



## Request for Information

# **Streamlining and Automating MMA's Banking Services and Reserve Management Activities**

14<sup>th</sup> May 2023

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## 1. Overview and Background

The Maldives Monetary Authority (MMA), here in after referred as “the Bank” is the central bank of the Republic of Maldives, is currently undertaking a project to modernize and streamline the operations related to banking services, reserve management activities and corporate payment settlements of the Bank. More specifically, the project would focus on the following operational areas of the Bank;

- Banking Service provided to Government of the Maldives by the Bank.
- Banking Services provided to Commercial Banks in the Maldives by the Bank.
- Corporate Payment Settlements of the Bank.
- Reserve Management & Market Operation activities including front, middle and back office operations of the Bank.
- Cash & Vault Management operations of the Bank.

As part of the Bank’s objective to modernize the operations in line with the current global standards across the central banks, the Bank has decided to implement a solution which would automate, streamline and minimize manual interventions across the workflows of the above operations of the Bank, in order to improve productivity as well as efficiency.

This Request for Information (RFI) is a request to seek information from the vendors in the industry on their ability to provide such a solution to the Bank. The Bank is seeking solutions, innovative ideas and feedback from the industry and propose either an existing solution or development of a solution that would achieve the objectives outlined in section 3.

The RFI is intended to be used to assist the Bank in pre-selecting a list of suitable shortlisted Vendors that may be invited to participate in a Request for Proposal (RFP) stage later in 2023. Issuance of the RFI does not imply an offer by the Bank or a firm commitment for issuance of an RFP or a contract for services in the future.

## 2. Instructions to potential vendors

### 2.1 General information

2.1.1 Project Streamlining and Automating MMA's Banking Services and Reserve Management Activities

2.1.2 Proposal Potential vendors are invited to submit proposals for this Request for Information (RFI). The proposals will be the basis for the creation of the Request for Proposal (RFP) and hiring of a vendor to achieve the objectives in section 3.

After all the responses has been submitted and evaluated, MMA will issue an RFP with the finalized requirements. Submission of response to the RFP is limited to vendors who responds to this RFI **ONLY**.

The MMA reserves the right not to select any of the vendors or to request potential vendors to work together to provide a comprehensive solution.

Each potential vendor is permitted to submit only one proposal.

2.1.3 Clarifications Potential vendors requiring any clarification regarding the RFI shall email their queries to [procurement@mma.gov.mv](mailto:procurement@mma.gov.mv). MMA will respond in writing to any request for clarification.

All clarifications shall be sought and/or provided only as specified in Clause 2.1.3. MMA shall not be responsible for any clarifications sought and/or provided in any other manner of whatsoever nature.

2.1.4 Amendment to RFI documents At any time prior to the submission deadline, the MMA for any reason, whether its own initiative or in response to a clarification requested by a potential vendor, may amend the RFI documents.

Any Addendum issued shall be part of the RFI and shall be informed to the potential vendors in writing.

In order to offer potential vendors reasonable time in which to take the amendment into account in preparing their proposals, the MMA may, at its discretion, extend the deadline for the submission of proposals, in which case, the MMA will communicate it to the potential vendors in writing.

## 2.2 Preparation of proposals

- 2.2.1 Language            The language of the proposal shall be in English.
- 2.2.2 Documents comprising the proposals            The information submission by the potential vendor shall comprise:
- i. A company profile, including the country of origin, senior management details, country of headquarters etc.
  - ii. Response to the questions in Appendix-1 (Key Information Required) in the format provided in this document. Supplementary information may be attached to the responses as required.
  - iii. Supporting documents to demonstrate evidence of technical expertise and working experience of the team.

## 2.3 Submission of proposals

- 2.3.1 Submission            a) Please email your completed information proposals to [procurement@mma.gov.mv](mailto:procurement@mma.gov.mv).
- b) The documents stated in clause 2.2.2 must be sent in separate PDF files.
- c) The attachment containing the Proposal and enclosed other documents should not be larger than 10MB. If the documents or the compressed file is larger than this threshold amount, please send the proposal in multiple parts.
- 2.3.2 Submission deadline            a) All information proposals must be submitted to MMA via email before 1400hrs (Maldives time) of 18 July 2023.
- b) The MMA may, at its discretion, extend this deadline for submission of information proposals by amending the information proposals in accordance with the clause 2.1.4, in which case all rights and obligations of the MMA and the potential vendors will thereafter be subject to the deadline as extended.
- 2.3.3. Late submissions            Any submission received by MMA after the submission deadline prescribed by MMA in clause 2.3.2, will be declared late, and rejected.

## 2.4 Expected timeline

No.	Key Dates	Actions
2.4.1	14 <sup>th</sup> May 2023	<b>Publication of Request for Information (RFI)</b>
2.4.2	15 <sup>th</sup> -31 <sup>st</sup> May 2023	<p><b><u>Registration for RFI Response Submission</u></b> Interested parties shall register by submitting the following contact details to <a href="mailto:procurement@mma.gov.mv">procurement@mma.gov.mv</a> latest by 31<sup>st</sup> May 2023, 1400 hours, Maldives time.</p> <ul style="list-style-type: none"> <li>• <i>Company name</i></li> <li>• <i>Name of the contact person</i></li> <li>• <i>Designation</i></li> <li>• <i>Email Address</i></li> <li>• <i>Company Website</i></li> </ul>
2.4.3	15 <sup>th</sup> -31 <sup>st</sup> May 2023	<p><b><u>Clarification regarding the RFI documents</u></b> Potential vendors may also obtain further clarification regarding the RFI documents via email until 31<sup>st</sup> May 2023, 1400 hours, Maldives time.</p>
2.4.4	8 <sup>th</sup> June 2023	<p><b><u>Response for Clarifications</u></b> Deadline to provide responses to the clarifications requested in 2.4.3 by the Bank.</p>
2.4.5	18 <sup>th</sup> July 2023	<p><b><u>Deadline for RFI response submission</u></b> 18<sup>th</sup> July 2023, 1400 hours, Maldives time</p>
2.4.6	1 <sup>st</sup> -15 <sup>th</sup> August 2023	<p><b><u>Vendors to give presentation about their RFI submission</u></b> Presentations by the potential vendors regarding the proposed solution.</p>
2.4.7	Q4 of 2023	<p><b>Expected date of publication of RFP</b> (<i>submission of responses is limited to vendors who responds to this RFI ONLY.</i>)</p>

## 2.5 Point of contact

All questions and queries regarding this RFI should be directed to:

Procurement Section  
 Maldives Monetary Authority  
 Boduthakurufaane Magu, Male'  
 Maldives  
 Email: [procurement@mma.gov.mv](mailto:procurement@mma.gov.mv)

### 3. Project Objectives and Goals

In line with the Bank's strategic objective to enhance work efficiency through automation, the project has been initiated to implement modern, state of the art solution to automate its operations and to provide reliable services to its stake holders.

The Bank is looking for a Vendor with a suitable solution and with the necessary experience to help achieve the objectives of the project. The solutions can be presented as separate modules or together as one complete solution to cover all the operational aspects under the scope of the project.

The Bank would like to achieve the following objectives upon completion of this project:

- Implement a fully automated government payment & receipt processing system which extends the relevant components of the application to its customers i.e., Ministry of Finance and government agencies as required based on the functionalities.
- Implement Straight Through Processing (STP) for all the transactions passed as part of banking services provided by the Bank to the Financial Institutions.
- Implement STP for corporate payment settlements of the Bank.
- Implement a Treasury Management System to automate Reserve Management Activities of the Bank.
- Implement a solution to fully automate the receipt, issuance and inventory records for stocks of currency notes and coins held in the Bank.

#### 4. Overview of Existing Systems used by the Bank

4.1 The following are existing systems used by the bank which will not be replaced upon the implementation of the proposed solution under this project. Vendors must demonstrate integration capabilities with these systems in the proposed solution.

System	Usage
SWIFT	SWIFT is used to settle, send and receive foreign fund transfer instructions between the Bank and its foreign correspondent banks. The Bank's SWIFT Code is MMAUMVMV
ACH/RTGS/IPS	Automated Clearing House (ACH) and Real Time Gross Settlement (RTGS) are payment systems used in the Bank to process local transactions via commercial banks of the Maldives.  <i>Instant Payment System (IPS) is a payment system currently being developed by the Bank and is expected to be go live by the end of 2023.</i>
Bloomberg	The Bloomberg is the primary interface used to enter and execute deals with the Bank's foreign counter parties. The system is currently used in front, middle and back office of the Bank.

4.2 For the following existing systems, vendors have the option to provide an alternative system, software and or modules as part of the overall solution proposed. Vendors can also provide solutions to retain these systems at the Bank as used now. However, must demonstrate integration capabilities with these systems in the proposed solution



System	Usage
Oracle E-Business Suite Version 12.2.4	<p>Enterprise Resources Planning (ERP) software is the accounting software used by the Bank for its operations. The Bank uses the following modules of the ERP Software.</p> <ul style="list-style-type: none"> <li>• Oracle Financials (Fixed Assets, Accounts Payable &amp; General Ledger)</li> <li>• Oracle Supply Chain Management (Purchasing)</li> <li>• Oracle Human Capital Management (Payroll)</li> </ul>
Vault Inventory System	An in-house inventory system is currently being developed by the Bank which will be used to monitor the inventory of notes and coins held in the vaults of the Bank

## 5. Scope of Work

The solution(s) must cover the following aspects in achieving the objectives specified in section 3.

### 5.1 Banking Services to the Government (Payments & Receipts)

As the banker to the government, the Bank processes all the domestic and cross border payments & receipts of the Government of the Maldives. The proposed solution must cover the following functions regarding the Banking Services provided to the Government.

Function No:	Functional Requirement
FR01	STP for all the government's domestic and cross border payments including integrations with the relevant systems used by the Bank in the process.
FR02	STP for all the government's domestic and cross border receipts including integrations with the relevant systems used by the Bank in the process.

## 5.2 Banking Services to Commercial Banks in the Maldives

The Bank provides banking services to all the commercial banks operating in the Maldives and maintain Reserve Accounts in both MVR and USD. The Bank also accommodates the requests of cash withdrawal and deposits by the commercial banks.

In addition, as a member of Asian Clearing Union (ACU) the bank processes ACU related transactions and funding requests of commercial banks.

The proposed solution must cover the following functions regarding the Banking Services provided to the Commercial Banks of the Maldives;

Function No:	Functional Requirement
FR03	STP for Commercial Bank reserve account transactions with integrations to the relevant systems used in the process.
FR04	STP of ACU related transactions with integrations to the relevant systems used in the process

## 5.3 Corporate Payment Settlements

The Bank processes its own local and cross border payments using payment settlement systems (RTGS/ACH/IPS and SWIFT). The proposed solution must cover the following function regarding the Corporate Payment Settlements.

Function No:	Functional Requirement
FR05	STP for Corporate Payments of the Bank including integrations with the relevant systems of the Bank.

#### 5.4 Reserve Management Activities

The Bank conducts Reserve Management Activities according to set guidelines that specify a comprehensive list of investable instruments, country and counterparty as well binding risks and constraints. The proposed solution must cover the following functions regarding the Reserve Management Activities of the Bank;

Function No:	Functional Requirement
FR06	STP for front, middle and back office operations and should cover all aspects of pre and post settlement activities including integrations with the relevant systems of the Bank.

#### 5.5 Cash and Vault Management

The Bank maintains records of inventory for issuance and stocks of notes and coins to be issued into circulation. The proposed solution must cover the following functions regarding the Cash and Vault Management operations of the bank.

Function No:	Functional Requirement
FR07	STP for daily cash transactions of the Bank including integrations to the relevant systems used in the process.
FR08	STP for cash & inventory management within the Bank including receipt, issuance of notes & coins for circulation with integrations to the relevant systems used in the process.

## 6. Existing Workflows

*Detailed workflows are available in Appendix-2 to Appendix-9*

### 6.1 Banking Services to the Government (Payments & Receipts)

#### 6.1.1 Domestic Payments of Government

Local Fund Transfer Instructions known as LT's are received through a Secure Payment Gateway (SPG) established between the Bank and Ministry of Finance. An in house-built portal known as payment portal is used to authorize payments and to send the relevant entries to Oracle General Ledger automatically. The entries are approved manually from Oracle General Ledger. The transactions are semi-automatically entered into Payment Originator (PO) and approved manually.

#### 6.1.2 Domestic Receipts to Government

Local receipts to the government (Tax, Import Duties etc) are received to the Bank through ACH, MRTGS, IPS and over the counter in cash. Majority of the receipts are received through the MRTGS system. An in house-built integrator is used to export to Oracle General Ledger to record transactions and all the transactions are manually verified and approved from Oracle General Ledger. However, all the receipts through ACH system and over the counter are entered and approved manually

#### 6.1.3 Foreign Payments of Government

Foreign Fund Transfer Instructions known as FT's are received electronically to the Bank and are processed manually via Oracle General Ledger and SWIFT. The respective sanctions check, and payment processing is through manual interventions and there is no integrations between the systems used in the process. Entry to the Oracle General Ledger and SWIFT creation is currently manual.

#### 6.1.4 Foreign Receipts of Government

Foreign receipts to the government are received via SWIFT to overseas NOSTRO accounts of the Bank. The funds are manually entered and approved from Oracle General Ledger. Documents and information regarding receipts are obtained from Ministry of Finance & Maldives Inland Revenue Authority (MIRA) via email & E-Gems portal of government. All documents are physically verified and approved before being credited to the respective account in the Bank.

In addition, confirmations of transactions processed from government accounts held with the Bank are notified by sending a manually created and approved Debit or Credit advices to the respective agencies via E-Gems Portal. Government is unable to view their account balances, account statements are shared with the Ministry of Finance daily, via Email to notify the funds availability of accounts as currently government agencies are unable to view their accounts.

## 6.2 Banking Services to Commercial Banks in the Maldives

Instruction for Commercial Bank Reserve Account transactions are received via SWIFT and MRTGS. These transactions are manually keyed into ERP system for accounting purpose and respective Payment system for settlement.

## 6.3 Corporate Payment Settlements of the Bank

All the corporate payments are processed through the Oracle Accounts Payables Module which is part of the Oracle E-Business Suite used as the main ERP system in the Bank. All invoices are matched with corresponding Purchase Order in Oracle Purchasing Module and payment settlement is via manual entry to the respective payment system which is ACH/RTGS/IPS for local payments and SWIFT for foreign payments. There is no integrations between Oracle E-Business Modules and the payment systems used to process these payments.

## 6.4 Reserve Management Activities

Bloomberg is used as the main trading platform and majority of the -trades are executed via the Bloomberg Terminals at the bank. On execution of a deal, Bloomberg sends an automatically generated deal ticket via email to all respective sections including, the front and the back office. Data is entered and verified manually through Bloomberg by the front and middle office while the back office manually prepares the settlement instructions and post entries into the accounting system.

For those trades executed via telephone or email, a deal ticket is prepared manually by the front office and emailed to the back office for settlement and accounting of the transactions.

In addition, for those counterparties who require a trade confirmation by the Middle office, an email is sent manually after the trade.

Risk and performance analysis is conducted manually with spreadsheets through data compiled from Bloomberg, internal databases and other sources.

There are no integrations between Bloomberg Terminals and accounting and settlement systems.

## 6.5 Cash and Vault Management

Manually prepared sheets and books are used to record movements of cash in and between vaults. Related entries are then passed manually in ERP system in the Bank. Manual entries via ACH/RTGS/IPS are also processed when a commercial bank is involved in the movement. The bank is currently working on developing an internal application to record the inventories and the movements of cash in the vault.

## 7. General Information for Interested Vendors

7.1	The purpose of this RFI is to obtain information about the wide variety of software currently available in the industry which is relevant to the objectives the Bank require to achieve under this project, along with the breakdown of costs, available modules and other related services relevant to the scope of this project
7.2	An RFP will be issued later, to which the Bank will grade the applicant vendors and select the best vendor which is willing and able to best cater for the requirements set by the Bank under this project.
7.3	There will be no payment or fees paid by the Bank as a result of this RFI.
7.4	The potential vendors which respond to this RFI are expected to be engaged in communication with the Bank for a period of 3 (three) months from the deadline of proposal submission in response to this RFI.
7.5	The Bank may request for additional information based on the submission to this RFI by the company.
7.6	The potential vendors responding to this RFI is not required to visit the Bank as a result of this RFI. However, if a vendor requires an on-site visit to the Bank for additional clarifications in reference to this RFI, the vendor may conduct on-site visit at their own expense.

## Appendix-1 Key Information Required

The following are the main key areas for which the Bank is seeking information as a result of this RFI, from potential vendors in the industry. *(Responses must be presented in the below format)*

Question No.	Company Overview
1.	Describe the solutions currently offered by your company.
	Answer:
2.	Please provide information about your company's revenue and information on its financial position for the latest financial year ended.
	Answer:
3.	Which solutions offered by your company covers the scope of this project and assist the bank in achieving the objectives set under this project?
	Answer:
4.	Which other Banks or Central Banks currently use the software provided by your company? If possible, please provide at least two previous projects undertaken by your company and how your solution assisted the banks in achieving desired results? Briefly explain the outcomes of these projects.
	Answer:

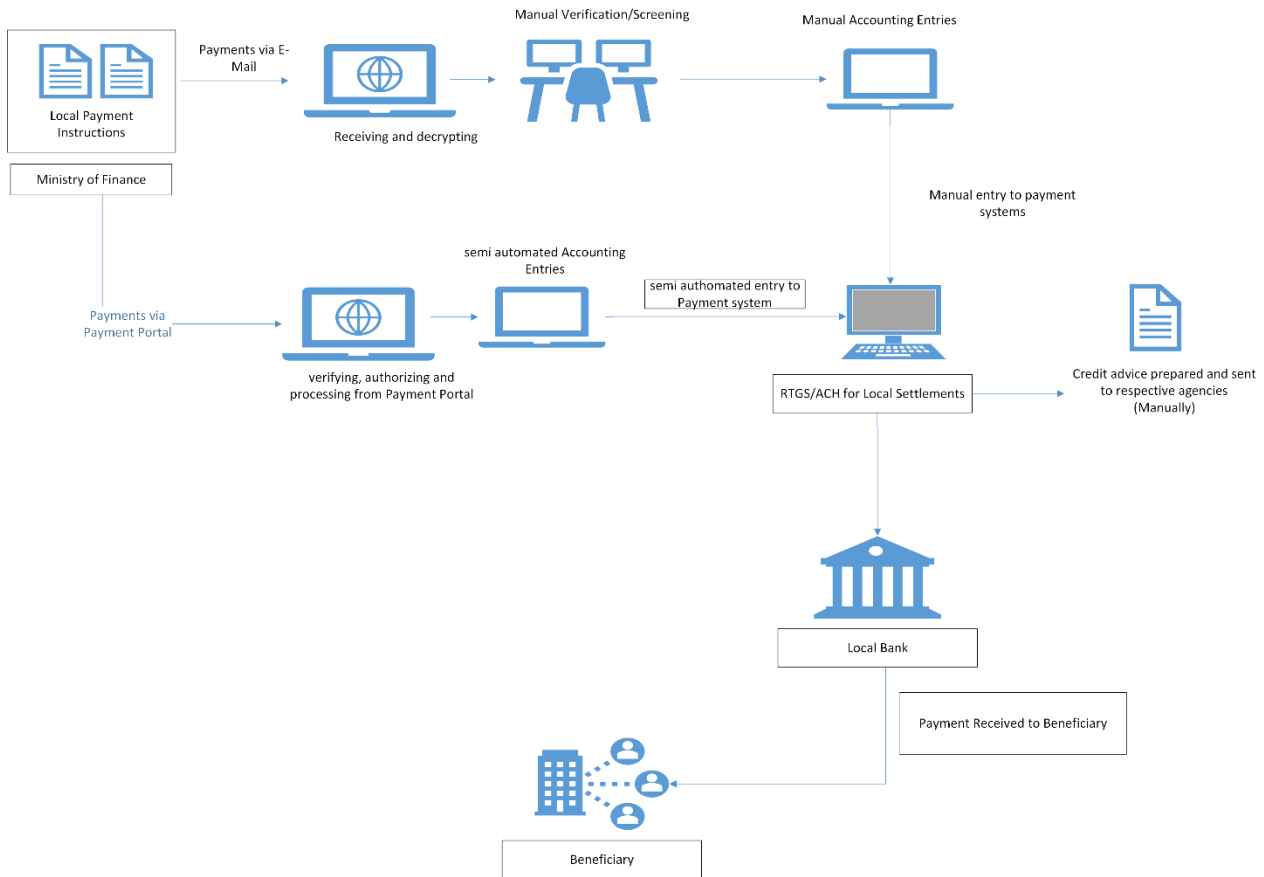
	Proposed Solution
5.	Describe in detail how your proposed solution meets the functional requirements (FR01 to FR08) outlined in section 5 “Scope of Work” of this RFI and help the bank to achieve the objectives of this RFI as specified in section 3.
	Answer:
6.	Is your proposed solution a single software or consisting of multiple modules for each of the respective functional requirements of the project as specified in Section 5 “Scope of Work”? Please clarify how the software will work?
	Answer:
7.	Describe how the proposed solution will be integrated with the existing systems (Section-4) used by the Bank.
	Answer:
8.	Does your proposed solution include a dedicated Core Banking Solution to undertake banking function of the bank under the project?
	Answer:
9.	Describe how the Bank’s operations will evolve in relation to the existing workflows provided in Section 7. Describe briefly the value additions that will be brought by your proposed solution to the Bank
	Answer:



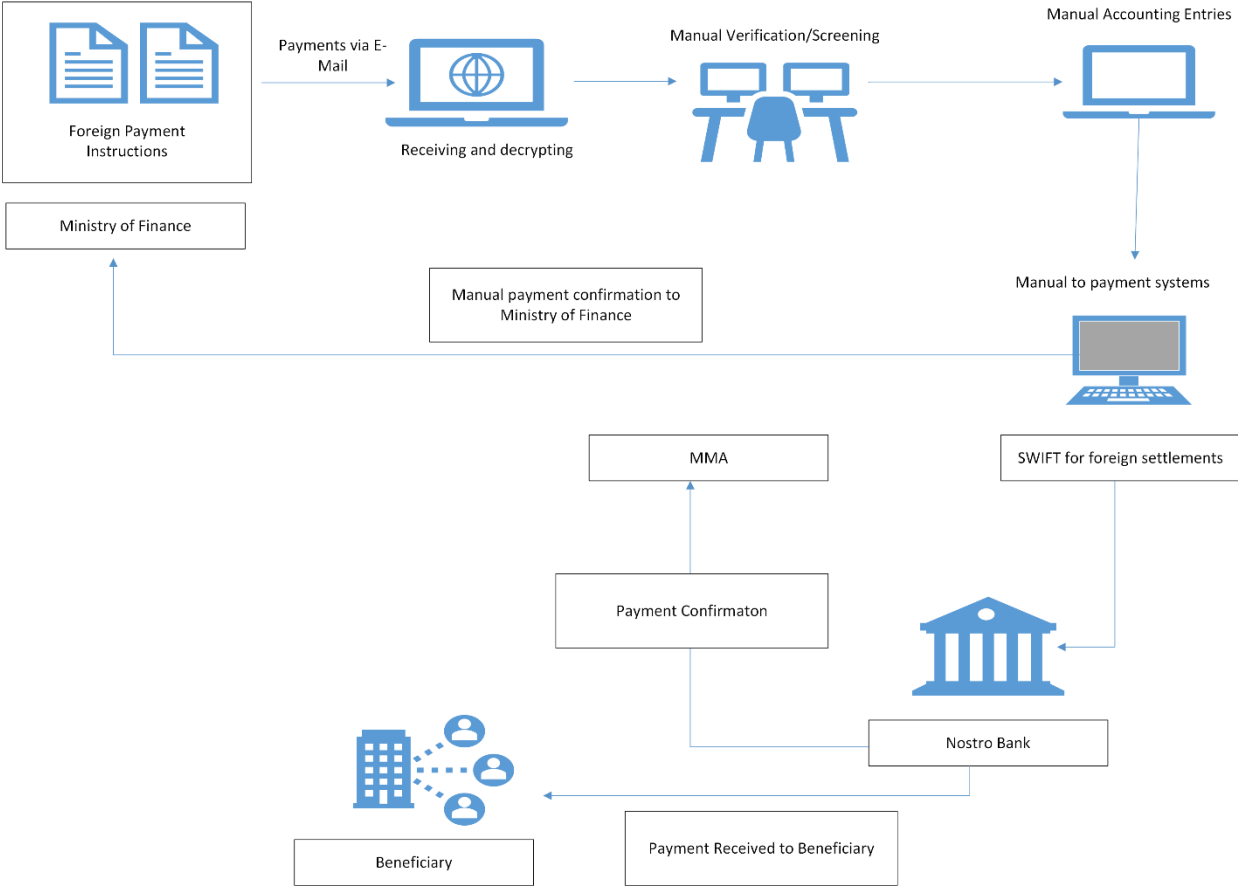
	Implementation & Cost Structure
10.	Describe the overall solution architecture including hardware components that will be required and any pre-requisites at the Bank for the installation and functioning of the proposed solution.
	Answer:
11.	Describe the implementation methodology that will be adopted by your company to achieve the overall objectives of this project.
	Answer:
12.	Describe in detail, the support and maintenance model that will adopted by your company for the proposed solution provided for this project,
	Answer:
13.	Provide an estimate of the overall cost of the proposed solution. This should include the initial software acquisition cost, implementation cost and any annual maintenance cost to be incurred. The figures provided are not legally binding and will only be used to estimate the cost of the overall solution.
	<p>I. Software Cost:</p> <ul style="list-style-type: none"> <li>a) Please provide the estimates cost of the software including any additional modules that Bank is required to license in order to achieve the objectives set under this project.</li> <li>b) Describe the pricing model used to estimate the cost provided in your response.</li> <li>c) List any other assumptions.</li> </ul> <p>II. Implementation Cost</p> <ul style="list-style-type: none"> <li>a) Please provide the estimated cost for implementing the solution, including standard breakdown contingent on</li> </ul>

	<p>accomplishing expected deliverables, consultancy fees, etc.</p> <p>b) Describe the pricing model used to estimate the cost provided in your response</p> <p>c) List any other assumptions.</p> <p>III. Annual Maintenance Cost</p> <p>a) Please provide details of the Annual Maintenance Contract that the Bank is required to enter with the vendor.</p> <p>b) Describe the pricing model used to estimate the cost provided in your response</p> <p>c) List any other assumptions.</p>
	<p>Answer:</p>

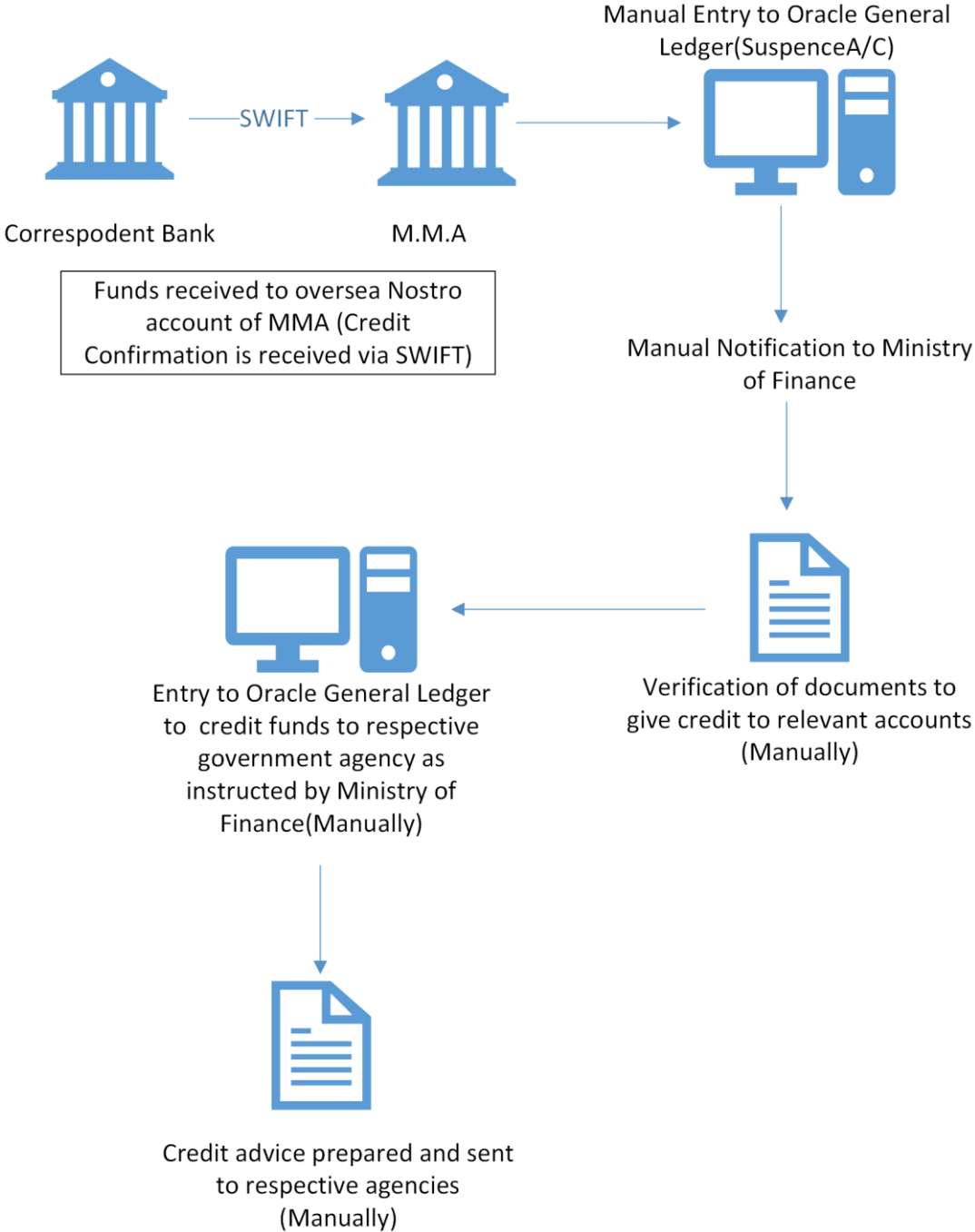
## Appendix-2 Existing workflow for Government Domestic Payments



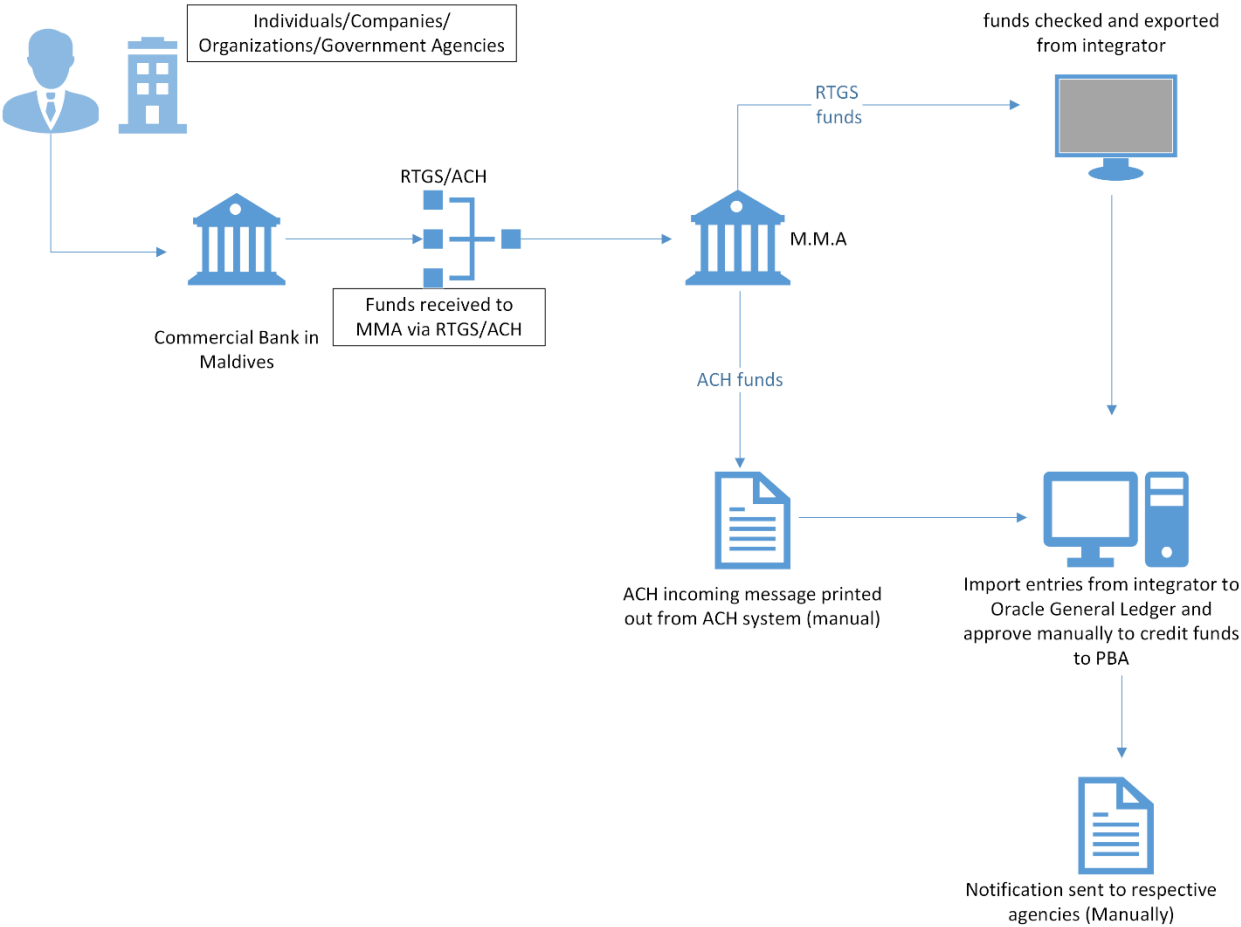
# Appendix-3 Existing workflow for Government Foreign Payments



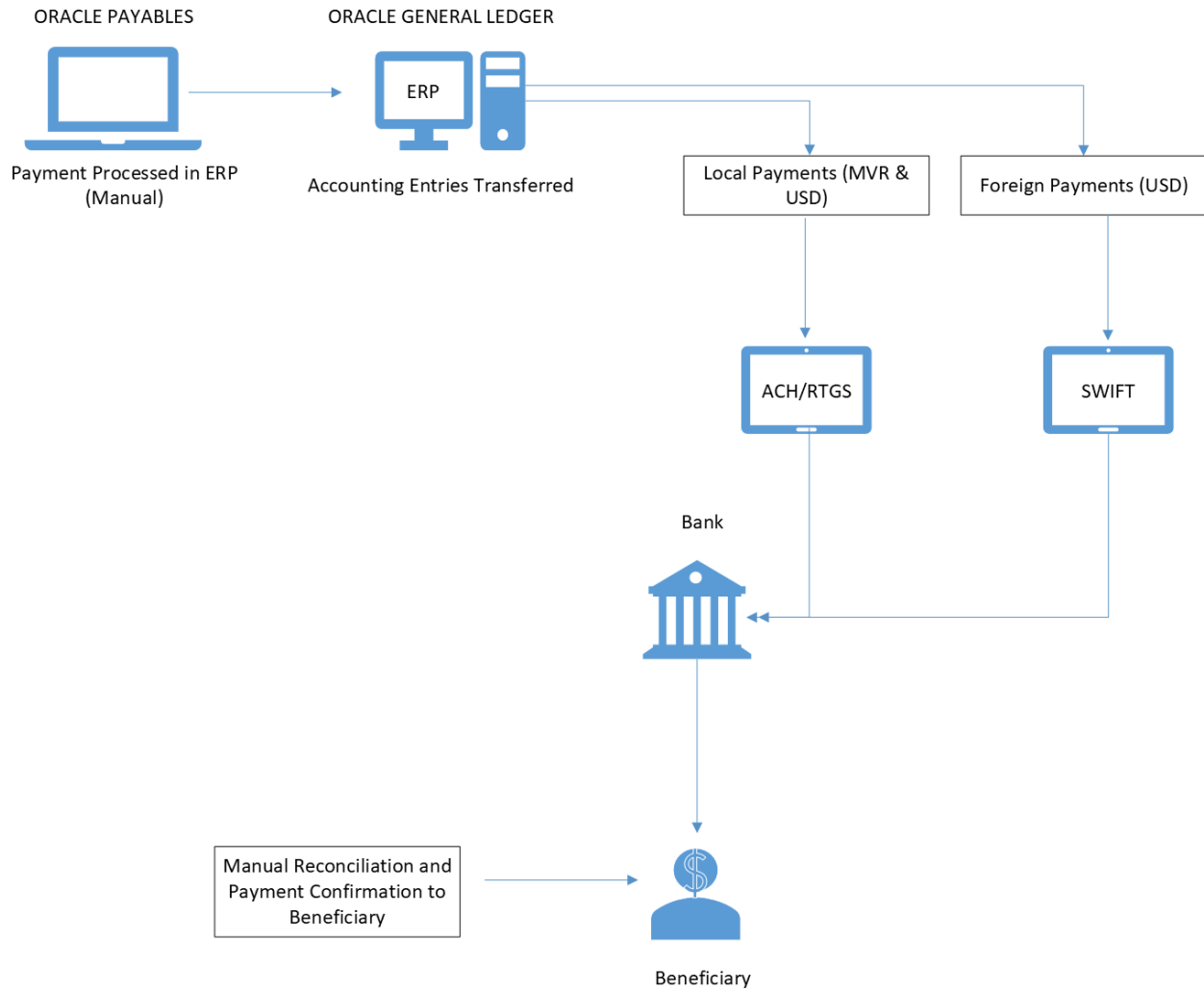
Appendix-4 Existing workflow for Cross Border Receipts for Government



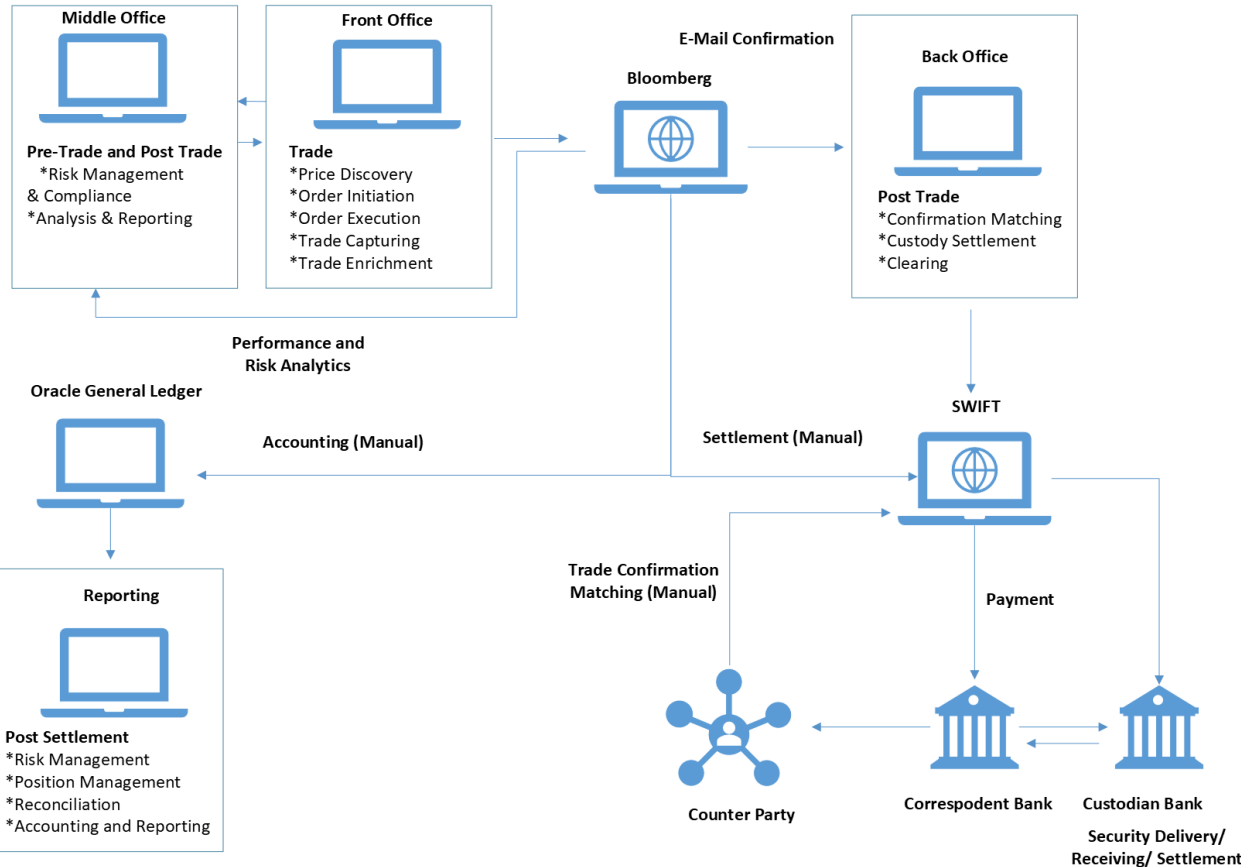
# Appendix-5 Existing workflow for Domestic Receipts for Government



## Appendix-6 Existing Workflow for Corporate Payments



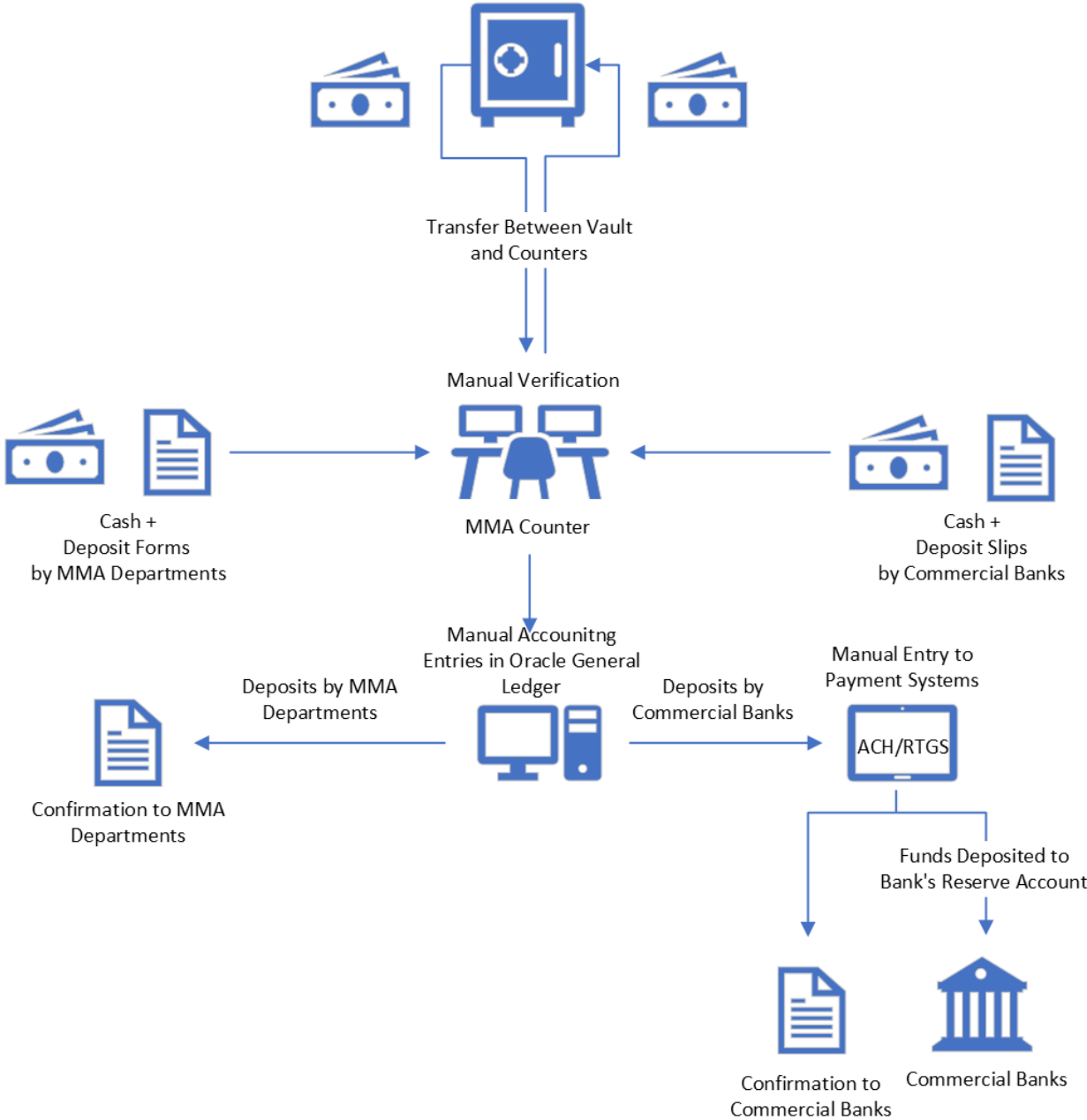
# Appendix-7 Existing workflow for Reserve Management



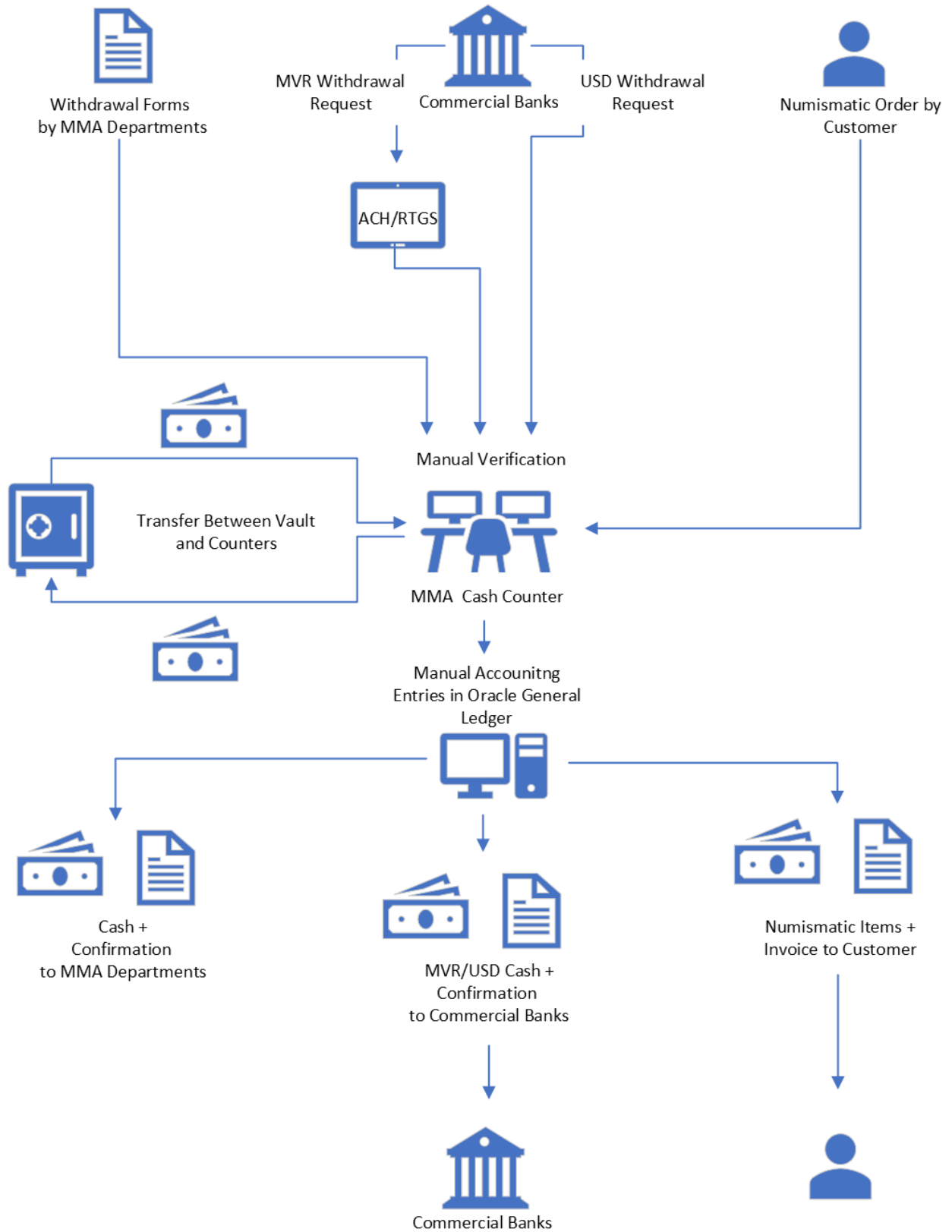


# Appendix-8 Existing workflow for Cash and Vault Management

## Deposits



Withdrawals



# Appendix-9 Existing Workflow for Commercial Bank Transactions

