

Scope Document:

AUTOMATED REGULATORY REPORT AND MANAGEMENT INFORMATION SYSTEM

1. Introduction

This document outlines the comprehensive scope of work for the conceptualization, development, and implementation of an Automated Regulatory Reports and Management Information System (MIS) for AB Bank PLC. The primary objective of this initiative is to streamline the generation, management, and archival processes for mandatory regulatory reports, internal MIS, and IFRS-compliant reports. This project aims to ensure timely compliance with Bangladesh Bank regulations while enhancing the bank's internal reporting capabilities, analytical insights, and data integrity. Furthermore, a key requirement for this system is the flexibility to integrate and utilize additional data sources beyond the Core Banking System (CBS), thereby improving the quality and scope of reporting.

2. Project Objectives

The successful vendor shall be responsible for delivering a solution that effectively achieves the following pivotal objectives:

- To automate the generation of all mandatory regulatory reports in accordance with prescribed formats as stipulated by Bangladesh Bank guidelines.
- To establish a centralized, robust, and scalable data repository (Data Warehouse/Data Lake) capable of integrating diverse banking systems and external data sources.
- To facilitate T+1 monitoring of key banking metrics through the provision of interactive MIS dashboards.
- To ensure complete adherence to IFRS 9 Expected Credit Loss (ECL) reporting standards.
- To provide the requisite flexibility for the integration and utilization of data originating from sources currently external to the Core Banking System.

3. Scope of Work and Deliverables

The project encompasses the subsequent major deliverables and functionalities:

3.1 Regulatory Reporting

The system must possess the capability to support the automated generation of Bangladesh Bank-mandated reports, which include, but are not limited to:

- CIB Reports (Enquiry request management, Report Generation & Submission etc.)
- Loan Classification & Provisioning (CL) Reports
- SBS-1, SBS-2, SBS-3 Reports
- ISS Reports
- Weekly Reporting (Thursday Position)
- Risk Based Supervision System Reporting
- FX Daily Bulk Uploads & Monthly Returns
- Any additional regulatory reports as may be mandated by Bangladesh Bank, with an imperative for agile adaptability to future modifications in reporting formats and requirements.

It is stipulated that reports must be generated in the most current formats effective at the time of delivery and must incorporate facile configurability for subsequent format updates.

3.2 Management Information System (MIS) Reports and Dashboards

The system shall furnish real-time, interactive Key Performance Indicator (KPI) dashboards and reports for the meticulous monitoring of critical banking metrics. These functionalities are to be complemented by drill-down analytics capabilities, segmental by product type, branch, customer segment, and other pertinent dimensions. Essential KPIs to be monitored include:

- Bank wise, Zone wise and Branch wise product mix
- Bank wise, Zone wise and Branch wise new product sales (Loans and Deposits) during the period.
- Bank wise and Branch wise Cash Inflow, Cash Outflow and Loan Recovery.
- Collateral Coverage against loans (eligible collaterals only)
- Non-Performing Loan (NPL) Ratio
- Loan-to-Deposit Ratio (LDR)
- Return on Assets (ROA)
- Return on Equity (ROE)
- Capital Adequacy Ratio (CAR)
- Cost-to-Income Ratio
- Profitability Analysis (by product, branch, and customer)
- Customer Segmentation and Behavior Analysis
- Liquidity Ratios (e.g., Liquidity Coverage Ratio (LCR), Net Stable Funding Ratio (NSFR))
- Asset-Liability Management (ALM) Reports

The system should incorporate features enabling authorized users to generate custom reports with minimal reliance on IT intervention.

3.3 IFRS 9 ECL Reporting

The system is mandated to automate the calculations and reporting processes for IFRS 9 Expected Credit Loss (ECL), encompassing:

- The establishment and ongoing maintenance of a historical loan data repository (commencing from 2022, or as otherwise specified by the bank).
- Automated computation of Probability of Default (PD), Loss Given Default (LGD), and Exposure at Default (EAD).
- The generation of IFRS 9-compliant Expected Credit Loss (ECL) reports.
- The provision of capabilities for historical trend analysis to identify early warning signals and facilitate comprehensive scenario analysis.
- Support for distinct staging classifications and associated impairment calculations.

3.4 Data Warehouse / Data Lake

A centralized data repository is deemed indispensable for ensuring data quality, consistency, integrity, and for serving as the definitive “single source of truth.” This repository must facilitate the integration of data from:

- Core Banking System (CBS)
- DB2 (iSeries / AIX) and other internal legacy systems
- External third-party systems
- Manual data inputs for information which are not available to automated capture, complemented by robust data validation mechanisms.

The system must be equipped with powerful ETL (Extract, Transform, Load) capabilities to manage the ingestion, cleansing, transformation, and loading of data from disparate sources.

3.5 API Development, Integration and Bulk Data Handling

The system must feature robust Application Programming Interfaces (APIs) and bulk data handling mechanisms to ensure seamless data exchange and integration. These solution needs to support:

- Use APIs for real-time or small-scale data interactions, and leverage **ETL (Extract, Transform, Load)** pipelines or **file-based transfers** (e.g., SFTP, secure cloud storage) for bulk data ingestion from CBS, DB2 (iSeries / AIX), and other source systems.
- Both T+1 and batch data synchronization.
- Where applicable, consider **data streaming platforms** (e.g., Apache Kafka, etc.) for continuous bulk data flow.
- Integration with regulatory reporting platforms.
- Integration with MIS dashboards and other internal analytical tools.
- Future third-party integrations (e.g., FinTech partners, external analytics tools).
- Secure data transmission, incorporating encryption and authentication protocols.
- Real-time data validation and transformation during transmission.
- Application Hardening: The solution must comply with the Bank’s own and regulatory body’s (e.g. Central Bank) security standards and guidelines.

3.6 BACKUP and Restore:

The Solution will provide GUI for taking backup & restore. Backup will be preserved as per predefined location & naming format. E.g.

D:\XYZ_APP_BACKUP\YYYY_MM_DD_XYZ.BAK

D:\XYZ_APP_BACKUP\YYYY_MM_DD_XYZ.LOG

3.7 Report and Data Archiving

The system must provide comprehensive archiving functionalities for all generated reports and their supporting data, thereby ensuring audit readiness and strict compliance with data retention policies. Key features in this domain include:

- Automated archiving processes.
- Comprehensive audit trails and version history for all reports, associated data and user activities.
- Efficient search and retrieval functionalities for both internal and external audits.
- Secure long-term storage solutions.
- Encrypt PII data both at rest and in transit using industry-standard protocols (e.g., AES-256, TLS 1.2+).

3.8 Enhanced Requirements (Beyond Initial Document)

In addition to the aforementioned functionalities, the system is required to incorporate the following capabilities, which are commonly observed in advanced banking MIS systems:

- **User Management and Access Control:** Implementation of role-based access control (RBAC) with granular permissions tailored for distinct user groups (e.g., finance, risk management, branch staff).
- **Workflow and Approval Management:** Provision of configurable workflows for report generation, review, and approval processes, ensuring proper authorization prior to submission.
- **Alerts and Notifications:** Automated alerts and notifications for critical KPI threshold breaches, impending regulatory deadlines, identified data quality anomalies, and report generation status updates.
- **Data Governance and Lineage:** Tools designed to track data lineage from its source to the final report, thereby ensuring transparency and accountability. Data quality dashboards are also required for monitoring and reporting on data integrity.
- **Scenario Analysis and Forecasting:** Capabilities enabling the performance of "what-if" scenario analysis for purposes of financial planning, risk assessment, and regulatory stress testing.

- **Self-Service Business Intelligence (BI):** Empowerment of business users to generate ad-hoc reports and conduct data analysis utilizing intuitive, user-friendly interfaces, thereby minimizing reliance on IT support.
- **Scalability and Performance:** The system must be architected for high performance and scalability, ensuring its capacity to accommodate increasing data volumes and user loads without performance degradation.
- **Disaster Recovery and Business Continuity Planning:** Implementation of robust mechanisms for data backup, recovery, and business continuity to ensure uninterrupted operational capabilities.
- **Auditability and Compliance:** Comprehensive logging of all user activities and system processes for audit purposes. Adherence to industry, the best practices for data security and privacy (e.g., encryption at rest and in transit) are also mandated.
- **Data Dictionary:** The solution provider must always provide Updated Data Dictionary literature of the solution to the Bank. This must be a very detailed, well-structured document.
- **System Log:** The solution should have an extended system log which will have each user journey and system events log in details with timestamp.

4. Technology Stack (Proposed, Vendors May Propose Alternatives)

While vendors are encouraged to propose their optimal technology stacks, the bank's current preferences are articulated as follows:

- **Application Layer:**
 - Front-End: Any modern UI technology
 - Back-End: SQL Server Analysis Services (SSAS)
- **Data Layer:**
 - RDBMS: Microsoft SQL Server
 - Hadoop Distributed File System (HDFS)
- **Data Integration:**
 - ETL Tool: SQL Server Integration Services (SSIS)
 - Apache NiFi
 - Python scripting
- **Reporting:**
 - Power BI Report Server (PBRS) – Paginated reports and dashboards
 - Apache Superset
 - Metabase
- **Authentication and Access Control:**
 - LDAP / Active Directory integration
 - Role-based Access Control (RBAC)
- **Middleware Capabilities:**
 - Secure data transmission
 - Support for Open API standards
 - Real-time data validation and transformation during transmission

Vendors proposing alternative technology stacks are required to provide a comprehensive justification for their selection, encompassing anticipated benefits, associated risks, and demonstrated compatibility with the bank's extant IT infrastructure.

5. Implementation and Support

The vendor shall assume responsibility for the following aspects of the project:

- **Cloud Implementation:** The vendor must possess hands-on experience in deploying and configuring the complete solution in a cloud environment, including both live and redundant systems to ensure high availability and disaster recovery readiness as well as test environment.
- **Virtual Machine (VM) Implementation:** The vendor must demonstrate practical expertise in setting up and managing the full solution on virtual machine infrastructure, covering both live and redundant systems, with an emphasis on reliability and failover capabilities as well as test environment.
- Full system design, development, rigorous testing, and deployment.
- Data migration from existing systems.
- Comprehensive user training and detailed documentation.
- Post-implementation support, maintenance, and regular updates for a minimum period of 3 years. Solution Provider should be able to identify the root cause of an error and provide the appropriate fix quickly.
- Thorough knowledge transfer to the bank's internal IT team.

6. Proposal Submission Requirements

Vendors are formally requested to submit a meticulously detailed proposal addressing all facets of this scope document. The proposal should include, but not be restricted to, the following elements:

- Executive Summary
- Company Profile and demonstration of relevant experience in analogous projects.
- Detailed technical architecture and design of the proposed solution.
- Comprehensive project plan, including defined timelines and milestones.
- Resource allocation strategy and organizational structure of the project team.
- Itemized cost breakdown.
- Deployment strategy and a comprehensive post-implementation support plan.
- Demonstration of proposed solution capabilities.
- A compliance matrix meticulously detailing adherence to all requirements outlined within this document.

6.1 Proposal Submission

Vendors must submit their technical proposals via email to rfp@abbl.com with the subject line: “**Automated Regulatory Report and Management Information System**” A hard copy of

the commercial proposal must be submitted separately in a sealed envelope, addressed to the **Head of Administration** at the following address:

Head of Administration

AB Bank PLC.

The Skymark, Level 4, 18 Gulshan Avenue, Dhaka 1212, Bangladesh

Submission Deadline

Proposal Submission Deadline: August 25, 2025

Contact Information

For any clarifications, please contact rfp@abbl.com.

7. Deliverables Summary

SL	Deliverable Area	Key Components
01	Regulatory Reports	CIB, CL, SBS, ISS, FX Reports, and future regulatory report adaptability
02	MIS Reports & Dashboards	Real-time KPI dashboards, drill-down analytics, custom report generation
03	IFRS 9 ECL Reporting	PD, LGD, EAD automation, Historical Analysis, Scenario Analysis
04	Data Warehouse / Data Lake	Centralized repository from CBS, DB2, external, and manual sources
05	API Development	Open RESTful APIs for real-time data sync, secure data transmission
06	Reports & Data Archiving	Long-term secure storage with version control, audit trails, easy retrieval
07	User Management	Role-based access control, granular permissions
08	Workflow & Approvals	Configurable report generation and approval workflows
09	Alerts & Notifications	Automated alerts for KPIs, deadlines, data quality
10	Data Governance & Lineage	Data lineage tracking, data quality monitoring
11	Scenario Analysis	"What-if" analysis for financial planning and risk assessment
12	Self-Service BI	Intuitive tools for business users to create ad-hoc reports
13	Mobile Accessibility	Mobile-friendly interfaces or dedicated applications
14	Scalability & Performance	High performance design, ability to handle increasing data volumes
15	Disaster Recovery	Data backup, recovery, and business continuity mechanisms