bangladesh Bank Guidelines and which shall be integrated with Banks CBS.
5.7.5	Vessel Tracking	i. Guidelines for prevention of TBML mentions vessel tracking against shipments. Banks may subscribe for the 3rd party vessel tracking software. ii. Audit trail shall be maintained for vessel tracking software.
5.7.6	Uniform Template for Price Verification	i. As per TBML Guideline as well as Regulatory requirements the system shall maintain a uniform template to verify the price of goods/services for import or export. ii. Banks shall develop a sub-system for implementing this uniform template.
5.7.7	Detection Scenarios of TBML Alert identification	i. Bank shall automate TBML alert (e.g. land lock countries, high risk jurisdictions, tax havens, big value round figures etc.) checking through CBS or Sub-System as per TBML Guidelines.
5.7.8	STR/SAR and 3rd level escalation for potential alerts and sanction hits.	i. As per Guidelines for prevention of TBML Banks shall maintain the system of STR/SAR and level 3 escalation for potential alerts and sanction hits.

6. Module: Treasury

6.1 Products

Sl. No.	Item	Description
6.1.1	Foreign Exchange	System shall provide facility to: i. Cash/Spot ii. Forward iii. Swap
6.1.2	Money Market	Money Market System shall provide facility for: i. Deposits/Placements – Fixed, Short Notice and Call ii. Certificate of deposits iii. Discount instruments iv. Refinancing Fund v. Commercial Papers
6.1.3	Securities	System shall provide facility for (on behalf of bank & 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, Sukuk, etc.) v. Shares, Equities, Rights & Warrants vi. Debentures vii. Preference shares viii. Securitization ix. Share trading on stock exchanges x. Issuance of all kinds of money and capital market bonds xi. Primary Dealership of securities from Bangladesh Bank
6.1.4	Derivatives	System shall provide facility for: i. Forward Rate Agreements ii. Interest Rate Swaps iii. Currency Interest Rate Swaps iv. Futures, Options v. Repo/Reverse Repo vi. Interest Rate Cap and Collar
6.1.5	Foreign Exchange and Stocks Margin Trading	System shall be able to perform: i. Margin trading with margin account maintenance ii. Setting up of initial & maintenance margin (in percentage terms) iii. Settlement & verification of margin trades iv. Closure of margin trades

6.2 Front Office

Sl. No.	Item	Description
6.2.1	Basic Feature	i. System shall be able to perform Straight Through Processing with level-wise authorization as per regulatory guideline. ii. System shall have currency-wise foreign currency & money market position blotter. iii. System shall have Individual dealer wise log in screen and monitoring system. iv. System shall show each dealer about his limit information (open & used currency/counterpart wise). v. System shall have direct interface to dealing systems like Reuters dealing 3000/3000 extra, Telerate, Bloomberg for deal capture and also for download currency rates for generation of exchange

Sl. No.	Item	Description
		rates (card rate, treasury rate).
6.2.2	Online Real-Time Facilities	i. System shall perform intraday positions & profitability analysis for deal/currency/dealer-wise.
		ii. System shall process Nostro position and funding.
		iii. System shall perform dealer's limit (Stop/Loss, triggers) checking/ up gradation showing open position currency-wise.
		iv. System shall perform counter party limit checking/up gradation showing open position.
		v. System shall monitor central bank regulatory limits for both LCY & FCY.
		vi. System shall have interest/yield, 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.).
		vii. System shall have credit analyzer for counter party limit.
		viii. System shall have exception event handling option.
6.2.3	Trades	i. System shall be able to make amendment, cancellation, deletion to trades captured in the system with proper authorization and notification to the mid office.
		ii. 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 divisional level.
		iii. System shall have built-in currency converter and calculator to facilitate all kinds of interest/yield, discounted, present value at present and accrual basis.
		iv. System shall have ability to generate Money Market, Foreign Exchange, Fund Transfer and Securities deal related instructions to related office.
		v. System shall have ability to match deals, discounted instruments for profitability analysis or liquidation of contracts.
		vi. System shall perform maintenance of static data like standing instruction, sweep facility, event and holiday calendar.
		vii. System shall be able to adopt introduction of new currency created for a new financial zone.

6.3 Middle Office

Sl. No.	Item	Description
6.3.1	Basic Feature	i. System shall be able to cover the following middle office features:
		a) Credit risk exposure monitoring and control
		b) Product limit for main and sub-limit
		c) Limits by tenors
		d) Counterparty Limit
		e) Stop loss limit
		f) Trigger limit
		g) Dealer's limit
		h) Dealing room limit
		i) Inter day limit
		j) Settlement limit
		k) Forward limit
		l) Mandatory limit for SLR/CRR
		m) Off-Market Rate Monitoring
		n) Overnight foreign currency limit
		o) Secured/Unsecured Credit Lines

Sl. No.	Item	Description
		p) Online excess overrides and Audit Trail reports
		q) Authorization of deal captured at front office
		ii. System shall generate P/L according to dealer-wise, currency-wise, product-wise, deal-wise, counter party-wise and for a specific period-wise.
		iii. System shall perform mark to market, revaluation, and forward revaluation.
		iv. System shall be able to set internal trading limits and monitoring at various levels, e.g. Product, Dealer, Trading Books, Currency, etc.
		v. Shall have the facility of Revaluation Reserve Securities wise.
		vi. Shall have the facility of Revaluation Loss Securities wise.

6.4 Back Office

Sl. No.	Item	Description
6.4.1	Basic Feature	i. System shall monitor outstanding trades tracking.
		ii. System shall track confirmed/unconfirmed trades (incoming & outgoing).
		iii. System shall have features for Standard Settlement Instruction and Incomplete Settlement Instructions.
		iv. System shall have Historical Trades Analysis.
		v. System shall have trade confirmation and settlement processing.
		vi. System shall provide mark-to-market revaluation, Coupon Accruals and alerts.
		vii. System shall have standard control process – Maker-Checker "4-eyes principle".
		viii. System shall perform Dealer and/ or Settlement Verification.
		ix. System shall prepare regulatory report.
		x. System shall perform treasury reconciliation e.g. Local book to correspondent book, Local book to Local book, correspondent book to correspondent book, etc.
		xi. System shall issue BB cheques/DD/ BEFTN/ RTGS /Pay order and charge realization with automated accounting entries.
		xii. System shall have ability to receive and sent SWIFT messages including auto message preparation and accounting entries.
6.4.2	Reconciliation	i. System shall perform treasury reconciliation e.g. Local book to correspondent book, Local book to Local book, correspondent book to correspondent book etc.
		ii. System shall have ability to reconcile one to one, one to many & many to one entries.
		iii. System shall have ability to reverse reconciled entries with different and higher level users.
		iv. System shall have ability to raise cancel flag for unreconciled entries.
		v. System shall maintain Local book (Nostro Account) balance.
		vi. System shall maintain Corresponding book balance.
		vii. System shall have facility for uploading text/excel/xml/SWIFT etc. files of Local book and correspondent book of entries.
		viii. System shall have option for queries both local book & correspond book of entries (Bank, Date range, Reference Number, Amount range etc.)
		ix. System shall have ability of generating following reports:
		a) reconciled entries (Bank/Branch, Date range, Reference

Sl. No.	Item	Description
		Number, Amount range etc.)
		b) cancel & reversal entries.
		c) provision calculation for un-reconciled entries.
		d) un-reconciled entries
		e) regulatory requirements, etc.

6.5 Other Features

Sl. No.	Item	Description
6.5.1	Deal Capture	i. System shall be able to capture any deal in front office for both local and foreign currency.
		ii. System shall perform real time online monitoring of dealer-wise/counterpart-wise/currency-wise limit and shall show the open limit and then shall pass the deal to mid office after proper authorization. After mid office verification, deal will be passed to back office for settlement.
		iii. System shall have flexible dealing screen to capture all local market features respective to all standard products (e.g. deal passing without mentioning rate).
6.5.2	Interest/Profit Calculation	i. System must perform all possible methods of interest calculation (e.g.360/364/365/366 days and if any other).
		ii. System shall have facility to change interest rate with effect from a prior/future date and the re-computation of interest to be done globally and the dues to be adjusted in the affected accounts. Shall keep history of interest changes globally and at account level.
		iii. System shall support various method of charging/paying/ calculating interest (e.g. Flat, Floating, Tiered, Mixed, Compounding, Grace period, Add on facility, Holiday marking with feature of in advance/subsequent to a holiday, Premature encashment, Renewal, Premature encashment of interest and Renewal of principal with or without accrual, Penal charge implication etc.).
		iv. System shall have ability to give effect to back value to interest change and all related effect to concerned accounts.
		v. System shall provide calculators for all kinds of interest/yield rate and amount calculation like flat, fixed, compound, tiered, mixed, discounted values, NPV based on grace period, with or without accruals and all other possible methods.
		vi. System shall calculate all kinds of SWAP and its legs, forward contracts, future and option contracts.
		vii. Shall have facility to tag spread margin (+/-) with any product rate to other product/individual account.
6.5.3	Accounting	i. System shall generate accounting entries for treasury contracts (off & on balance sheet items) in a flexible and parameterized manner supporting generation of multi currency general ledger entries. The accounting entries shall be defined based on product type, client type and a business event.
		ii. System shall have ability 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 of Spot and Forward Legs (or Forward &Forward Legs).

Sl. No.	Item	Description
		iii. System shall automatically generate premium related accounting entries, on value date for Options Contracts iv. System shall perform back value accounting entries for predefined time period by the bank.
6.5.4	Maker-Checker Process	i. System shall be able to run 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. System shall make the contract active, only after the maker checker process.
6.5.5	Settlement Processing	i. System shall allow the users to maintain default settlement instructions by counter party currency wise. ii. System shall also allow split settlement & multi currency settlement. iii. System shall have ability to produce confirmation, payment & receive messages based on the settlement instructions.
6.5.6	Contract Reversal	i. System shall automatically generate the accounting entries to reverse the initial accounting entries posted to the General ledger and also generate cancellation message like MT392 for instance.
6.5.7	Revaluation of FX Contracts	i. System shall be able to perform Mark to Market Revaluation of FX Contracts like spot, forward, total holding etc. based on various methods.
6.5.8	Management Information for FX Contracts	i. System shall be able to provide information like net position by currency, forward cumulative currency position from FX Contracts for the management.
6.5.9	FX Position Keeping	i. System shall be able to track trade date positions & the actual value date positions for FX Contracts, including Margin trading.
6.5.10	Profitability Analysis of FX Contracts	i. System shall be able to calculate the unrealized profit on daily or cumulative figures for FX Contracts. The daily profitability is based on the difference between the previous day's market rate and the current day market rate.
6.5.11	Brokerage Commission Calculation	i. System shall be able to calculate the amount of brokerage commission automatically. ii. System shall also be able to maintain the currency in which the brokerage commission is calculated. iii. System shall be able to liquidate the amount of brokerage commission automatically.
6.5.12	Amendment of Money Market Contracts	i. System shall have ability to perform the following amendments on Money Market Contracts with level wise predefined authorization: - a) Increase principal b) Decrease principal c) Rate change d) Change in interest frequency e) Change in rollover frequency f) Maturity extension, etc.
6.5.13	Prior to Maturity adjustments of Money Market Contracts	i. System shall allow the users to perform the following adjustments, prior to maturity of money market trades: a) Deposit and withdrawal entries from Call/Notice accounts b) Early/Delay withdrawal of fixed term deposits with or without penalty & tax effect c) Rollover of outstanding trades d) Changes in settlement instructions

Sl. No.	Item	Description
6.5.14	Back Valuation of Contracts	i. System shall be parameterized to allow the users to maintain the maximum period for which a contract can be backdated.
6.5.15	Charges on Contracts	i. System shall maintain and automatically generate the charges & the charge related accounting entries for treasury contracts as defined by the users.
6.5.16	Portfolio Definition for Securities	i. System shall have ability to define the below portfolios: a) Bank Portfolio b) Customer Portfolio c) Issuer Portfolio
6.5.17	Auto Renewal of Money Market Contracts	i. System shall support the followings: a) Money market deals can be configured to be auto- renewed upon maturity. b) The auto-renewal attribute of a money market contract shall be set up at 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 have the ability to override any renewed contract with level wise authorization.
6.5.18	Deal Matching of Security Transactions	i. System shall have ability 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 completely matched against the buy(s). c) It is possible to match a sale deal against multiple buys; buy deals likewise can have multiple 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 being matched. e) If a sale deal is being reversed, all the match records with the buy deal shall be deleted after proper authorization.
6.5.19	Portfolio Restructuring	i. System shall have ability to perform Portfolio Restructuring including the following: a) To split/merger of stock from one counter to another or within the same counter b) Compute new stock quantity c) Apply new stock price
6.5.20	Security Lending	i. System shall have ability to support security lending. It shall allow the users to input security as collateral for lending. The cash and/or security can be used as collateral. ii. System shall validate the position before security can be lent out.
6.5.21	Coupon & Maturity Redemptions	i. System shall have ability to automatically generate the accounting entries for Coupon & Maturity Redemptions of securities contracts. ii. System shall also be able to automatically generate the coupon payment deals. The coupons alert shall be generated on given specified time before the coupon date.
6.5.22	Short Sales	i. System shall have ability to support short sales of bonds & securities. This shall be extended even to those cases where there is no opening position having proper authorization.
6.5.23	Custodian Information	i. System shall have ability to capture the "own" & "counter- party" custodian information for securities.

Sl. No.	Item	Description
6.5.24	Security Delivery Types	i. During settlement of bonds & security contracts, system shall have ability 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)
6.5.25	Fixed vs Floating & Floating vs. Floating for Interest Rate SWAP Transactions	i. System shall have ability to handle both Fixed vs. Floating & Floating vs. Floating (basis swap) transactions for Interest Rate SWAP.
6.5.26	Interest Differential Processing for FRA/IRS Transactions	i. System shall have ability to perform the rate fixing for Forward Rate Agreements, Interest Rate SWAP & Currency Interest Rate SWAPs, also process the settlement of the interest differential.
6.5.27	PI & RI For IRS/CIRS Transactions	i. System shall have ability to calculate & generate accounting entries automatically for Interest Payable (PI) & Interest Receivable (RI) from Interest Rate SWAPs & Currency Interest Rate SWAP contracts.
6.5.28	Different Types of Future Contracts	i. System shall have ability to handle different types of Future Contracts like: a) Currency Futures b) Interest Rate Futures c) Long Term IR Futures d) Short Term IR Futures e) Index Futures f) Stock Index Futures g) Equity Index Futures
6.5.29	Processing of Key Events of Future Contracts	i. System shall have ability to process the following key events of Future Contracts: a) Auto Generation of LIFO/FIFO/MIN/MAX b) Matching and Liquidation Trades c) Revaluation of position and warning for Call Margin Situation d) Tracking and assisting in execution of trades and settlement
6.5.30	Exchange Settlement of Future Contracts	i. System shall have ability to perform future trade liquidation & deal matching as per the exchange settlement dates for future contracts.
6.5.31	Trade Liquidation of Future Contracts	i. System shall have ability to perform the future trade liquidation by the following methods: a) Reduce the open position by selling b) Manual Deal matching c) Auto Deal matching – LIFO, FIFO, MIN, MAX & deal matching as per the exchange settlement dates for future contracts.
6.5.32	Different Types of Option Contracts	i. System shall have ability to handle different types of Option Contracts like: a) Currency Options b) Interest Rate Options c) Long Term IR Options d) Short Term IR Options e) Index Options f) Stock Index Options g) Equity Index Options h) American Options i) European Options

Sl. No.	Item	Description
6.5.33	Different Trade Types for Option Contracts	i. System shall have ability to generate different trade types for Option Contracts as follows: a) Normal, Hedge vs. Cover Deals. b) Normal cover & short sales.
6.5.34	Options Exercise	i. System shall have ability to handle the following types of Options Exercise: a) American Option trades can be exercised when they are IN-THE-MONEY. b) Display of un-expired option contracts that can be exercised c) Exercise price is defaulted and can be amended d) Options Exercise Settlement amount and profit & loss amount are automatically calculated.
6.5.35	Issuance	i. System shall have ability to handle issuance of securities, shares, debentures, etc. and all related monitoring, alert and report feature.
6.5.36	On-line Updates	i. Once the treasury contracts are done, system shall be able to perform the following on-line updates: a) Updates to the Bank-wide overall cash flow b) Updates to the Bank-wide Nostro positions c) Updates to the Bank-wide Currency positions d) Intra-day positions e) Estimated P/L.
6.5.37	Limit Exposure Checking	i. System shall monitor/track the following limits/exposures online real-time: a) Counter party b) Country c) Region d) Product e) Settlement f) Dealer
6.5.38	Revaluation & Related Accounting Entries	i. System shall have daily/monthly/predefined interval revaluation/ mark to market of all foreign exchange positions/securities with the related calculation. ii. System shall automatically generate the revaluation accounting entries for all the treasury products based on pre-agreed method. iii. System shall have the facility of Revaluation Reserve Securities wise. iv. System shall have the facility of Revaluation Loss Securities wise.
6.5.39	Automatic or Manual Generation of Deal Numbers	i. System shall have both the options of automatically generating deal ticket with numbers, or manually entering the deal numbers depending on the treasury department's policies.
6.5.40	Interfaces	i. System shall have ability to interface and manage messages to the following external systems: a) SWIFT b) RTGS c) Reuters d) Telerate e) Central Depository Bangladesh Ltd. f) Stock Exchanges g) Related other systems
6.5.41	STP Processing	i. System shall support Straight Through Processing from deal entry to settlement and accounting.
6.5.42	Deal Modification	i. System shall facilitate the following online operations for treasury

Sl. No.	Item	Description
		deal modification: a) Approval b) Corrections c) Amendments d) Reversals e) Cancellations
6.5.43	Maturity Diary	i. System shall have ability to generate diary reminders for expiry dates and interest due dates against all treasury contracts.
6.5.44	Cash Flow Management	i. System shall perform daily fund requisition from Retail and Corporate through system. ii. System shall automatically update the relevant Nostro accounts with the funds expected to be received/paid once a transaction is processed with prior approval.
6.5.45	Messages	i. System shall produce the payment notices/ receipts for each payment made through the Nostro accounts with detailed information on transaction identifier, counter party name, transaction details, deal date, value date etc. The related confirmation notices to be sent to the counter party shall also be automatically generated.
6.5.46	Budget	i. System shall monitor the variance between the actual P/L and other positions with budget figures on various areas.
6.5.47	Work Flow Process	i. System shall show the work flow process in every working area of treasury.
6.5.48	Cheque Management System	i. System shall have ability to manage cheque printing, cheque inventory management, tracking of fund transfer against loan disbursement, remittance payment, cash management service etc.
6.5.49	Asset Liability Management	i. System shall have ability to support the following features/ analysis/reports: a) Product-wise cost/yield for asset & liability b) Capital Management c) BIS Ratios (Capital Adequacy Ratio etc.) d) Gearing Ratio e) Leverage etc. f) Gap Analysis g) Structural Liquidity Gap (bucket-wise & cumulative gap against set limit) h) Interest Rate Sensitivity (repricing, bucket wise & cumulative gap against set limit) i) Dynamic Liquidity j) Dynamic Gaps k) Option Adjusted Gaps l) Duration Analysis m) Economic Value of Equity n) Duration calculation for every product (asset & liability) & cumulative duration o) Duration Gap p) Sensitivity Analysis q) Scenario Analysis using Monte Carlo Technique r) Rate Shock Analysis s) Trend Analysis of all asset & liability products. t) DEAR, EAR, VAR u) Ratio Analysis v) ROA, ROE

Sl. No.	Item	Description
		w) Earning Asset /paying liability
		x) Yield on earning asset
		y) Equity/Total Asset
		z) Break even yield on earning asset
		aa) Un drawn commitment as % of unused WBC
		bb) Net Interest Margin & Risk adjusted Margin
		cc) Forecasted effect on NIM & RIM, ROA, ROE
		dd) Balance Sheet trend analysis
		ee) Forecast Vs Actual, Forecast Vs Budget & Budget Vs Actual - business segment-wise position (rolling 6/12 months)
		ff) Concentration analysis as per product/customer/maturity-wise
		gg) Liquidity Stress Testing
		hh) Scenario Analysis
		ii) Back testing assumptions in Trend Analysis
		jj) Liquidity Ratios
		kk) SNAP Liquidity Ratio
		ll) Short term borrowing/liquid asset
		mm) Volatile liability/total asset
		nn) Liquid asset/short term liabilities
		oo) All other standard ALM reports
		pp) Options to add new ratios as when required by the Bangladesh Bank
6.5.50	ALCO Process	i. System shall support the followings: a) ALCO limit setting and monitoring b) ALCO pack preparation based on committee requirement c) Interest rate fixation by ALCO at product level
6.5.51	Local Nostro Transactions	i. System shall have ability to process fund transfer instructions via other banks for loan disbursement & repayment, remittance payment, cash management service etc. by other departments through treasury for efficient fund management. ii. System shall have ability to handle all related accounting entries by itself. iii. System shall have ability to calculate shadow interest on Nostro

7. Module: Alternative Delivery Channel (ADC)

Alternative delivery channels (ADC) are the channels that expand the reach of financial services beyond the traditional bank branch channel. In providing financial services directly to customers outside the branch, ADC has proven its ability to meet customers' expectation ensuring accuracy, convenience, and timely/on-time/real-time 24/7 services.

7.1 Existing ADC products
   a) Internet-Banking(IB)
   b) Banking with Mobile Apps
   c) Mobile Financial Services (MFS)
   d) Electronic Fund Transfer (EFT)
   e) Real Time Gross Settlement (RTGS)
   f) National Payment Switch Bangladesh (NPSB)
   g) BACH (Bangladesh Automated Clearing House)
   h) E-Wallet
   i) Call Center
   j) ATM Switching System
   k) Card Management System
   l) Agent Banking
   m) Binimoy
   n) Other Channels

7.2 Different channels integration with CBS

Sl. No.	Item	Description
7.2.1	Channels integration with CBS	i. The CBS shall allow the necessary Application Programming Interface (API) for different ADC (ATM, CDM, CRM, POS, e-Commerce/payment gateway, QR, Internet Banking, IVR, Kiosk, Agent Banking, MFS, etc.). ii. The system shall support ISO/XML and other standard message format to communicate with switching solutions and /or card management systems. iii. The system shall store card data in a secured manner (encrypted, masked, etc.) iv. The system shall synchronize (if applicable) customer information with Card Management System (CMS). v. The system shall check & validate the customer Transaction Profile (TP) and regulatory limit for ADC transaction. vi. The system shall have real-time cash reflection of ATM/online CDM/CRM etc. terminals. vii. The system shall have the ability to maintain separate currency conversion rates for foreign currency transactions. viii. The system shall maintain separate settlement accounts for different payment methods (NPSB, VISA, Master Card, JCB, Amex, etc.) & ADC. ix. The system shall have the ability to perform central reconciliation of different ADC channels. x. The system shall have ability to configure particular products for ADC transactions. xi. The system shall support Multifactor Authentication (dynamic or non-replicable).

Sl. No.	Item	Description
		xii. The system shall determine the maximum number of failed log-ins or authentication attempts. The user shall be notified of failed or successful log-in.
		xiii. The System shall have the ability to monitor and analyze the transaction behavior.
		xiv. Online session shall be automatically terminated after a fixed period of inactivity as per "Guideline on ICT Security, of Bangladesh Bank".
		xv. The System shall have the facility to ensure secured delivery of password/OTP.
		xvi. Audit trails and logging features for application server, web server, file server, database etc. should be preserved properly.
		xvii. The system shall ensure compliance of all relevant security control of ICT Security Guidelines, other relevant guidelines and circulars of Bangladesh Bank.
		xviii. The system should be configurable to include new delivery channel solutions.
		xix. There should be a module for call center, so that the agents/representatives can provide all kinds of required customer service related to CBS.
		xx. Channel wise reconciliation report, mismatched transaction list, rectification voucher etc. should be generated on daily/ monthly/ yearly basis.

8. Module: Customer Relationship Management (CRM)

It is necessary to manage the required customer information of an individual, company, nominee, introducer, chairman, director, guardian, grantor, bearer etc. and relationship among them. Ensuring KYC with proper due diligence complying AML & CFT guidelines are required for customers that includes asset liabilities info, occupation info, business nature (if applicable), transaction profile, source of funds, beneficiary owner info (if applicable), etc. It is required to generate reports related to customer profile, account, transaction, CIB, CL, Group Customer, AML, RIT and any other reports including regulatory reports

8.1 Customer Information Management

Sl. No.	Item	Description
8.1.1	Customer Information Management	i. System shall have the following features to manage customer information: a) System shall maintain unique Customer ID to open any relationship with bank for a customer. b) Customer may have multiple products in a bank but he/she shall have one unique ID/customer ID. c) System shall have option to create a group ID linking with multiple customers IDs. d) System shall have different types of searching option to identify unique customer and group. e) During creation of customer profile, built-in/separate validation system (aligned with the system of Election Commission (EC)) shall bring information of customer from EC and if matched, user may create customer profile in the system. f) Storage media shall be defined where captured/stored photo or other similar artefacts would be stored.
8.1.2	Personal / Individual Information	i. System shall have the ability to capture/store the Information/Documents related to identify an individual to establish the bank and customer relationship including the following: a) Customer ID b) Title c) Name d) Gender e) Date of Birth f) Place of Birth (District) g) Country of Birth (Code) h) Father's Title i) Father's Name j) Mother's Title k) Mother's Name l) Spouse's Title m) Spouse's Name n) Permanent Address: House, road etc o) Permanent Address: Postal Code p) Permanent Address: District q) Permanent Address: Country(Code) r) Present Address: House, road etc s) Present Address: Postal CODE t) Present Address: District u) Present Address: Country(Code) v) Mobile Number

Sl. No.	Item	Description
		w) Email Address x) Last verification/update date of the information y) Others

8.1.3	Personal / Individual Document Management	i. System shall have the ability to capture/store the Information/Documents related to identify an individual to establish the bank and customer relationship including the following:
		  a) ID/Document Type (NID/Passport/Driving License/Birth Certificate etc)
		  b) ID /Document Number.
		  c) ID /Document Issue Date
		  d) ID /Document Expiry Date
		  e) ID /Document Issue Country (Code)
		  f) Electronic copy of the document/documents
		  g) Others

8.1.4	Information /Document related to Tax	i. System shall have the ability to store the following Tax related information:
		
		  a) TIN Number
		  b) TIN Issue Date
		  c) Tax Circle
		  d) Tax Zone
		  e) Last tax return assessment year
		  f) Last tax return submission date
		  g) Electronic copy of the document/documents
		  h) Others

8.1.5	Information /Document related to Profession	i. System shall have the ability to store the following information regarding customer profession:
		
		  a) Profession
		  b) Sector Code (Must comply Bangladesh Bank sector code guidelines)
		  c) Name of the Business/ Institute/ Employer
		  d) Business/ Institute/ Employer address: :House, road etc
		  e) Business/ Institute/Employer: Postal code
		  f) Business/ Institute/Employer Address: District
		  g) Business/ Institute/Employer Address: Country (code)
		  h) Last verification date of the information
		  i) Electronic copy of the document/documents
		  j) Others

8.1.6	Information /Document on the source of funds or source of wealth of the customer to ensure Customer Due Diligence (CDD)	i. System shall have the ability to store the following information regarding source of funds of customers:
		
		  a) Source Type (Business, Salary, Remittance, Rent, sales of assets etc)
		  b) Serial Number of Source of fund or income (in case of multiple source)
		  c) Monthly Income / Inflow / outflow Amount
		  d) Declared Assets Value
		  e) Last verification date of the information
		  f) Electronic copy of the document/documents
		  g) Others

8.1.7	Company / Entity Information	i. System shall have the ability to store the following information regarding Company / Entity:

Sl. No.	Item	Description
		a) Institutions (Companies, partnership, Proprietorship concern etc.)
		b) Trade/Company name
		c) Sector Type
		d) Sector Code
		e) Legal Form
		f) Business/Institution Address: House, Road, Plot etc
		g) Business/Institution Address: Postal CODE
		h) Business/Institution Address: Thana/Upzilla
		i) Business/Institution Address: District
		j) Business/Institution Address: Country(Code)
		k) Factory Address: House, Road, Plot etc
		l) Factory address: Postal CODE
		m) Factory address: Thana/Upzilla
		n) Factory Address: District
		o) Factory address: Country (Code)
		p) Phone Number (only land/IPTSP number)
		q) Business Mobile Number for Financial/Transactional/OTP Information
		r) Business Email address for Financial/Transactional/OTP Information
		s) Credit Risk Grading (CRG) Scoring
		t) Credit Rating
		u) Others
8.1.8	Company / Institution Document Management	i. System shall have the ability to store the following information /Document related to identify an Institution (Companies, partnership, proprietorship concern etc.) to establish the bank and customer relationship: a) Registration Date b) ID/Documents Type (RJSC/Trade License/Certificate of incorporation etc.) multiple document may require to record c) ID /Document Number. d) ID /Document Issue Date e) ID /Document Expiry Date f) ID /Document Issue Country (Code) g) Electronic copy of the document/documents h) Others
8.1.9	Information /Document related to Govt. Duties	i. System shall have the ability to store the following information /Document related to Govt. Duties: a) Information /Document related to Govt. Duties b) Types of Govt. Duties (Tax/VAT/AIT etc) c) Registration Number (TIN/BIN/ Vat Reg. Number etc) d) Tax Circle e) Tax Zone f) Last tax return assessment year g) Last tax return submission date h) Electronic copy of the document/documents i) Others
8.1.10	Information /Document related to enterprise/ company	i. Information /Document related to enterprise/company: a) Sector of the business (Trade Business/Service/Industrial etc.) b) Capital of the company

Sl. No.	Item	Description
		c) Fixed assets other than land and building d) Fixed assets land and building e) Number of employees f) Financial year g) Operating profit of the organization h) Net profit of the organization i) Enterprise type (Large/Medium/Small/Startup etc) j) Last date of update information k) Electronic copy of the document/documents l) Others
8.1.11	Bearer Information and Document Management	i. System shall have the ability to store the following Bearer Information: a) Photo ID number (NID/Passport/Birth Registration etc) b) Name of Bearer c) Address of Bearer d) Relationship of the bearer with account/transaction (employee/business/relative etc) e) Mobile No. f) Electronic copy of the document g) Others
8.1.12	Signature/Photograph	i. System shall have the ability to store following Information/Documents related to Signature/Photograph of customer: a) System shall have ability to capture/store customer Photo(s) b) System shall have ability to capture signatures/ thumb imprints/ biometric stamp wherever required. c) System shall store signatures in encrypted format. d) In case of more than one signatory (joint accounts and company accounts), system shall capture signatory-wise signatures/thumb imprints/bio metric stamp and photographs and shall make those viewable at the time of transaction. e) System shall retrieve and view signatures of any customer in any branch with mode of operation and name/designation of the signatory [that view shall be account number-wise instead of customer IDs]. f) System shall support storing of scanned signatures in compressed format. g) System shall support viewing signature history. h) Signature history should include User Id, timestamp, source workstation IP & ID. i) Others
8.1.13	Customer Risk Management Customer Risk Grading (ref. e-KYC guideline)	i. System should have the ability to assess the customer risk based on different customer information and Bangladesh Bank circulars. a) According to the e-KYC guidelines, system shall have the facility to assess the risk of the customer during customer on boarding considering the following information: b) Type of On-boarding of customer c) Geographic Risks considering customer residence d) Customer information on Politically Exposed Person (PEP)/Chief or High Official of International Organization e) Customer family/close associates information related to PEP/Chief or High Official of International Organization

Sl. No.	Item	Description
		f) Customer information related to Influential Person (IP) or his/her family/close associates related to IP g) Product and Channel Risk h) Business/Profession and Activity Risk i) Transactional Risks

8.1.14	Sanction screening	i. System shall have the ability to store following Information/Document regarding Sanction screening:
		  a) During creation of customer profile, real-time/post sanction screening system shall scan the customer information automatically and based on scanning result, it may allow creating the customer ID or wait for decision and must comply the relevant circulars of Bangladesh Bank.
		  b) Banks having separate system to check sanction list shall have proper audit trail and approval before opening relationship.
		  c) The system shall have option for formal escalation screening as per AML matrix of the bank.

8.1.15	FATCA (foreign account tax compliance act) information	i. System shall be able to capture FATCA Compliance info (For US Citizen or Bangladeshi USA Citizen) US Person or Entity with below information:
		  a) Customer information of citizen of the US
		  b) Lawful resident of the US status (including US Green Card holder).
		  c) Customer residing information in the US (having US address, phone number, e-mail address, etc.).
		  d) Entity information that has a linkage or ownership to the US or to US territories.
		  e) Information of Non-US entities that have at least one US person as a "substantial beneficial owner".
		  f) Information of US citizen having been granted power of attorney or signing authority of an account.
		  g) Information of US citizen receiving payments sourced from USA, such as interest, dividend, rent, payment for services (salaries) and any other fixed determinable annual periodical (FDAP) income.
		  h) Systems shall have capabilities to comply any further changes of FATCA.

8.1.16	Credit Risk Grading Information (for borrower)	i. System shall have the facility to preserve the Credit Risk Grading (CRG) information of the borrower considering Bangladesh Bank guidelines with the following measures:
		  a) CRG score
		  b) CRG grading
		  c) Financial Risk score
		  d) Business/Industry Risk score
		  e) Management Risk score
		  f) Security Risk score
		  g) Relationship Risk score
		  h) Last date of assessment
		ii. System shall have the facility to preserve the Internal Credit Risk Rating (ICRR) information of the borrower considering Bangladesh Bank guidelines with the following measures:
		  a) Total score
		  b) Quantitative Score

Sl. No.	Item	Description
		c) Qualitative Score
8.1.17	Customer History Management	i. For CRG/ ICRR, bank may use different system and CBS shall have the facility to access/store the score of the borrower to set different parameter of the facility of the customer.
		ii. System shall have the facility to keep all the changes history/audit logs properly to find the previous information, status, activities and audit compliance considering the following:
		a) Proper record keeping like preserving documents in digital format
		b) User activity logs shall be maintained.
		c) Customer updated information including contact number shall be maintained.
8.1.18	CRM Report	i. System shall have the facility to provide different types of collaborative, operational, analytical information and reports based on the customer information for individual or company. Multi parameters might be considered for preparing/generating reports. Following reports shall be considered but not limited to:
		a) Customer status (active, inactive, deceased etc.) wise report
		b) Customer Segment (age, sector, profession, gender etc.) wise report
		c) Customer location (geographical, branch, zone, administrative area etc.) wise report
		d) Group or Customer wise assets and liability report.
		e) Group or Customer wise income, expenditure and profitability report.
		f) Group or Customer wise different (CTR, STR, FATCA, CRG/ ICRR, AML, CDD, EDD, TP etc) risk report
		g) Group or Customer wise Tax, Excise duty and different commission report.
		h) Different periodic report for customer information management based on document expiry, status change, effective date etc.
		i) Group or customer co-relation (Director, owner, nominee, guarantor etc) report.
		j) Others

9. Module: Information Security, Governance and Compliance

The Bank shall ensure that CBS must have Access Controls and Governance as following:

9.1 Governance, Risk Management and Compliance

Sl. No.	Item	Description
9.1.1	Access Controls and Governance	i. Proper configuration management ii. Proper CBS transaction controls governance by continuously monitoring transactions against policies to detect suspicious transactions or inappropriate business practices. iii. Maintaining preventive controls by ensuring user view and edit of data, tracking changes (or attempted changes), audit trail to comply with bank's policy and regulatory requirements. iv. Having ability to detect exceptions and check compliance. v. Having ability to Keep track of audits and facilitate the generation of report for management reviews & preserve for future record. vi. Having ability to monitor data in real time. vii. Automate risk monitoring using real-time application data from both internal and external systems. viii. Having ability to automatically prioritize issues for deeper investigation. ix. Performing risk assessment for CBS in regular basis. x. Having ability to track individual transactions across connected applications. xi. Having ability to detect malicious transactions—including potential instances of fraud. xii. Ensuring privileges assign to the CBS users by maintaining segregation of duties. xiii. Ensuring frontend application user does not have direct database access. xiv. Ensuring that without appropriate authorization database user can not alter/delete/manipulate CBS data from database. Proper log shall be maintained. xv. Having standard error handling procedures with proper log management. xvi. Having features to generate appropriate and details audit trail report. xvii. Having appropriate logging session management features. xviii. Having features to generate alert at the time of log-in if there is previous successful and unsuccessful log-in attempt with date and time. xix. Maintaining Role Based Access Control (RBAC) along with implementing least privileges mechanism. xx. User authorization must be reviewed and updated. xxi. Modern authentication mechanism including MFA (OTP/smart card/biometric/digital signatures, etc.) may be incorporated. xxii. May have the ability to verify digital signatures of data being uploaded in the system. xxiii. CBS shall not allow any database level modification like creating, modifying, deleting, dropping database objects from application front-end. xxiv. Operating system, database software and any other third party

Sl. No.	Item	Description
		software used by the CBS software shall have valid license/SLA/AMC. xxv. Bank's call center officials shall not be allowed for CBS transactional activities. Rendering customer services, they may have access the information in view mode with proper authorization. xxvi. For acquisition, development and operation of CBS Bank Shall ensure full compliance of all relevant controls of latest ICT Security Guideline, Cloud Computing Guidelines, Digital Banking Guidelines and related other guidelines/framework of Bangladesh Bank as and where applicable. xxvii. In case of acquisition of CBS, bank shall ensure that the service provider must comply the relevant controls of international standard such as NIST, ISO, PCI DSS, OWASP, SWIFT CSP, etc. xxviii. CBS application shall follow secure software development framework. xxix. Bank shall ensure data masking and encryption in case of integration with API. xxx. Bank shall ensure implementation of SSL/TLS for CBS. xxxi. System shall ensure security control for transaction behavior monitoring. xxxii. There shall be a standard error code along with a details description/message for the respective error code.
9.1.2	Information System (CBS and relevant systems) Audit	i. An annual system audit plan for CBS environment shall be developed. ii. Internal Information System (IS) audit for CBS environment shall be carried out as per audit plan at least once a year. iii. Internal IS audit shall be conducted by personnel with sufficient relevant expertise and skills. International standard certification shall be ensured for IS auditors. iv. Bank may use Computer-Assisted-Auditing Tools (CAATs) to perform IS audit planning, monitoring/auditing, control assessment, data extraction/ analysis, fraud detection/prevention and management. v. Bank shall ensure external audit for CBS at least once a year. vi. All audit reports shall be preserved for ready reference. vii. Audit findings shall be implemented /complied within stipulated date and time.
9.1.3	Vulnerability Assessment and Penetration Testing	i. Bank shall ensure internal and external Vulnerability Assessment and Penetration Testing of their CBS and relevant systems. ii. Vulnerability Assessment and Penetration Testing reports shall be preserved for ready reference. iii. Vulnerability Assessment and Penetration Testing may conduct in Test environment where test environment application configuration need to be same as live.

10. Module: System Administration

10.1 User Management

Sl. No.	Item	Description
10.1.1	User Group Maintenance	i. User groups shall be maintained as per bank's policy such as, a) Administrator b) Manager c) Operation Manger d) Supervisor e) Functional Officer f) Teller, etc.
10.1.2	User Creation and update	i. User creation, update, activate/deactivate, transfer shall be done with proper documentation.
10.1.3	Password Management	i. Password shall be implemented as per banks policy. ii. Unique user ID and password shall be maintained. iii. User name and password shall be communicated with user separately. iv. Default password shall be changed at the first login. v. Password history shall be maintained at least four times. vi. User password shall be reset as per banks policy at least every 30 days.
10.1.4	User Information	i. User information shall be maintained properly with a minimum of: a) User ID b) Employee ID c) User Name d) User Branch e) Prime Menu f) User Type (HO User, Approval Authority, Relationship g) Manager, Manager, Officer, Supervisor, etc.) h) Role based user authorization i) User authorization reviewed and updated continuously. j) User Terminal IP, Operating Time, Application Server IP, etc. k) Roll-wise user Limit
10.1.5	System Administrator	ii. The administrator shall be able to do the followings as per bank'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 Delegation of authority (DOA)
10.1.6	Application Users	i. An application user shall be able to perform his duty regarding CBS as per given authorization (Role based).

10.2 Role Management

Sl. No.	Item	Description
10.2.1	Application Access Control	i. User's privileges are granted or revoked when user status gets changed. ii. Options/Functions are granted or revoked for each user as per assigned role. iii. User authorization form shall be maintained.
10.2.2	User Role	i. Creation of different role name for different types of functions. ii. Addition/deletion of functions in a role.

Sl. No.	Item	Description
		iii. Selection of appropriate function (add/modify/ /inquiry/view/print etc.) while creating a role.
		iv. Assign single or multiple roles to a user as per business requirements.
10.2.3	Transaction Limit and Authorization	i. System shall have the ability to set transaction limit considering the following: a) Branch code b) Group Code c) Max amount for local credit d) Max amount for local debit e) Max amount for inter-branch credit f) Max amount for inter-branch debit g) As per approved DOA user can provide services for Customers and GL/P&L Account
10.2.4	Delegation of Authorization	i. System shall have the ability to delegate authorization as per requirement.
10.2.5	User Availability	i. System may have the ability to assign authorization automatically to ensure user availability as per fallback plan.

10.3 Application Administration

Sl. No.	Item	Description
10.3.1	Application Environment Setup	i. Library List Setup ii. User Password Rule
10.3.2	Bank Parameters	i. Following parameters shall be maintained: a) Maintain Spot Rates b) Weekly Holidays c) Yearly Calendar d) Bank Name e) Base Currency f) Local Currency g) Currency Parameters h) Currency Holiday i) Chief Local Office j) Profit period start day k) Profit period start month l) Automatically balance system m) Length of external account number n) Allow alpha customer number o) FX rate field size p) Regional branch settlement q) Real time branch settlement r) Maintain reporting defaults. s) System shall have facility to maintain daily exchange rate list details with history
10.3.3	Enquiry Security	i. Following enquiry security features shall be maintained in the system: a) Account Enquiries b) Statistics Enquiries c) Account Services Enquiries d) Additional Information Enquiries
10.3.4	Account Maintenance Control Security	i. Following Account Maintenance Control Security shall be maintained in the system:

Sl. No.	Item	Description
		a) Setting up menu options for customer and internal account detail maintenance.
		b) Defining account detail fields which may be maintained using specific menu options.
		c) Authorizing individual users to these menu options.
10.3.5	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 at Head office level for all
		vi. Units/Branches
		vii. Super/Admin users in CBS shall not be authorized to perform any financial transactions.
		viii. CBS shall be capable to block multiple session initiated by single user.
		ix. All type of activity log should be stored for Super/Admin users.
		x. Dual Control/Authorization (Checker/Maker) shall be ensured for any admin activity in CBS System.
10.3.6	Audit Trail	i. Journal Report for User Profile Management Activity
		ii. Journal Report for all types of Transaction
		iii. Journal Report for all types Overrides
		iv. Journal of Enquiry Usage Security
		v. Journal Report of all parameter changes and configuration level changes.
		vi. Log level, frequency, etc. need to be defined for log capacity management.
10.3.7	Transaction Monitoring	i. Shall use transaction monitoring system to indentify unusual transactions based on bank's policy and customer behavior.
		ii. There should be parameterized transaction monitoring option which is configurable by the concern system operator.

11. Module: Reporting

11.1 Reporting Category and Features

Core Banking System shall be capable of generating the following Reports:

Sl. No.	Item	Description
11.1.1	Daily Reports	i. The System shall have the ability for generating the following daily reports: a) Daily Clean Cash b) Daily Affairs c) Transaction Monitoring d) Transaction Profile (TP) exceed /overdrawn e) Daily Foreign Currency Inflow/Outflow f) Daily Foreign Currency Position g) Daily Transaction Checklist h) Ledger Balance i) Branch Cash Balance j) Over Due k) Excess Over Limit l) Others reports including necessary regulatory requirements.
11.1.2	General Banking Reports	i. The System shall have the ability for generating the following Reports: a) Account Statement b) Top Depositors/Borrowers List c) Customer Exposure d) Deposit Growth e) Periodical Branch Cash Balance f) Average Cash Balance g) Denomination-wise Vault Position h) Amount Slab-wise Deposit i) Account Monitoring j) Loans, Advances, and Deposit Statement k) TP (Transaction Profile) Monitoring l) Sanction Screening m) Maturity/Anniversary/Auto-Renewal Due List n) Payment Order/DD Register and Outstanding o) Sundry/Suspense Report p) Account status (Dormant, Inoperative, Close, Active etc.) q) Account Type wise statement r) Statement of Income & Expenditure s) Lien Register t) Borrower's Wise Asset Liability Statement u) CTR & STR Analysis v) Customer related w) AML & CFT related x) Others reports including regulatory requirements y) Unclaimed Deposit 10 Years and above z) Male Female Deposit aa) Rural Urban Deposit bb) Deposit Mix (Low Cost/High Cost Deposit) cc) Deposit Mix (Retail/SME/Corporate) dd) Sector wise Deposit (All) ee) Sector wise Deposit (Government) ff) Age wise Deposit

Sl. No.	Item	Description
11.1.3	Loans & Advance Reports	i. The System shall have the Ability for generating the following Reports: a) Expired Loans and Advances b) Undrawn statement c) Bank/ Branch Asset Liability statement d) Loan/ Advance Disbursement related different statements e) Loan/ Advance Defaulter statement f) Loan/ Advance write off statement g) Different types of Loan/ Advance outstanding statement h) Loan/ Advance reschedule/settlement statement i) Loan/ Advance Provision statement j) Sectoral Loan/ Advance statement k) Loan/ Advance Ledger (Principal and Interest) statement l) Different types of Classification Reports m) Off-Balance Sheet Report in Classification n) Recovery statement for classified Loan/ Advance o) Aging of Non-Performing Loan/Advance p) ICCR Reporting q) Credit Risk Grading/Scoring r) Others reports including regulatory requirements s) Group Exposure t) Group Liability u) Large Loan Borrowers v) Bucket wise reporting (e.g. 90 DPD or based on overdue days) w) Male Female Loan x) Rural Urban Loan y) Loan Mix (Retail/CMSME/Corporate/Agriculture/Sustainable Finance) z) Sector wise Loan aa) Customer wise Interest Suspense bb) Group wise Limit cc) Age wise borrowers
11.1.4	Foreign Exchange Reports	i. The System shall have the ability for generating the following Reports: a) LC opening related statement b) Statement of business earned on foreign trade c) Foreign trade consolidated/detail statement (PAD, LIM, Demand loan, PC, FBP, FDBC etc.) d) Statement of LC-wise PAD outstanding e) Export/import overdue report. f) Undrawn balance outstanding of export bills g) Monthly statement of foreign bills purchased outstanding (FBP) h) EXP/IMP/TM statement i) Export/Contact / Purchase order control registrar j) Weekly statement of LC opened & settled for the 1st /2nd /3rd /4th /5th week k) Customer-wise Import export position l) Customer-wise liability position m) Export LC wise BTB LC position including import bills of a customer n) LC liability & margin register o) IFBC issue/ FBP /PAD/ FDBC/PC/LATR register

Sl. No.	Item	Description
		p) Letter of Credit Position for Monitoring q) Overdue Accepted Bills statement r) Bank Guarantee & Overdue Bank Guarantee Register s) Others reports including regulatory requirements
11.1.5	Remittance Report	i. The System shall have the ability for generating the following Reports: a) Inward/Outward Foreign Remittance Exchange House statement b) Inward/Outward Foreign Remitter statement c) Inward/Outward Foreign Remittance (COC/Transfer) statement d) Inward/Outward Foreign Remittance through own Bank e) Inward/Outward Foreign Remittance through other Bank f) Time Series statement for Inward/Outward Foreign Remittance g) Statement for Cash Incentive under Inward Foreign Remittance disbursement h) Statement for Inward/Outward Foreign Remittance Receive (Country wise) i) Others reports including regulatory requirements
11.1.6	Reports for ADC	i. The System shall have the ability of generating the following Reports: a) Mobile/Internet Banking user report b) Mobile/Internet/Card Banking Transaction statement c) Channel wise Dispute Transaction statement d) Channel wise Transaction Settlement statement e) Channel wise Reconciliation statement f) Error Logs statement g) ADC relevant required reports h) Others reports including regulatory requirements. i) Channel wise transaction report. j) Channel wise transaction rectification report.

11.2 Report Preservation

Sl. No.	Item	Description
11.2.1	Report Preservation	i. All relevant reports should be preserved and maintained properly. ii. The report shall be preserved for regulators as and when required.

12. Module: User Training and Customer Awareness

12.1 Training and Awareness

Sl. No.	Item	Description
12.1.1	Administrative Training	i. Bank shall ensure all relevant database admin, application admin, systems admin.
12.1.2	End User Training	i. The bank shall ensure proper training and education to all relevant employees related to CBS activities. ii. The bank shall ensure proper training and education to all end users. iii. The bank shall ensure cyber security training focusing on protecting the CBS from unauthorized access, data breaches, and other cyber threats. iv. The bank shall ensure training on secure password practices, phishing, and other social engineering attacks. v. Training shall be tailored based on the roles and responsibilities of users. vi. The bank shall arrange Security Awareness and Education for the general users.
12.1.3	IT Personnel Training	i. Specialized subjects to develop technical skills and knowledge according to the job/function shall be ensured.
12.1.4	Certification	i. The bank shall ensure that the relevant personnel are getting proper training and certification.
12.1.5	Simulation and Scenario-Based Training	i. The bank shall ensure module wise simulations training/awareness of common and complex tasks/operations.
12.1.6	Awareness Sessions for Management	i. Aiding in higher-level decision-making and strategic planning, training on dashboards, data analytics, and decision support systems shall be ensured for top management.

12.2 Customer Awareness

Sl. No.	Item	Description
12.1.5	Customer Awareness	i. The bank shall ensure adequate training/awareness facilities for their employees considering any new banking services and technological changes. ii. The Bank shall create ad, TVC, banner, festoon etc. and circulate to different Bank locations, media and social platform. iii. The Bank shall extend training to their customers, particularly in the use of online and mobile banking platforms, which are integral parts of CBS.

12.3 User Manual

Sl. No.	Item	Description
12.2.1	User Manual	i. The bank shall ensure user manual for all modules describing features, controls and maintenance. ii. The bank shall ensure interactive tutorials and step-by-step guides for all banking processes. These should be easily accessible and designed to help new users quickly become proficient with the system.