PROCUREMENT –

PAYMENT SYSTEM

REQUEST FOR PROPOSAL

OCT / 2026

RFP.BDB.2026.02

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1 INTRODUCTION

BDB's payments infrastructure plays a critical role in supporting its retail, corporate, treasury, and channel banking operations. The current payment processing platform, based on the current Payments System, has been in operation for several years and supports various domestic and international payment services.

However, BDB has identified several operational, financial, and strategic challenges with the existing solution. Recurring issues within the current platform have resulted in payment processing disruptions, operational inefficiencies, and repeated financial losses. In addition, BDB seeks to reduce its dependency on a single technology vendor and establish a more flexible, scalable, and future-ready payments ecosystem that aligns with its long-term digital transformation strategy.

To address these challenges, BDB intends to procure and implement a modern, resilient, and configurable Payments System that will replace the existing current platform. The new solution shall provide end-to-end payment processing capabilities while supporting evolving business requirements, regulatory obligations, operational efficiency objectives, and future growth initiatives.

1.1 PURPOSE OF RFP

The purpose of this Request for Proposal (RFP) is to invite qualified vendors to submit proposals for the supply, implementation, integration, migration, support, and maintenance of a comprehensive Payments System.

The proposed solution should:

- Replace the existing Payments System with minimal business disruption, meeting the overall scope mentioned in this RFP document.
- Eliminate current operational challenges that contribute to financial losses and processing inefficiencies.
- Provide a robust, scalable, highly available, and secure payment processing environment.
- Support current and future payment schemes, channels, and regulatory requirements.
- Enhance operational visibility, monitoring, exception handling, and straight-through processing (STP).
- Enable seamless integration with all systems mentioned in the technical requirements of this RFP.
- Provide comprehensive reconciliation capabilities across all payment streams and settlement processes.

1.2 BANK ADDRESS

Bahrain Development Bank Building 170
Road 1703
Block 317 Diplomatic Area Kingdom of Bahrain

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1.3 RFP TIMELINE

Activity	Description	Timeline	Responsible Party
RFP Issuance	Availability of RFP documents and related documents for downloading in BDB bank's site	**19th Oct 2026**	BDB
Deadline for participation confirmation	Last date for bidders for sending the Participation confirmation.	**31st Oct 2026**	Bidders
Deadline for Submission of Questions	Last date for bidders to submit queries related to the RFP.	**12th Nov 2026**	Bidders
Proposal Submission Deadline	Vendors must submit proposals by this date.	**22nd Nov 2026**	Bidders

1.4 POINT OF CONTACT

Activity	Contract Person
Acknowledgement of RFP & Participation confirmation	Once received the RFP, send acknowledgement and participation confirmation email addressing **Mr. Sumesh Subrahmanian** to ssubrahmanian@bdb-bh.com CC: procurements@bdb-bh.com
Questions shall be directed to	Send all clarifications about the RFP via email addressing **Mr. Sumesh Subrahmanian** to ssubrahmanian@bdb-bh.com CC: procurements@bdb-bh.com
Technical & Financial Response Submissions	By the submission deadline, bidders shall upload their technical and financial proposals, including all required attachments, via the BDB tender website and send an email confirmation to **Mr. Sumesh Subrahmanian** to ssubrahmanian@bdb-bh.com CC: procurements@bdb-bh.com

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1.5 INSTRUCTIONS TO BIDDER

NON-DISCLOSURE

The RFP Document and all appendices and attachments shall remain the property of the client and is transmitted to the Bidder solely for the purpose of preparing and submitting a proposal in accordance therewith. Bidder shall maintain confidentiality of this document and shall not release the same, or any part thereof, to any third party for any purpose other than for obtaining quotations directly relating to their proposal.

Definitions

The terms "Request for Proposal" and "RFP" refer to this document. The term "Bidder(s)" and "Tenderer(s)" as used in this document, shall mean the company(ies) that intend to quote for the works. The term "Contractor" as used in this document, shall mean the Bidder awarded for carrying out the works.

The term "Proposal" as used in this document means the submission of the Bidder, which shall include the Fee Schedule and all other technical submittals detailed in all documents, sections, schedules and attachments hereof.

RFP Acknowledgement and Participation Confirmation

Bidders shall acknowledge receipt of this RFP and confirm their intention to participate by notifying BDB in writing via the designated communication channel / to BDB contact person mentioned in section 1.4, no later than the specified deadline.

The confirmation shall include the bidder's legal name and the contact details of the designated representative for all RFP-related communications. Participation confirmation does not constitute a commitment to submit a proposal.

Examination of RFP Document

The Bidder shall be solely responsible for examining, with appropriate care, the RFP Documents, including any addenda issued during the bidding period. The Bidder shall familiarize himself with respect to any and all detailed requirements and/or conditions, which may in any way affect the amount or nature of the Proposals, or the provision of the required goods or services.

Failure on behalf of the Bidder to carefully examine and study the Documents as described above shall be at his sole risk and no relief for resulting errors or omissions will be entertained.

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INTERPRETATION OF RFP DOCUMENT

- The Bidder may request the Client in writing, during the period of submission, for clarification and/or interpretation of any aspect of the RFP Document.
- All bid clarifications should be sent through the email to the contact mentioned in section 1.4 and copying all email addresses mentioned in the same
- All the clarifications must be sent to the client on or before the "Deadline for Submission of Questions" that mentioned in section 1.3.
- No clarifications will be accepted after the "Deadline for Submission of Questions" that mentioned in section 1.3.
- Any interpretation or clarification by BDB will be made in writing to each and every Bidder. Where such interpretation and/or clarification require a change in the RFP Document, BDB will prepare and issue to all Bidder an Addendum to the RFP Document.
- BDB shall not be bound by, nor shall the Bidder rely on, any verbal interpretation and/or clarification of the RFP Document that may be given by any person whomsoever.

PREPARATION OF PROPOSALS

The Bidder shall initial and stamp all pages of his Proposal, including any attachments provided by BDB or submitted by the Bidder in support of his Proposal, in order to signify his acceptance of the terms, conditions and provisions contained therein.

In addition, all Bidder shall formally stamp and initial any corrections or alterations made on the

Proposal. All Proposals shall be prepared by, and at the expense of the Bidder.

All Proposals and other submissions must be in English unless specifically allowed for in the list of RFP submittals.

AMENDMENT OF REQUIREMENTS

BDB reserves the right during any stage of the submission period to add to, vary, change or modify the requirements, on its own initiative or at the request of one or more Bidder(s). In such event BDB shall notify the Bidder of such a change via an Addendum and of any time adjustment which may be granted for the submission of Proposals.

COMPLIANCE WITH APPLICABLE LAWS

Bidders shall comply with all local and international laws, ordinances, regulations, and codes that are applicable to the execution of the Services specified in this RFP Document, including but not limited to labor laws, health and safety regulations, and environmental standards.
It is the Bidder's responsibility to ensure that their Proposal and, if awarded, their performance under the Contract will comply with legal and regulatory requirements. Evidence of such compliance may be requested by BDB at any stage of the procurement process or Contract execution.

DISCLOSURE OF CONFLICTS OF INTEREST

Bidders must disclose, as part of their Proposal, any potential conflicts of interest that might affect their ability to perform the Contract with impartiality and the best interest of BDB. This includes any financial or personal interest in the outcome of the procurement process.
Failure to disclose a conflict of interest may result in disqualification from the bidding process or termination of the Contract, should such a conflict be discovered after Contract award.

TERMS AND CONDITIONS

These general terms and conditions shall govern the provision of Services outlined in this RFP Document:

1- BDB reserves the right to withhold payment in the event of unsatisfactory performance or failure to meet deadlines.
2- Payment by BDB shall be made within thirty (30) days of BDB's receipt of an undisputed invoice from the Contractor or as otherwise agreed upon in writing by BDB and the Contractor.
3- Any intellectual property developed or created as a result of the Services shall belong solely to BDB.
4- The Contractor recognizes and acknowledges that during the course of performing the Services, it may have access to and become acquainted with confidential information of BDB, including but not limited to proprietary technology, business strategies, financial information, customer data, and any other information deemed confidential by BDB (hereinafter collectively referred to as "**Confidential Information**").
5- The Contractor agrees to maintain the confidentiality of all Confidential Information received from BDB, both during the term of the contract and for five (5) years after its termination or expiry.
6- The Contractor shall not use any Confidential Information for any purpose other than the performance of the Services under the Contract, nor shall it disclose or permit access to any Confidential Information to any third party without the prior written consent of BDB, except as required by law or a court order, provided that the Contractor promptly notifies BDB in writing of such requirement to disclose and cooperates with BDB in seeking appropriate protective measures.
7- The Contractor shall take all reasonable precautions to safeguard the Confidential Information and prevent its unauthorized use or disclosure, including implementing physical, technical, and administrative security measures.
8- The obligations of confidentiality set forth in this Clause shall survive the termination of the Contract.
9- BDB may terminate the Contract entered into for the provision of the Services upon serving the Contractor with a thirty (30) day written notice.
10- BDB reserves the right to terminate the Contract with immediate effect by providing written notice to the Contractor in any of the following circumstances:

a) If the Contractor commits a material breach of any provision of the contract and fails to remedy such breach within five (5) days of receiving written notice from BDB specifying the nature of the breach;

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b) If the Contractor becomes insolvent, bankrupt, or enters into liquidation or receivership proceedings, or if a petition for bankruptcy or winding-up is filed against the Contractor;
c) If the Contractor undergoes a change in control or ownership that, in the reasonable judgment of BDB, adversely affects the Contractor's ability to fulfill its obligations under the contract;
d) If the Contractor engages in conduct that brings disrepute to BDB or otherwise damages BDB's reputation, as determined by BDB in its sole discretion.

11- Upon termination of the Contract, the Contractor shall promptly return to BDB any Confidential Information or other property of BDB in its possession or control, and shall cease all use of BDB's name, trademarks, logos, and other intellectual property.

12- Upon termination for convenience, the Contractor shall be compensated for all work performed up to the termination date. Upon termination for cause, the Contractor shall not be entitled to further payment until the Services are satisfactorily completed, and any additional costs incurred by BDB may be deducted from any due payment to the Contractor.

13- The Contractor agrees to indemnify, defend, and hold harmless BDB, its affiliates, officers, directors, employees, agents, successors, and assigns from and against any and all claims, liabilities, damages, losses, costs, and expenses (including reasonable attorneys' fees) arising out of or in connection with the Services provided under the contract, except to the extent such claims arise from the gross negligence or willful misconduct of BDB.

14- The Contractor may not assign or transfer its rights or obligations under the contract without seeking the prior written consent of BDB.

15- The Contractor agrees to perform the Services in accordance with prevailing industry standards and best practices.

16- The deadlines for the provision of Services are of the essence of the contract.

17- The Contractor shall bear any additional costs or expenses incurred by BDB as a result of delays in the provision of Services, unless such delays are attributable to acts or omissions of BDB.

18- Any matter, claim or dispute arising out of or in connection with Services, whether contractual or non-contractual, is to be governed by and determined in accordance with the laws of the Kingdom of Bahrain.

19- In carrying out the Services the Contractor will comply with all applicable laws and prevailing regulations and judicial requirements in the Kingdom of Bahrain. BDB will not be liable to the Contractor to the extent that any such legislation, decision, direction, order or determination prohibits or restricts its performance under or compliance with its obligations.

20- In alignment with the regulations of the Central Bank of Bahrain, the Contractor irrevocably and unconditionally agrees to and acknowledges the following:

a) Each Party’s obligations under the Contract are conditional upon and subject to the respective compliance with all applicable laws and prevailing regulations and judicial requirements in the jurisdiction over either party to or the subject matter of the Contract. Neither Party will be liable to any other Party to the extent that any such legislation, decision, direction, order, or determination prohibits or restricts its performance under or compliance with the Contract.
b) On the expiry or termination of the Contract for whatsoever reason, or if the Contractor ceases to deliver the Services, the Contractor agrees to cooperate and promptly take all steps required to assist in effecting a complete transition of the Services to the new service provider at no additional cost to BDB while maintaining the required service levels.
c) The Contractor agrees that during the term of the Contract, it will ensure, the uninterrupted provision

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of all Services and obligations defined in the Contract, regardless of any crisis situation, recovery, or resolution event (collectively "**Adverse Events**") that may affect BDB. Furthermore, the Contractor shall not have the right to terminate, suspend, amend or otherwise modify its obligations under the Contract due to any Adverse Events that may affect BDB. This section shall prevail over any other clause that may be construed to the contrary in the Contract or in any other agreement between the Parties.

d) This section is intended to ensure compliance with the applicable regulations of the Central Bank of Bahrain and shall be interpreted accordingly.

WITHDRAWAL OF RFP BY CLIENT

Bidder may withdraw or modify a Proposal at any time prior to the date and time set by The Client for submission of Proposals in section 1.3, provided The Client has received written and signed documentation of withdrawal or modification before such date and time. Written notification shall be by registered letter and postmarked prior to the date and time for submission of Proposals. The Client reserves the right during any stage of the submission period to add to, vary, change or modify its requirements. In such event BDB shall notify the Bidder of such a change via an Addendum and of any time adjustment which may be granted for the submission of Proposal.

SUBMISSION OF PROPOSAL

- **Submission Deadline:** The proposal must be submitted by the deadline mentioned in section 1.3. Bids submitted later than the prescribed submittal date and time may be rejected by the Client, or the Client may impose upon the Bid the appropriate Bid evaluation penalties. Such penalties or rejection of Bid shall be solely at the Client's discretion.

- As part of the bid submission, the bidder **must** submit their technical response, which will include all the below listed, to the client for them to perform technical evaluation of the bidder's product.
    1. **Technical Response** for the proposed solution that includes the below listed
        a) Summarize Proposed solution, key benefits, and alignment with BDB's objectives.
        b) Bidder Profile & Experience that includes the Company profile, relevant experience, similar projects, banking-sector references, and certifications.
        c) Understanding of BDB's objectives, scope, business needs, and expected outcomes.
        d) Proposed solution overview containing Solution description, key capabilities, functional modules, and proposed licensing/deployment model.
        e) Solution Architecture that explains High-level architecture, components, technology stack, deployment architecture, and architecture diagrams.
        f) Functional Capabilities - Detailed explanation of how the solution meets functional and business requirements.
        g) Integration approach, API capabilities, connectivity with existing bank systems, and third-party dependencies.
        h) How the proposed product meets the security and data privacy requirements mentioned in the RFP.
        i) How the proposed product meets the technical requirements mentioned in the RFP.
        j) Supported approach for Data migration, validation, reconciliation, retention, and data ownership.
        k) Supported Hosting model, environments, infrastructure requirements, sizing, and deployment prerequisites.
        l) How the bidder's Project organization, roles and responsibilities, key personnel, resource allocation, and governance structure will be during the implementation of the product.

m) What will be the bidder's Testing strategy, test types, defect management, UAT support, and acceptance criteria.
n) What will be the bidder's Training approach, documentation, administrator training, and knowledge transfer to meet the relevant requirements that are listed in RFP
o) Explaining Support model, SLAs, incident management, escalation procedures, maintenance, and upgrades.
p) Explaining the recommended Backup strategy, disaster recovery arrangements, recovery objectives, and continuity procedures.
q) Technical assumptions, prerequisites, dependencies, limitations, and exclusions.
r) Key delivery risks and proposed mitigation measures.
s) Comparable implementations, client references, project scope, and outcomes.
t) **Submit all relevant supporting documentation** - Product datasheets, architecture diagrams, certifications, technical documentation, and other supporting evidence.
u) Submit the **BDB-PAYMENT SYSTEM_RFQ_REQ_Compliance_Schedule** (Excel sheet) filled by the bidder for all RFP requirements, including compliance status, explanations, deviations, and proposed resolutions as comments.
v) Submit the **BDB_TPRM_AI Security Questionnaire_v1.0 (excel sheet)** filled by the bidder
w) Submit the **BDB_TPRM_Outsourcing Questionnaire_V7.0 (Excel sheet)** filled by the bidder
x) Submit the Bidder's **License Contract, Implementation Contract** and **Production Support Contract** Templates.

2. Submit the **Financial Response** which will include the below listed (but not limited to), to the client for them to perform financial evaluation

- The bidder shall submit a detailed financial proposal covering the **full three-year contract term**. The proposal shall separately identify one-time implementation costs, annual recurring costs, third-party costs, and optional services.
- All costs shall be itemized, with unit rates, quantities, annual pricing for Years 1, 2, and 3, and consolidated three-year totals. Applicable taxes shall be stated separately.
- The bidder shall provide a consolidated three-year Total Cost of Ownership (TCO), including all mandatory costs required to implement, operate, support, and maintain the proposed solution throughout the contract term. Optional services should be priced separately and excluded from the base contract price.
- The bidder shall provide Cost structure flexibility (SaaS, on-premises, or hybrid models and different licensing options like Perpetual / Annual) if applicable.
- The bidder shall provide transparency in licensing terms (per-user, per-module, or enterprise-wide). Flexibility to adjust licensing based on future needs
- The bidder shall be providing a prizing sheet that clearly provides year-wise, below listed costs for each proposed option
    - One time Implementation Costs
    - Recurring Costs that shall include Software License Costs, Support and Maintenance Costs or any other recurring costs
    - Optional services costs
    - Cost of Upgrades
    - Year wise total cost

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- Total contract value for the full term
- Change request costs
- Payment schedules (*different flexible options if applicable*)

- The financial proposal shall clearly specify
  - The proposed currency, payment milestones, payment terms,
  - License metrics, quantities, and any usage limits, and any additional charges applicable during the contract term.
  - Warranty Period, Scope of Warranty Coverage,
  - Support hours, SLA levels, and associated costs,
  - Annual price increases, renewal charges, and applicable escalation rates,
  - Pricing assumptions, exclusions, and third-party dependencies
  - Confirmation that all costs required to deliver the proposed solution are included, except for explicitly stated exclusions,
  - Contract termination, license portability where applicable.

- **Submission**: Bidders shall submit their technical and financial responses via email to the addressed mentioned in the section 1.4 (Refer "Bid Submissions shall be addressed to")

VALIDITY OF PROPOSALS

Proposals shall remain valid and binding upon the Bidder for a period of **one hundred and eighty (180) calendar days**, with a provision for extension upon mutual agreement, commencing from the date fixed for delivery of the Documents to the Client. A Proposal may be accepted at any time before the expiration of this period.

OWNERSHIP OF PROPOSALS

Upon submission, the Proposal shall become the sole and absolute property of the Client and no documentation shall be returned to the Bidder.

EVALUATION OF PROPOSALS

The Proposal shall be evaluated based on the evaluation criteria mentioned in section 3 of this RFP.

- The bidder must provide a comprehensive product demo session during evaluation timeframe showcasing how the proposed offering meets each requirement specified in the BRD.
- The Bidder might be required to attend meetings at the client office sites, or online via MS teams during the period of evaluation, to clarify and/or detail any part of his Proposal in order to satisfy the Client that he has carefully considered all matters affecting the execution of the Scope of Works.

REJECTION OF PROPOSALS

BDB has the right, without incurring liabilities, to reject all Proposals submitted by Bidder.
Bidder shall acknowledge that no claim is admissible for any expense or cost incurred in preparation of

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the Proposal(s), or for any other reasons.

NEGOTIATED AGREEMENT

Following submission of Proposals, the Client may undertake a negotiated agreement with the successful Bidder, or any or all of the Bidder. Bidder shall acknowledge that no claim is admissible for any expense or cost incurred in preparation of the Proposal(s), or for any other reasons borne out of a negotiated agreement.

AWARD

BDB will issue a letter of award and purchase order to the Contractor. Subsequently, BDB and the Contractor will enter into a contract governing their relationship and the Services that will be performed by the Contractor.

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2 SCOPE OF WORK

This section provides the list of detailed functional and non-functional requirements that each bidder's product should support, the overall scope of product implementation by the bidder, and expected timeline of implementation.

2.1 BUSINESS REQUIREMENTS FOR PAYMENT SYSTEM.

- The Solution shall cover the full payment lifecycle: capture, validation, enrichment, screening, approval, routing, posting, clearing and settlement, reconciliation, exception handling, and reporting.

  In scope

  - Outward and inward cross-border payments via SWIFT and AFAQ.
  - Domestic payments via EFTS and RTGS Pro.
  - Bill inquiry and bill payment under EFTS.
  - Bulk payments (within bank and domestic), WPS salaries, and Salary payments.
  - Integration with Core, AML, Treasury, EFTS, SWIFT, RTGS Pro, Internet Banking, and Mobile Banking.
  - Reports, audit trails, and monitoring.
  - Direct debit mandates under EFTS, issuing outward mandates, canceling mandates, and direct debit transactions in and out.
  - Standing orders creation and canceling, processing the payments (within bank, cross border and Local).
  - Open banking APIs.
  - Reconciliation Nostro account statements
  - Reconciliation of suspense accounts.

  Detailed in scope requirements are listed below.

  Payment Types and Channels

Area	Requirement
Cross-border	Outward and inward customer transfers, bank-to-bank transfers, cover payments, returns and recalls, via EFTS, RTGS Pro and SWIFT MT and ISO 20022 (pacs, pain, camt)
Domestic	Transfers available through EFTS and RTGS Pro (e.g. real-time transfers, ACH, direct debit, and other schemes)
Bills	Bill inquiry and bill payment through EFTS service, updating billers lists on daily basis.
Bulk	Payroll and bulk file processing, WPS, standing orders, scheduled and recurring payments
Channels	Internet Banking, Mobile Banking, branch/teller, corporate host-to-host, APIs
Internal Transfers	Cross currency transfers, same currency (own accounts and within bank).
Standing orders	Standing orders within bank, Cross border through SWIFT and AFAQ, Domestic through EFTS and RTGS Pro.

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Open Banking	Support open banking APIs.

Payment Initiation and Capture

- Accept payment instructions from Internet Banking, Mobile Banking, branches, and API/files.
- Support single, bulk, scheduled, future-dated, recurring payments, and beneficiary templates.
- Support configurable maker-checker or maker and two checkers approval workflows, payment type, currency, and user role.
- Enforce limits (per transaction, daily, per customer, per channel) as configured by BDB.
- Support payment initiation via open banking APIs.

Validation and Enrichment

- Validate IBAN, BIC, account status, currency, cut-off times, and mandatory fields before processing, throw error if validation failed, no financial entry to be posted.
- Validate beneficiary name from a received payment instruction message (MT103) with name in core system, process if match, send to repair queue if not matched, maker checker flow to be implemented.
- Convert between MT and ISO 20022 formats without data loss.
- Detect duplicate payments (all types) using configurable rules.
- Detect duplicate bulk files using configurable rules.
- Calculate fees, charges, and FX rates (linked to Treasury module under core system), and display them to customers before confirmation.
- Enrich payments automatically with reference data (correspondent, SSI, beneficiary details).

Compliance, Screening and Controls

- Maintain an internal prohibited list for customers names, BIC codes and countries, managed with maker-checker approval and a full audit trail, and applied across all payment types and channels.
- Send all payment data required by the AML system for transaction monitoring, in near real time.
- Support country, currency, and bank-level restrictions and blocks.

Routing and Processing

- Route payments automatically by configurable rules (currency, country, amount, scheme, cut-off).
- Manage cut-off times, holiday calendars, and value dating for all currencies.
- Provide queue management, prioritization, and payment status tracking end to end.
- Support SWIFT gpi tracking (send, receive, and update status).

Clearing and Settlement

- Connect to EFTS for clearing and settlement of domestic products, following the operator's specifications and timelines.
- Manage settlement positions and cut-off windows for EFTS and provide real-time visibility of positions.
- Manage nostro and vostro accounts, including expected balances and statement matching (camt.053/MT940/MT950).

Bill Inquiry and Bill Payment

- Provide bill inquiry (retrieve outstanding amount, due date, and bill details by biller and customer reference) in real time through EFTS.
- Process bill payments from customer accounts through Internet Banking and Mobile Banking, with confirmation and receipt.
- Support saved billers, scheduled and recurring bill payments, and partial or advance payments where the biller allows it.

- Handle timeouts, failures, and duplicate requests safely, with automatic reversal and no double debit.
- Reconcile bill payments daily with billers/operators and produce settlement and exception reports.
- Allow configuration of new billers and fee structures.

Exceptions, Investigations and Returns

- Provide repair and exception queues for failed, rejected, and unmatched payments, with audit of every change.
- Support investigations, recalls and returns.
- Send automatic customer notifications (SMS, email) on status changes, holds, and rejections.

Accounting and Reconciliation

- Post all debits, credits, fees, and FX entries to the Core Banking system in real time or as configured, with automatic reversal on failure.
- Reconcile automatically between the Solution, Core, EFTS, SWIFT, and nostro statements, with break management and ageing.
- Produce accounting and GL interface files with full traceability to source transactions.
- System shall automatically post unmatched, rejected, and exception transactions to designated suspense accounts.
- System shall perform automated EOD balancing between Payment System, Core Banking, SWIFT, EFTS, RTGS, Treasury to ensure no transactions are missed or not posted with real time alerts.
- Reconciliation to cover Transaction-by-transaction matching between:
  - Core Banking
  - Nostros
  - Payment Hub
  - EFTS
  - RTGS
  - SWIFT
  - Bill Payment Platforms
  - Suspense Accounts

Administration and Reference Data

- Provide user, role, and entitlement management with segregation of duties and maker-checker on all configuration changes.
- Provide configurable parameters (limits, fees, cut-offs, calendars, routing rules, workflows) through an administrative interface.
- Maintain correspondent bank, BIC directory, and SSI data, with automated updates from SWIFT reference data.
- Provide a test/simulation environment for rule and routing changes before production.

Future readiness

- AI readiness for future changes and requirements.

Reporting Requirements

- Provide standard operational reports: payments by status, type, channel, and currency; pending,

held, rejected, and returned payments; queue ageing; cut-off exceptions.

- Provide compliance reports: screening alerts and dispositions, blocked or rejected payments, prohibited-counterparty hits, list change history, and STR referrals.
- Provide reconciliation and settlement reports for Core, EFTS, SWIFT, RTGS, nostro accounts, and billers.
- Provide bill payment reports: transactions by biller, fees, failed and reversed items, and settlement.
- Provide regulatory reports as required by the CBB and other authorities, and support new report formats without vendor code changes.
- Provide management of dashboards (volumes, values, processing times, and fee income).
- Provide an audit report showing every action on a payment and every configuration change (who, what, when, before/after values).
- Allow reports to be scheduled, filtered, and exported (PDF, Excel, CSV), with role-based access.
- Provide a self-service report designer and access to a reporting database or data feed.
- Provide Supporting Reports / Statements to execute Reconciliation
- Provide daily suspense account reconciliation / Nostro reports.
- Provide ageing reports for unreconciled items

2.2 TECHNICAL REQUIREMENTS FOR PAYMENT SYSTEM

The Solution shall meet the technical requirements below. Bidders shall state compliance against each requirement ID in the Requirements Compliance Schedule and describe how it is met.

Service availability and operating hours

The BENEFIT Electronic Funds Transfer System (EFTS) runs 24 hours a day, 7 days a week, 365 days a year. Fawri+ credits the beneficiary within 30 seconds, and an EFTS Corporate beneficiary bank must respond within 15 seconds. Any downtime of the Solution's EFTS path is therefore a customer-visible outage. The Solution shall meet two availability tiers.

- Tier 1 — 24×7 services (EFTS outward and inward, CAS lookup, bill inquiry and payment, open banking payment APIs, Internet and Mobile Banking payment APIs) shall be available 24×7×365 with at least [99.99%] availability measured monthly, excluding outages caused by the scheme operator.
- No planned downtime for Tier 1. Upgrades, patches, configuration changes, scheme releases and database maintenance shall be applied without stopping Tier 1 services (rolling deployment, blue/green or equivalent). The bidder shall describe its approach.
- Tier 2 — window-based services (CBB RTGS, AFAQ, SWIFT outward) shall be fully available for the whole of each scheme's operating window, with at least [99.99%] availability within the window. Planned maintenance shall take place only outside all scheme windows, with at least 5 business days' notice to BDB.
- Bidder should clearly specify the Service Level Agreement and support response and resolution based on incident severity.
- Bidder to propose credit calculation enabling BDB to claim should a breach to the SLA occur.
- Independence from Core Banking end-of-day. EFTS inward and outward processing shall continue while the Core Banking system is in end-of-day, maintenance or outage. The Solution shall provide store-and-forward and stand-in processing under Bank-approved rules, and post to Core automatically when it is available again, with no duplicate and no lost posting.
- The Solution's own end-of-day, batch, reporting and archiving jobs shall not interrupt Tier 1 processing.
- Business-day calendars, operating windows and cut-off times shall be held per scheme and per currency

(EFTS, RTGS, AFAQ by country, SWIFT by currency) and updated automatically where the scheme publishes them (for example the AFAQ business-day schedule and calendar messages).

- Vendor support for Severity 1 incidents on Tier 1 services shall be available 24×7. Response and resolution times are set in the SLA schedule.

Resilience, business continuity and disaster recovery

The Solution shall support BDB's business continuity obligations under the CBB Rulebook (Volume 1, OM-5).

- No single point of failure in any component: application, database, message queue, scheme connectors, HSM and network.
- Deployment across BDB's primary and disaster recovery data centres. Tier 1 services shall run active-active or with automatic failover. The bidder shall state the supported topology.
- Recovery objectives: Tier 1 RTO ≤ [15 minutes], RPO = 0 (no loss of any acknowledged payment); Tier 2 RTO ≤ [2 hours], RPO = 0.
- In-flight integrity on failover: every payment shall end in exactly one final state. No duplicate submission to a scheme and no duplicate posting to Core after a failover. All interfaces shall be idempotent.
- Scheme-connection error handling as specified by each operator, configurable per scheme. For the BENEFIT EFTS REST API: HTTP 500/503 → repeat the same request once per second until resolved; HTTP 429 → retry after the Retry-After header; HTTP 401 → renew the token and repeat; timeout with no response → hold the payment as "status unknown" and resolve it automatically by status inquiry or reconciliation, never by re-sending.
- Disaster recovery switchover tested with BDB before go-live and at least annually afterwards. Vendor support for BDB's BCP tests is included in the annual maintenance contract.
- Online, encrypted backups without service interruption, with point-in-time recovery.

Performance and capacity

- Response times below are measured inside the Solution, excluding time spent in Core Banking and in the scheme, unless stated otherwise.

- EFTS inward (beneficiary bank): validation, name/IBAN check, credit decision and response to BENEFIT within 5 seconds at the 95th percentile, so BDB always meets the scheme's 15-second response and 30-second credit timelines.
- EFTS outward: time inside the Solution (receipt of the instruction → message to BENEFIT, and BENEFIT response → status to the Middleware) of 1 second or less at the 95th percentile.
- Open banking APIs: payment initiation average time-to-last-byte of 750 ms or less; confirmation of funds average of 300 ms and maximum of 500 ms; 5xx error rate of 0.5% or less per day, in line with the Bahrain Open Banking Framework Operational Guidelines.
- Capacity: sized for 3 times BDB's peak-hour volume plus 5 years of growth, scaling horizontally. Bank volumes per payment type: [to be provided in Appendix — volumes]. The bidder shall state the throughput (transactions per second) proven on its reference configuration.
- Bulk, WPS and payroll files: a file of [10,000] payments validated within [5] minutes and released to the scheme within the scheme window.
- Before go-live, the bidder shall run a performance test and a soak test of at least 24 hours at peak load in BDB's pre-production environment, and share the results.

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Architecture and technology

- ISO 20022-native processing: the internal data model shall hold the full ISO 20022 data set. MT messages shall be handled by translation per SWIFT CBPR+ rules; truncated data shall be flagged and the original message kept.
- API-first: every function used by channels, the Middleware and operations shall be available through documented REST APIs (OpenAPI 3.x), with versioning and backward compatibility.
- Modular, horizontally scalable, stateless application tier. Container deployment (Kubernetes / OpenShift) is preferred. The bidder shall state the supported operating systems, application servers, databases and message queues, with versions.
- Routing rules, limits, fees, cut-offs, calendars, workflows, new schemes and new message versions shall be configured through parameters with maker-checker, without vendor code changes.
- Scheme connectors shall be pluggable: a new scheme, or a new version of a scheme message, can be added without changing the core product.
- One payment repository and one end-to-end status model across all payment types, with every message sent and received linked to its payment.
- An event shall be published on every payment status change (message queue or event stream) for notifications, AML, monitoring and the Middleware.

Scheme connectivity and messaging standards

- BENEFIT EFTS: connection through the BENEFIT EFTS REST API (PTD-013): OAuth token, message signing with BDB's certificate, message input (POST /input/{request_id}) and output long-polling (GET /output/{request_id} with configurable fetch timeout, parallel threads and handling of out-of-order messages), minified XML. Coverage: Fawri+, Fawri, Fawateer (including direct debit and EBPP), EFTS Corporate payments (NRT, IP, DNS) and CAS.
- CAS: IBAN/alias lookup before payment, and BDB-side duties of the scheme, including IBAN status and KYC updates to CAS within 24 hours and upload of new IBANs.
- CBB RTGS: connection as a direct participant through SWIFT (and the CBB private network where provided), covering customer and interbank payments, liquidity and queue view, and end-of-day statements, using the CBB RTGS message set.
- AFAQ (GCC RTGS): connection to the AFAQ RTGS Participant Gateway (RPG) through its REST API, using the AFAQ message set: pacs.008, pacs.002, pacs.004, pacs.028, camt.016/017 (exchange rates), reda.064/065 (calendar), camt.019 (business-day schedule), camt.053/054 (statements) and camt.056/029 (cancellation). The Solution shall apply the AFAQ Operating Rules timings, for example sending payments received before value date within 2 hours of "Open for Business" and returning payments within 2 business days at most.
- SWIFT: connection through BDB's SWIFT infrastructure over FIN and FINplus. CBPR+ ISO 20022 for customer and financial-institution payments (pacs.008, pacs.009, pacs.004, camt.056, camt.029, camt.052/053/054). Structured or hybrid postal addresses (unstructured addresses are no longer accepted after 14 November 2026). pain.001 over FINplus in place of MT101.
- SWIFT gpi: UETR on every payment, gpi tracker updates (send, receive, confirm), and stop-and-recall.
- Scheme changes included in the annual maintenance contract: SWIFT annual Standards Release, BENEFIT and AFAQ scheme updates and CBB mandates shall be delivered before each mandatory date

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at no extra license cost.

- Scheme certification: the vendor is responsible for passing BENEFIT, AFAQ, CBB RTGS and SWIFT certification and conformance testing for BDB before go-live.
- Open banking: payment initiation and confirmation-of-funds APIs compliant with the current Bahrain Open Banking Framework, including the availability and performance statistics BDB reports monthly to the CBB.

Integration with Bank systems

- Core Banking: real-time posting of debits, credits, fees, VAT and FX entries through Bank APIs, with customer legs identified by IBAN, and automatic reversal on failure. Account, balance and status inquiry.
- Bank Middleware: the Solution shall expose REST APIs for payment initiation, status, inquiry and cancellation, called by BDB Middleware on behalf of Internet Banking, Mobile Banking, open banking and other channels. Status changes shall be pushed to the Middleware (callback or event).
- Limits, charges and notifications: the Solution shall integrate through APIs with BDB's existing Limit, Charge and Notification services.
- Treasury rates: FX rates from BDB's Treasury rate source; the applied customer rate shall never be worse for BDB than the mid rate. AFAQ payments use the AFAQ scheme rate, and no AFAQ payment shall be sent unless both the current day's AFAQ rate and calendar are available.
- AML and sanctions: real-time screening before release, with hold/release workflow, and a near-real-time transaction feed to BDB's AML system.
- General Ledger and reconciliation: GL interface files, and nostro statements (camt.053, MT940, MT950) for automatic matching.
- Identity: single sign-on with BDB's identity provider (Azure AD / Active Directory) for operations users, with role-based access and maker-checker.
- Integration standards: REST/JSON over TLS 1.2 or higher (mutual TLS between systems), ISO 20022 XML, message queues and SFTP for files. An idempotency key on every API that creates or changes data.

Hosting, environments and data residency

- The bidder shall propose deployment on-premises in BDB's data centres and may also propose cloud.
- Any cloud option shall keep Bank customer data in the Kingdom of Bahrain, support BDB in obtaining the CBB's prior written approval for outsourcing (CBB Rulebook OM-3), and comply with the Bahrain Personal Data Protection Law (Law No. 30 of 2018), including its rules on cross-border transfer.
- Environments: SIT, UAT, Pre-production, Production and Disaster Recovery, each connected to the matching scheme test environment (BENEFIT, AFAQ, SWIFT, CBB). The proposal shall state the number and sizing of environments.
- Simulators for BENEFIT, AFAQ, SWIFT, RTGS and Core Banking, so testing can continue without the external systems.
- No real customer personal data in non-production environments. The Solution shall include a tool to anonymise or mask test data.

Data, archiving and retention

- Payment records, original scheme messages and audit trails shall be retained for at least 10 years, with

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online access for [2] years and retrieval from archive within [24 hours] after that.

- Archiving and purging shall run without affecting Tier 1 performance.
- Data migration tooling: extract, transform and load, reconciliation reports and repeatable mock migrations from BDB's current sources (Bank Middleware database, and the AFAQ gateway), covering standing orders, beneficiary templates, direct-debit mandates, open and pending payments, and payment history. Live standing orders shall be migrated with no missed and no duplicate execution.
- A reporting database or data feed for business intelligence, without load on the transactional database.
- Active data separation. The Solution shall keep in-flight payments (not final, status unknown, awaiting Core posting or awaiting reconciliation) separate from completed history. A payment shall leave the active set only when it is final, posted and reconciled, and its return, refund and duplicate-check window [configurable, default 90 days] has passed. Processing time for in-flight payments shall not get slower as history grows; the bidder shall demonstrate this with 10 years of BDB's projected volume. Moving data between tiers shall run online without affecting Tier 1 services. All inquiries, matching of returns to original payments, investigations and reports shall search every tier transparently.

2.3 INFOSEC REQUIREMENTS FOR PAYMENT SYSTEM

DATA PRIVACY & SECURITY REQUIREMENTS

The Vendor platform and products should support the below high-level requirements:

- Solution should be designed for Data Privacy (Data privacy by design) aligning to Bahrain PDPL regulations.
- Adherence to NIST Cyber Security Framework as required by Central Bank of Bahrain (CBB) Volume 1, and Secure standards, development lifecycle and coding practices (e.g. OWASP).
- Should adopt secure code analysis during development (i.e., static, dynamic or hybrid).
- Strongly recommended to have recognized certifications-maintained ISO 270001, ISO 22301, SOC TypeII(for SAAS offerings) to demonstrate strong IT and Cyber Security processes.
- For Saas offerings, should have a strong orchestration security, cloud security posture management, security monitoring, cloud governance framework which includes responsibilities, data residency, exit/portability strategy.
- For AI models the governance framework, fairness monitoring/testing, auditability, privacy and security control around AI,
- Should be able to align to BDB Cyber Security and IT policies, standards and guidelines.
- Should support strong identity, authentication, authorization, access control, session management, encryption and auditing mechanisms.
- Should have comprehensive logging, monitoring and alerting/trigger activities, object calls, requests, responses etc. as well as security events with support for log forwarding.
- Audit logs/trail feature should be configurable to send logs to syslog or write to event viewer.
- Should support Role Based Accessed Control and delegated/segregated/granular administration to support strict access controls and to restrict access to authorized individuals and parties.
- Implement rate limiting and throttling to protect against abuse and Denial of Service Attacks.
- Adheres to privacy by design principles (e.g. PDPL) with support for data masking/obfuscation and tokenization to protect/restrict sensitive data. Also, should support data anonymization for analytics or testing purposes. Data inventory, Data classification, Data flow, data mitigation, consent, cross border transfer, processing by third parties if any, data subject rights support.
- Easy, trackable and customizable explicit user consent management for data collection and processing.
- Should provide independent penetration testing certification semi-annually covering the CBB requirements.

- Should have code testing AI/SAST/DAST/Manual for vulnerabilities.
- Support for encryption of all sensitive and confidential data at rest and in motion with industry recognized secure algorithms.
- Centralized and easy encryption keys management.

In case of mobile support;
mobile device security such as and not limited to location based restrictions, vpn detection, emulators, screenshot/recording prevention, biometric auth, tamper detection, certificate pinning, detection of jailbroken/rooted devices restricting app functionality.
Supports application code obfuscation to prevent reverse engineering and provides regular updates to address vulnerabilities in application and integrated third-party components/libraries/frameworks.
Support strong mobile application security such as and not limited to RASP, root/jailbreak detection, vpn detection, screenshot/recording protection, certificate pinning, rate throttling.

- Establish secure, encrypted staging environments isolated from production.
- In case of MFA, not only limited to secure OTP delivery support for sensitive actions but also stronger authentication schemes such as push buttons, authenticators and others.
- Supports data and log retention requirements such as those defined by the Central Bank of Bahrain (CBB) Volume 1.
- Trackable consent management which includes withdrawal and customizable privacy notices/notifications.
- Mechanism to support customer privacy rights as required by Bahrain PDPL such as access, correction, objection and erasure/portability.
- Easy to understand error messages without revealing sensitive or confidential information.
- User access, roles, privileges and activity details extractable/viewable as a report is recommended.
- Strong security integration in the case of APIs through strong authentication and audit logging.
- Clear and comprehensive API documentation for security testing.
- There should be an option to default all sensitive and confidential documents with password protection for different customers.
- The system shall implement a secure CAPTCHA mechanism to prevent automated attacks on the online user onboarding/registration and login functionalities.
- All Users/Accesses/Changes reporting feature to be present.
- Zero Critical and Major/High findings before release as go-live criteria.
- Enforced segregation of duties and Maker-Checker workflows across all financial transactions and administrative changes.
- Remote support through bank approved processes and PAM/jump server.
- Supports secure backups and archiving.
- Behavioral analytics on the journey to flag anomalies and trigger step-up authentication events with alerts.
- To align Bahrain PDPL right to object automations to be able to support non-AI and automated decision making but human oversight.
- Support secure, auditable integration across BDB's systems and third-party/partner sources.
- Support strong Service Level Agreements for banking with best practice implementation on data flow and secure solution architecture.
- PII and sensitive PII data must be avoided in test/staging environment.
- To provide formal step-by-step process and mutually agreed roadmap to decommissioning of old/legacy systems.

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2.4 Implementation timeline

- BDB requires the successful bidder to complete the implementation and deployment of the proposed solution and achieve full production go-live within four (4) months from the date of Implementation kick-off

2.5 Overall Scope

- Prepare and deliver a detailed implementation plan with timeline (Gantt chart) with the client's project manager.
- Gap analysis and requirement gathering from the client
- Project Management Services to oversee the delivery from the bidder's teams and ensure timely delivery at client's office
- Successfully deliver the Implementation of proposed solution covering.
  - Deployment and hosting of overall solution in accordance with the client's Requirements
  - UI/UX design customization – The successful bidder shall adhere to BDB design guidelines. For customer-facing screens, the bidder shall provide Figma designs and incorporate BDB review comments until design approval is obtained. Internal bank user screens shall also comply with BDB design guidelines.
  - Configuration and customization, in accordance with the client's Requirements
  - Integration development, in accordance with the client's Requirements
  - Development of operational, analytical and MIS reports in accordance with the client's Requirements
  - Perform QA testing on the Software and deliver to UAT
  - Design, execute, and validate a secure Data Migration Plan ensuring mathematical and logical parity between source and target datasets.
  - Validate migration scripts and automated reconciliation tools through rigorous test runs.
  - Provide verifiable reconciliation reports proving that Source Data = Migrated Data = Validated Target Data prior to business sign-off.
  - Aligning the solution security and network design as per security requirements of the client
  - Timely Support for all functional and non-functional testing by the client
  - Providing Solution design and architecture documentation
  - Providing training sessions and materials to client staff
  - Providing detailed user manual documentation for functional and non-functional users of the system
  - Providing Tutorial videos
  - Deployment to production, Go-live and provide post go-live support
- Training sessions to cover the below*:
  - Training to System testing teams (UAT)
  - Training to System Administrators
  - Training to Back-office teams
  - Training to Customer facing teams
  - Training to Support teams

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More training sessions might be defined as required post conducting the testing and it must be supported.

- Historic data migration from existing payment system application
- Post-Implementation Support- 3 months
- Product support - Bidders to provide availability of support including future upgrades for all components of the solution, without any exception, for a minimum period of 3 years from the date of going live meeting all SLA requirements mentioned in the BRD that attached with this RFP, entering to a support and maintenance contract with client. Continued monitoring of the environments and applications deployed in production during the entire contract period, and provide onsite technical support as per the requirements of the client. If software and utilities enhancement is available such new versions of software should be informed within 1 month of its release and made available for BDB within mutually agreed timelines
- Successful bidder shall be responsible for carrying out any upgrade, changes/modifications, regulatory requirements which may be required from time to time.
- Design, supply, delivery, installation, testing, commissioning and maintenance of the proposed solution conforming to requirements given in the BRD attached with this RFP, shall at all times and in all respects be effected to the entire satisfaction of the client, and the decision of its authorized representative, that any work or service or supply is essential for the due and successful execution of the contract, shall be final and binding on the successful bidder.
- The successful bidder or his any subcontractors shall observe and comply with all the by-laws or regulations of Bahrain, and shall be responsible for payment of all fees, charges, penalties etc. levied by such authorities for any purpose whatsoever and shall indemnify BDB against any claims arising out of his failure or neglect in observing or complying with such laws and regulations.
- If the successful bidder brings any subcontractor, the client will not be responsible for contacting or coordinating any teams from subcontractors on behalf of the successful bidder.
- The successful bidder should indemnify the client against claims from third parties for the use of material subject to patents / copyrights / IP rights of the software developer incorporated in any goods and services offered by them.

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3 EVALUATION CRITERIA

3.1 Mandatory Criteria

- The system should be installed in at least two Bahrain banks – References should be provided upon request from BDB during evaluation

3.2 Technical and Financial Criteria

- Below is a detailed list of evaluation criteria covering technical and financial aspects to ensure a comprehensive assessment of proposals. Only the bidders that meet the mandatory criteria will be evaluated technically.

Technical Evaluation 60%	**Out of 60%:** Whether Product meets all BDB requirements (Max 40%) Service Level Agreement proposal (Max 15%) Cost for future changes requests (Max 3%) Time of delivery (2% maximum). Bidders who meet the mandatory requirements shall be evaluated with the technical criteria mentioned. Each bidder must achieve a minimum score of **40% out of the 60%** to proceed to the financial evaluation. Bidders that qualify in the technical evaluation only will be evaluated financially.
Financial Evaluation 40%	Bidder with lowest price will get highest %

4 ATTACHMENTS

4.1 RFP Requirement compliance schedule

- BDB-PAYMENT SYSTEM_RFQ_REQ_Compliance_Schedule.xlsx



BDB-PAYMENT SYSTEM_RFQ_REQ_C

4.2 BDB Infosec questionnaire

- BDB_TPRM_AI Security Questionnaire_v1.0
- BDB_TPRM_Outsourcing Questionnaire_V7.0

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BDB_TPRM_AI Security Questionnarcing



BDB_TPRM_Outsou Questionnaire

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