



RE: REQUEST FOR A TECHNICAL SUPPORT ON IMPLEMENTATION AND INTEGRATION WITH MUSE SYSTEMS FROM MINISTRY OF FINANCE.

Introduction

The Muse System is a government payment system in Tanzania designed to facilitate secure, efficient, and transparent financial transactions. It ensures compliance with national financial policies and improves accountability in public sector payments.

Business Objectives

- Enhance efficiency in government payment processing.
- Ensure transparency and accountability in public funds management.
- Integrate with financial institutions for seamless transactions.
- Reduce manual processing errors and fraud risks.
- Improve reporting and auditing capabilities.

Scope of the System

In-Scope

- Processing government payments to vendors, employees, and agencies.
- Real-time tracking and reconciliation of payments.
- Integration with banks and financial institutions.
- Compliance with financial regulations and government policies.
- Automated reporting and audit trails.

Out of Scope

- Direct citizen collection.
- Handling of international transactions outside Tanzania.

Stakeholders

- Ministry of Finance and Planning
- Central Bank of Tanzania

- Government agencies and ministries
- Commercial banks and financial institutions
- Public service employees
- Vendors and suppliers working with the government

Functional Requirements

- **Payment Processing:** Support bulk and individual payments.
- **Reconciliation:** Automatic tracking of completed and pending transactions.
- **User Management:** Role-based access for different government entities.
- **Audit Trails:** Maintain logs of all transactions for review.
- **Multi-Channel Access:** Web-based and mobile access.
- **Security & Authentication:** Multi-factor authentication and encryption.

Non-Functional Requirements

- **Performance:** Ability to handle thousands of transactions per second.
- **Scalability:** Future expansion to accommodate additional agencies.
- **Security Compliance:** Adherence to financial security standards.
- **Reliability:** 99.99% uptime with disaster recovery capabilities.

Integration Requirements

- **Banking Systems:** Integration with local banks for payment execution.
- **Government Financial Management Systems:** Seamless data exchange.
- **Audit and Compliance Systems:** Ensuring regulatory reporting compliance.

Regulatory & Compliance Requirements

- Must comply with the **Public Finance Act** and **Bank of Tanzania regulations**.
- Must follow **GDPR-equivalent data protection laws** for sensitive financial data.
- Regular audits as per national financial guidelines.

Assumptions & Constraints

Assumptions

- All government entities will adopt the system as a standard payment platform.
- Banks will provide API access for seamless transaction processing.

Constraints

- Internet connectivity limitations in remote areas.

- Strict government procurement and policy compliance timelines.

Prerequisites

Network Connection to Payment Systems

Integrating payment systems and banks should have a network connection from their servers to MoFP servers. Connection can be established by using a VPN connection.

Banking System

Integrating banks should have a working system that is ready to integrate with the MoFP payment gateway system.

Call Back URLs

Integrating banks should provide callback URLs to receive requests from the MoFP system.

Digital Certificates

Integrating banks must share their public key and obtain the MoFP public key to be used in the verification of all message exchanges between the banking system and the MUSE system.

MoFP System End Points

All requests from the banking system will be received at only one endpoint.

Advice Posting Flow

Credit Advice

1. Implementing agent requests funds from the developing partner through the Ministry of Finance and Planning – External Finance Department.
2. Developing partner disburses funds to the project account.
3. Bank sends credit advice to the MoFP system.
4. MoFP acknowledges the receipt of the credit advice.
5. MoFP system recognizes credit advice from the bank and records it.

Expenditure Approval Request (Kibali) Posting Flow

Expenditure Request

1. Implementing agent requests an expenditure approval from MoFP.
2. MoFP approves the request and notifies the Bank of Tanzania (BOT).
3. BOT receives the expenditure request and acknowledges receipt to MoFP.
4. MoFP notifies the implementing agent about the receipt of the expenditure request.
5. Implementing agent awaits approval to proceed with submitting the payment as per the expenditure request.

Transfer Instruction Posting Flow

Transfer

1. Implementing agent initiates, a transfer instruction in the MoFP payment system.
2. BOT receives the transfer instruction and acknowledges receipt to MoFP.
3. The system verifies the reference of the expenditure approval (Kibali).
4. Transfer slip is generated.
5. BOT performs the accounting and notifies MoFP with an advice.
6. MoFP receives the notification and updates internal systems.

Payments Posting Flow

Payments

1. The payment system composes a pay list message and submits the request to Finance ESB as per the **muse_msg_block_payment** XML format. The pay list message may contain one or more beneficiaries.
2. Finance ESB receives the pay list request and returns an ACK message to the payment system. The ESB will only verify the signature and data format. The ACK could be **RECEIVED** or **INVALID**.
3. The MUSE system composes a pay list message and submits the request to the bank as per the **muse_msg_block_payment** XML format. The pay list message may contain one or more beneficiaries.
4. The bank system receives the pay list message and sends back a response message immediately.

Cancellation Request Posting Flow

Cancellation

1. The MUSE system composes a cancellation message and sends it to the banking system. The cancellation message quotes the original message identification for cancellation.

2. The banking system receives the cancellation request and responds synchronously.
3. If the pay list has not yet been processed, the bank cancels the pay list. Otherwise, the cancellation is rejected with a proper rejection message.

Digital Signature

All exchange of messages between MoFP systems and banks should be digitally signed. The MoFP system and banks will exchange public keys for signature verification. The original message will be separated from the signature using the pipe | symbol.

Success Criteria

- 100% adoption by government agencies within a set timeframe.
- Reduction in manual processing errors by at least 80%.
- Compliance with financial and security regulations.
- Positive feedback from users and auditors on efficiency improvements.

Conclusion

The implementation of the MUSE system is a crucial step toward improving financial transaction efficiency, security, and accountability within the government. This initiative ensures compliance with regulatory standards while enhancing operational transparency. Approval of this BRD will facilitate a streamlined and modernized payment infrastructure for Tanzania's