The National Payment Systems Oversight Framework

Bank of Uganda

June, 2021

The Bank of Uganda is committed to foster a safe and efficient payment ecosystem, which supports monetary policy and financial stability through its oversight role as provided for under the law.

Foreword

One of the principal functions of a central bank is to be the guardian of public confidence in money, and this confidence depends crucially on the ability of the economic agents to transmit money and financial instruments smoothly and securely through the payment systems. A payment system must be safe and efficient even when the markets around them are in crisis and should not themselves be the source of such crises. This is ensured through effective oversight. The Bank of Uganda considers oversight of the National Payment Systems one of its core functions, closely related to and contributing towards the overall financial and monetary stability.

Specifically, the role of the Bank of Uganda is to ensure the safety and efficiency of the individual payment systems and the payments system as a whole. This includes the systems operated by the Bank of Uganda and those operated by private sector entities. Bank of Uganda uses as a Benchmark the Principles for the Financial Market Infrastructures issued in April 2012 by the Committee for Payments and Settlement Systems (CPSS) of the Bank for International Settlement (BIS) in collaboration with the Technical Committee of the International Organization of Securities Commission (IOSCO). The Bank in this document sets out its oversight policies and the activities to be undertaken in the conduct of oversight of the National Payment Systems.

Besides compliance with international standards, by disclosing information about oversight policy and activities, Bank of Uganda seeks to contribute towards building and maintaining confidence of the National Payment Systems and thus foster greater use of the payment systems.

In carrying out its oversight responsibility, the Bank of Uganda is guided by the National Payment Systems (NPS) Policy Framework approved by Cabinet on 22nd December 2017, The NPS Act 2020 and the Regulations thereunder. The National Payment Systems oversight mission statement is stated as;

"To maintain a safe and efficient payment ecosystem, which supports financial and monetary stability and complies with international standards".

E. Tumusiime-Mutebile (Prof.)
Governor

Contents

Foreword 1
Glossary 3
1. Introduction 4
1.1. Special Definitions 4
Systemic risk: 4
2. Authority for Bank of Uganda Oversight 5
3. Objectives of the Oversight 5
3.1. Scope of the Oversight 5
3.2. Identifying Systems for Oversight 6
3.3. Assessment of Systemically Important Payment Systems (SIPS) 6
3.4. Retail Systems of prominent importance 8
4. Oversight Methodology 8
4.1. Authorisation 8
4.2. Monitoring 8
4.3. Assessment 10
4.4. Inducing Change 11
5. Organization and Staffing for Oversight 12
6. Co-operative Oversight 14
6.1 General Principles for Oversight 14
6.2 International Cooperative Oversight among Central Banks and with other authorities 16
7. Conclusion 18
8. Appendix I: Principles for FMIs (BIS-IOSCO: 2012). 19
9. Appendix II: Responsibilities of Central Banks, Market Regulators & other Authorities 22
10. Appendix III: Risks in Payment and Settlement Systems and Mitigation Measures 22
11. Appendix IV: Payment and Settlement Systems Risk Assessment Matrix 23
12. Appendix V: Payment Systems Categories 24
13. Appendix VI: Designation Criteria for Payment Systems in Uganda 24
14. Appendix VII: List of Payment Systems Subject to Bank of Uganda Oversight 25
15. References 25

Glossary

Abbreviation	Term	Explanation
BIS	Bank for International Settlements	The international body under whose auspices central banks and other regulatory authorities cooperate to decide global policy with regard to best practice in payments
BoU	Central Bank of Uganda	The institution that is mandated by Law to oversee Payment Systems in Uganda
COMESA	Common Market of Eastern and Africa	Since 1994 organization of independent sovereign states to co-operate in developing their natural and human resources for the good of their people.
CPSS	Committee for Payment and Settlement Systems	The BIS committee responsible for developing and promulgating best practice principles for oversight of payment and settlement systems
ECS	Electronic Clearing System	BoU Automated Clearing House
FMI	Financial Market Infrastructures	Any organization or system that provides processing, clearing and/or settlement functions for payments - these include the UNISS, ECS and CSD in Uganda as well as system operators of retail payment systems. The term FMI also applies to technical operators of payment systems.
IOSCO	International Organization of Securities Commissions	Organization that works alongside the BIS CPSS to define best practice principles for securities settlement
Lamfalussey Principles	Lamfalussey Committee of wise men Bank for International Settlements.	10 Core principles for use as universal guidelines to encourage safe and efficient operation of systemically important payment systems world-wide.
MoF	Ministry of Finance	The Ministry of Finance, Planning and Economic Development
NPSD	National Payment Systems Department	The BoU Department which oversees the Payment Systems
NPSS	National Payment and Settlement System	The national payment system (NPS) and securities settlement system (SSS) as defined by the PFMI, April 2012.
PFMI	Principles for Financial Market Infrastructures	The set of principles published by BIS in April 2012 which were assembled together by the BIS CPSS and IOSCO which provide guidance for the procedures to be employed by FMIs
REPSS	Regional Payment and Settlement System 2014	Settlement system joining Uganda, Malawi, Swaziland and Mauritius.
SIPS	Systemically Important Payments System	A payment system which if disrupted by failure, fraud or error could cause serious financial and economic damage to the country
UNISS	Uganda National Interbank Settlement System	The Real Time Gross settlement system implemented in 2005 in Uganda to settle high value interbank obligations in real time.

1. Introduction

This oversight framework has been developed to ensure that developments in the Uganda National Payments System (NPS) and participation in regional and international systems comply with the Bank for International Settlements (BIS) Committee for Payment and Settlement Systems (CPSS)[1] Principles for Central Bank Oversight of Settlement Systems, May 2005, the International Organization on Securities Commission Organization (IOSCO) Principles for Financial Market Infrastructures (FMIs), April 2012, and other relevant CPSS and IOSCO guidelines.

The principles require that the central bank NPS oversight activities are transparent and comply with the international standards. In addition central banks should have effective powers and capacity to carry out the oversight and should cooperate with other authorities. The purpose of this document therefore, is to place into the public domain the Bank of Uganda's (BOU's) NPS oversight policy and practices. The disclosure of policies and practices is also expected to build confidence in the Uganda National Payment and Settlement Systems and thus foster greater use of the payment systems.

This document describes the objectives and scope of the oversight, oversight methodology, organization and staffing for oversight and how the Bank manages cross-border relationships.

The framework is divided into four main sections:

i. Objectives and scope of oversight;
ii. Oversight Methodology - authorization (licensing), monitoring, assessment and inducing change;
iii. Organization and staffing for oversight; and
iv. Co-operative oversight with other central banks, domestic and cross-border authorities.

The BoU oversight framework is in line with the BIS CPSS principles. It is also in accordance with best practices among central banks as well as the recommendations of international organizations, including the World Bank's Global Payment Systems Survey Report 2010.

1.1. Special Definitions

Systemic risk:

Systemic risk arises in situations where the actions or inactions of individual participants affect the functioning of the entire system adversely. This is especially pronounced when participants in a system do not themselves pay all of the costs associated with the consequences of their actions, also known as negative externalities. For example:

i. In a netting system when failure of one participant to meet its obligations causes a large number of other participants to unwind transactions or to take losses, in a 'survivors pay' situation, potentially damaging their viability.
ii. Participants in a system like the Real Time Gross Settlement (RTGS) clearly rely on inflows of funds or securities to meet their obligations but may not consider the full impact of delaying their outgoing payments.
iii. A network operator may fail to take into account the full cost of a disruption to the system through under investment in the security and resilience systems.

[1] Effective September 2014, CPSS was renamed Committee on Payments and Market Infrastructures

2. Authority for Bank of Uganda Oversight

The authority is derived from the National Payment Systems Policy Framework approved by Cabinet on the 22nd December 2017 and the National Payment systems Act 2020.

In addition as a member of the East African Community (EAC) and the Common Market of Eastern and Southern Africa (COMESA), Uganda is a participant in the East African Payment Systems (EAPS) which went live in 2013 and the Regional Payment and Settlement System (REPSS) which went live in Uganda in 2014. Participation in the REPSS and EAPS require cross-border cooperation with other COMESA and EAC regulatory agencies to achieve effective oversight.

3. Objectives of the Oversight

The fundamental objective of BoU Oversight is to ensure the safety and efficiency of entire payment system of the country and ultimately financial stability by monitoring payment systems operating on an on-going basis, assessing systems' features and inducing change when necessary. Payment systems also support the central bank's monetary policy through settlements and systemic liquidity management which supports transmission of policy actions to the economy as a whole.

The main objectives for conducting the payment and settlement systems oversight are twofold as set out below:

i. Containment of systemic and other payment system risks in order to maintain stability of the financial system by:
   a. ensuring that critical attention is given to risks reduction and management in the design and operation of payment systems;
   b. promoting the safety, security, soundness and reliability of payment systems, payment infrastructures and payment instruments used by the public; and
   c. maintaining the public's confidence and interest in money and payment systems.

ii. Monitoring and evaluating the payment systems performance by:
   a. ensuring the effectiveness and reliability of the payment system and its conformity with legal provisions;
   b. maximizing the efficiency of payments clearing and settlement arrangements; and
   c. pursuing public interest in payment system arrangements;

3.1. Scope of the Oversight

The scope of payment system oversight will extend to Payment Service Providers (PSPs) and Operators of Payment Systems, both those owned by the BoU and those external to the BoU and the payment instruments. The broad scope of oversight is important to monitor all aspects of payment systems to ensure safety and efficiency so as to maintain public confidence and promote efficiency.

a. Payment services include:

i. Services enabling cash deposits or withdrawals;

ii. The execution of payment transactions;
iii. Issuance and acquisition of payment instruments;
iv. Any other service incidental to the transfer of funds or as may be classified by the Central Bank

A payment system operator is an entity which is in charge of the operation of a payment system, whether alone or with other entities and may include a participant in the payment system, a settlement agent, a central counterparty or a clearing house.

b. The scope of payment oversight will also cover the Central Securities Depository (CSD) operated by BoU. The BoU CSD offers securities accounts and central safekeeping services for government securities for both treasury bills and treasury bonds. The objective of oversight of the BoU CSD is to ensure that the CSD is safe and efficient.

c. Through the oversight activities, the BoU ensures that the payment, clearing and settlement systems comply with the relevant Principles for the Financial Markets Infrastructure [PFMI 2012]. To meet these objectives, the BoU methodology has the following features:
   i. It is backed by law (NPS Act 2020) and the Bank has the capacity to carry out its oversight responsibilities;
   ii. The oversight policy and activities are transparent; the oversight framework is publicised, including on the BoU web-site, specifying the standards and criteria for determining applicable systems;
   iii. There is consistency in the treatment of comparable payment and settlement systems including the systems which the Bank operates and owns; and
   iv. There is cooperation with other national authorities (i.e. central banks and other regulatory agencies) and cross-border and multicurrency systems in accordance with the international standards.

3.2. Identifying Systems for Oversight

i. The oversight on the payment and settlement system will be risk-based. The areas which constitute potential sources of risk to the system will be given a proportionately higher share of resources and attention. Conversely, areas which are deemed to be of less significance sources of risk to the system will receive proportionately less attention. The focus therefore is on the areas of high risk.

ii. International standards require that central banks have a clear criteria for assessing whether a specific payment system will fall within their oversight scope, and that these criteria should be made public.

iii. The BoU like most central banks has adopted two definitions of the types of system to be subjected to oversight that is; Systems which are considered to be of "systemic importance" and those of "prominent importance". The latter definition rather than the former will be applied more to retail payment systems.

3.3. Assessment of Systemically Important Payment Systems (SIPS)

Assessment of Systemically Important Systems will be driven by the following indicators;

i. **Market Penetration:** Where there is no alternative system available for high volume transactions such as Electronic Clearing System (ECS) the failure of such a system would have detrimental effects on the public confidence in the financial system and the country's currency. The level of market penetration will be determined by the BoU on the basis of statistical and business risk analysis.

ii. **Aggregate financial risks**: The BoU attaches considerable importance to the value of payments going through a system. There is a strong correlation between amounts processed, liquidity and credit risk. The Bank considers the Ugandan National Interbank Settlement System (UNISS/RTGS) to be of systemic importance. In addition any system which processes 10% or more of the value of the UNISS transaction would be considered systemically important, or as otherwise determined by the BoU.

iii. **Systemic Risk:** The failure of a participant in a payments system may have serious consequences for other participants and may adversely affect their viability. If the participant with the largest payment obligation in a payment system fails and the values processed in the system are highly concentrated among a few participants, the financial consequences for the other participants may be substantial. A high concentration of values with a few dominant players could put significant strains on the remaining participants in a system. Parameters for the level of concentration are determined by the BoU on the basis of observed flows passing through the system.

The above criteria notwithstanding, the BoU may designate a system systemically important using either criterion.

The CPSS-IOSCO Principles for FMIs provide guidance on the standards that systemically important payment systems (SIPS), central securities depositories (CSDs), securities settlement systems (SSS)[2] Central Counterparties (CCPs) and trade repositories (TRs)[3] must observe. Observance of the principles for FMIs will enhance safety and efficiency in the payment, clearing and settlement arrangements, and more broadly, limit systemic risk and foster transparency and financial stability.

SIPS and CSDs must comply with the relevant FMI principles ***(Shown as appendix I)***. They will be subject to licensing requirements, and to a comprehensive set of oversight standards, reporting requirements, and enforcement through effective oversight mechanisms.

Non-systemically Important Systems may be subject to licensing requirements, but the BoU will reserve the discretion to require the non-SIPS to comply with the necessary standards/principles, to ensure safety and efficiency. Not all the principles will be applied to these systems, nor will each principle be addressed in full. For example, the level of security and operational reliability and the contingency arrangements for non-SIPS will be lower than for SIPS. Also the lower level of risk in such systems may not warrant obligatory settlement in central bank money as required by principle 9 of the PFMI. The non-SIPS will be subjected to a lighter set of reporting requirements. The Bank will continue to review the evolution of these systems since the designation of the systems could change overtime.

[2] Although described separately in the PFMI, in market practice, as is the case in Uganda, the CSD also operates as a securities settlement system.

[3] Trade repositories are centralized registries that maintain electronic databases of derivative contracts. They may also provide additional services such as the management of trade lifecycle events and downstream trade processing. CCPs and TRs do not currently exist in Uganda and are therefore not addressed in this framework.

3.4. Retail Systems of prominent importance

Retail systems of prominent importance are not expected to pose a significant financial risk to the financial market. However, a disruption in this system could severely impact financial market operations and undermine the public confidence in the payment systems and the currency. The low financial risk means that the full policy principles of oversight would not be applied. However, the concentration of the retail payments market and the degree of penetration of a particular system will be taken into consideration. An indication of a system of prominent importance would be a quarter share/25% or more of processing in the respective retail market or if it is the only existing system of its nature processing payments through the interbank market. Bank of Uganda oversight will be extended to Prominently Important Retail Payment Systems (PIRPS); examples include Mobile Money Services by the Mobile Network Operators, Interswitch, and the Shared Banking Platform .

4. Oversight Methodology

The Central Bank's oversight role may be broken down into: authorization/licensing, ongoing monitoring, assessing and inducing change. This is necessary in the conduct of oversight and preservation of the safety and efficiency of individual payment and settlement systems and the safety of the payment ecosystem as a whole.

4.1. Authorisation

The BOU is responsible for the authorization or licensing of all Payment Systems that are operated in Uganda. Before licensing, the BoU must be satisfied that their operations do not pose a risk to the safety and efficiency of the payment system as a whole. BoU will review the operator's business plan, financials, projected revenue and expenses, senior management capacity, skills, risk management procedures, operational rules and procedures, agreements with participants and other factors associated with ensuring the stability of the payment system operator. The goal is to ensure that the operator has the necessary resources to safely operate a payment system in a sustainable manner with minimal risk to the participants. Included in this responsibility is the right to revoke a license and invoke sanctions or penalties for non-compliance.

Payment service providers which hold a license under the Financial Institutions Act [or under the Micro Finance Deposit-Taking Institutions Act], and which are authorised to issue or administer means of payment in accordance with such acts may be exempted from some of the licensing requirements under the NPS Act 2020.

4.2. Monitoring

The BoU applies a set of Principles for FMI as deemed relevant to each system it oversees to identify likely areas of risk. For non-SIPS and systems of prominent importance, the criteria may be less rigorous, but proportionate to the degree of risk that would be created by failure or abuses in the system operations.

Basis for monitoring

The BoU resources are rationed according to priorities. Monitoring will be based on the assessed risk. It is those areas where risk of failure, fraud, error and other risks are significant that receive the most attention. BoU will ensure that risk factors are monitored not only on their own but also in relationship with other risks.

Box 1 Risk Reviews.
As a matter of routine, the Oversight Division of the National Payment Systems Department follows a programme of risk reviews for each system. The review will include analysis of the following: 1. Qualitative information about the features of the system and its operations; 2. Quantitative information and statistics in relation to the system's flows and the resulting risk areas for further risk mitigation measures; 3. Current level of Principles observance relative to appropriate level, 4. Current level of other Codes of Practice and system rules observance.

Sources of Information

The success of monitoring operations relies heavily on accurate and timely information about the performance of the payment systems. BoU obtains the information needed about specific payment systems from a range of sources including:

Box 2 Sources of Information
1. *Publicly available information* on system design and performance; 2. Official *system documentation* (e.g. system rules, member documentation, business continuity plans and *other "static" info*rmation setting out how the system operates); 3. Regular or ad hoc *reporting on system activity* (including volume and value of transactions, and operating performance) *or on its financial position* (including balance sheet and profit and loss informatio*n);* 4. *Internal reports of board* or committee meetings or from internal auditors; 5. *Self-assessments* of compliance with central bank oversight policy; 6. *Bilateral contacts* with the system and system participants; 7. *Multilateral meetings* including industry group meetings or participation in committees; 8. *On-site inspections;* 9. *Expert opinion* from legal advisers and external auditors; 10. Information from *other regulators;* and 11. Customer feedback

Regular Reporting

Monitoring is based on the information received initially from the settlement systems ,the PSPs and Systems Operators. The procedures for assessing this information must measure certain key variables that relate to value, volume and risk. BoU carries out daily monitoring of the scale of transactions across the networks by examining trends for variables such as:

i. Volume of transactions
ii. Value of individual transactions
iii. Percentage of rejected transactions
iv. Percentage of transactions queued (e.g UNISS and ACH) which has implications for banks' liquidity control

v. Use of intra-day liquidity facilities and any difficulties in regularizing settlement accounts at end of day
vi. Use of collateral and collateral executions
vii. Bunching of transactions (especially tendencies to enter payments late in the day, which may indicate attempts to preserve liquidity).
viii. Percentage of securities pledged in the CSD for any day's exposure.
ix. Use of the reserve facility in UNISS to protect clearing positions.

Regular meetings

Regular contact between senior management of the BoU and the senior representatives of payment systems providers/operators is an important oversight tool. The meetings provide BoU with the fora to discuss policy and regulatory developments, assessment and monitoring issues arising from the Bank's investigations and from the payment systems' own risk reviews.

4.3. Assessment

Oversight is an on-going task, particularly in a developing economy like Uganda's where the risk parameters are constantly changing. The monitoring function provides information as to whether the policy objectives and standards are being met and whether there is cause for concern or issues that need urgent attention. The assessment represents a more extensive analysis and investigation of systems, to ascertain that their performance and status is in line with the best practice for safety and efficiency.

Information collected by the BOU is mainly used in two ways:

i. Generally, the BOU uses the information to understand payment and settlement systems arrangements in the economy and to provide an informed basis to formulate appropriate policies to enhance safety and efficiency in the payments industry, in order to uphold financial stability. General research and regular monitoring contributes not only to oversight and financial stability but also to other aspects, such as monetary policy formulation and implementation.
ii. Secondly, the information gathered enables the Bank to determine compliance with the best practices and the relevant laws. The Bank may use not only its own information gathering mechanisms but also information generated through self-assessments and any other sources. Under self-assessment, FMIs are required to evaluate their compliance with the applicable principles, such as the CPSS-IOSCO Principles for FMIs.

The BOU Assessment program has three aspects:

i. **Self-assessment**

   This is a periodic exercise conducted by operators of FMIs monitored by the BOU. On an annual basis, the system operator is required to conduct and submit a comprehensive self-assessment of the FMI's compliance with the applicable principles, such as the CPSS-IOSCO PFMI. Besides the annual self-assessment, interim assessments may be required following changes to the FMI's system (upgrades, patches, etc.) or the operating environment, which impact the FMI's status of compliance with the applicable principles. BOU will review the self-assessment reports and may engage the system operator to discuss certain aspects of the report. This also applies to the systems operated by BOU like the RTGS, ACH and CSD.

ii. **Off-site analyses**

Analysis of information received over a period of time will be carried out monthly, quarterly and annually for each system operator. For example, analyzing the information provided in the regular system operator reports for trends and assessing customer complaints over a period of time will be done quarterly and report presented to the BOU Payment Systems Policy Sub-Committee (PSP-SC).

iii. **On-site assessment**

BOU shall conduct a comprehensive assessment of each FMI against the applicable principles, in a cycle of at least 1-2 years. This assessment shall utilize, review and verify the information obtained from the FMI, including self-assessments and periodic off-site reports. The assessment may also entail on-site inspection of operations and discussions with the payment system provider/operator (management and staff). Where necessary, appropriate recommendations shall be made and follow-up reviews done.

4.4. Inducing Change

In the event that the Monitoring and Assessment procedures establish areas of concern, the BoU's objective is to induce change. The payment system provider/operator shall be required to rectify the concerns to ensure that policy requirements and standards are met, while ensuring minimal disruption to the system as a whole, and individual users. The tools available to BoU to induce change range from moral suasion, negotiated agreements, public statements and statutory powers to enforce oversight decisions.

i. Moral Suasion

The Bank of Uganda uses dialogue[4] and "moral suasion" backed by the publication of statistics and other results of monitoring and assessment processes to induce change. With a strong regulatory basis and a constructive relationship with the payment system participants, BOU is in a good position to dialogue with and persuade system providers/operators to make the necessary changes. Publication of performance information is also a powerful instrument in the compliance enforcement.

ii. Public statements

BOU publishes its oversight policy, primarily in the interest of transparency and accountability and to influence system operations. BOU's oversight objectives and any specific policy requirements or standards set for certain types of systems can usefully reinforce the market's self-discipline, for example by encouraging systems operators, their participants or other interested parties to make their own judgments about the system's design and operation and thus creating pressure for change if weaknesses are found. The BOU may, from time to time, publish oversight assessments of particular systems to inform PSPs and system users of the degree to which those systems meet the required standards.

iii. Negotiated agreements and contracts

BOU's ability to induce change may also be enhanced through the use of negotiated agreements or contracts with participants and other payment system providers/operators. The BoU owns and operates the Uganda National Interbank Settlement System (UNISS) and

[4] World Bank 2010 report

the Automated Clearing House (ACH) and therefore has agreements and contracts with other system operators/participants for clearing and settlement. As part of the terms and conditions for using the UNISS and ACH, BOU may require other systems providers/operators to undertake changes to their systems, whenever it deems as necessary.

iv. Participation in systems

Through full or part ownership, the Bank can, through voting rights or executive power, cause a system to change. The BoU owns and operates the UNISS and ACH and can therefore specify changes and enforce changes through its relationship with system users.

v. Cooperation with other authorities

Although the Bank only directly influences systems used by the authorized payment system providers/operators and participants, through cooperation with other regulators such as the Capital Market Authority (CMA) and Communications Commission (UCC). The areas of common concern for payment systems can be addressed through the cooperative oversight (Sec. 6 below)

vi. Statutory power to require change

The BoU may also use its statutory powers to require payment systems operators or payment service providers to comply with BoU oversight requirements. In addition to the powers to obtain information and conduct on-site inspections, these statutory powers include the authority to license PSPs, to use a system, to approve changes to it, system rules and procedures, to issue "cease and desist" orders and to suspend or revoke licenses and membership.

vii. Enforcement and Sanctions

In certain circumstances, non-compliance with the Bank's orders/directives by a system provider/operator may be a subject of litigation. However, the impact of any sanction will need to be weighed against the objective of continued smooth running of the system.

5. Organization and Staffing for Oversight

The BOU recognizes the necessity of segregating oversight responsibilities from operational responsibilities relating to the payment systems[5].

BoU operates the UNISS/RTGS, ECS and CSD systems and has set up a Payment Systems Oversight and Policy Division (PSOP) as an independent function from the payment operations function in the National Paymnet Systems Department to take charge of oversight.

Assuring adequate resources

The bank has available a number of tools and methods to provide the oversight functions.

i. The bank employs suitably qualified personnel and the operations functions are separated from the oversight functions in the organization;
ii. The Bank draws on its own internal expertise from the Legal, Financial Markets, Supervision and the Internal Audit departments/directorates to support the oversight objectives;

[5] World Bank global payment systems survey 2010

iii. External Audits are conducted.
iv. Joint oversight activities are conducted with the EAC partner states central banks.
v. The Bank staff benefit from external training on payment systems oversight from development partners and organisations.
vi. BoU subjects itself to the Financial Sector Assessment Program by the International Monetary Fund.

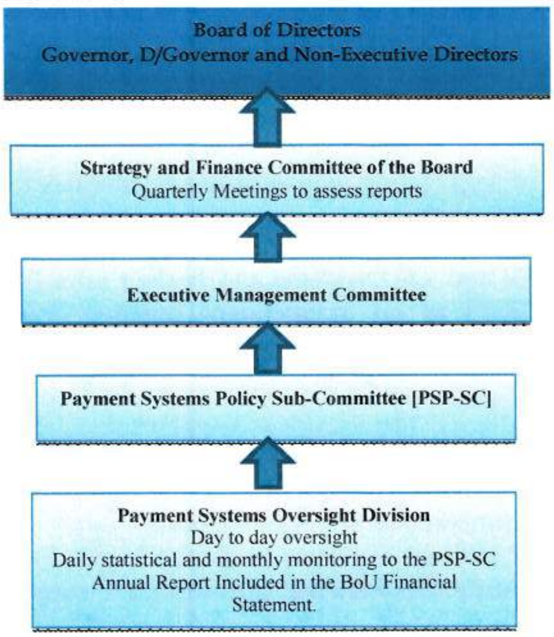
Managing the relationship between oversight and operations

The BoU makes a distinction and is clear when it acts as regulator and when it acts as owner and/or operator. To this end, the National Payment Systems Department has three distinct organizational divisions; Operations, Financial Inclusion and Oversight, managed by officers at the level of Assistant/Deputy Director.

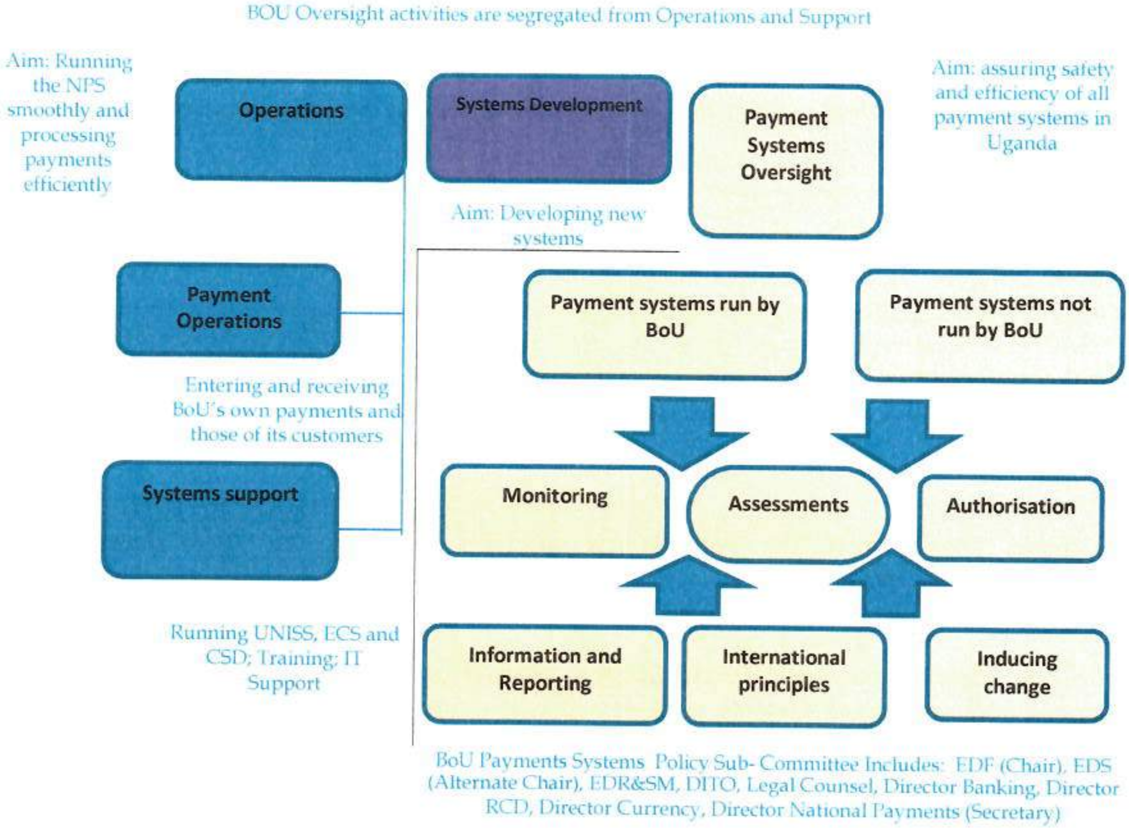
This is because there are a number of possible areas of conflict of interest:
i. Objectives of oversight and operations do not always, coincide;
ii. Oversight objectives can impose additional costs on system operators and the Bank may find its systems and services in direct competition with the private sector systems that are subject to its oversight;
iii. The Bank may find that it has to choose between its interests as system owner and the oversight objectives.

The BOU Payments Systems Policy Sub-Committee [PSP-SC] is responsible for ensuring that the oversight program is carried out satisfactorily. It considers the reports of the Oversight Division and decide whether action to induce change is necessary for any of the systems under Oversight.

Organizational Arrangements



The diagram below shows how oversight is segregated from, other BoU Systems Operation activities:



6. Co-operative Oversight

6.1 General Principles for Oversight

A: Transparency

Central banks should set out publicly their oversight policies, including the policy requirements or standards for systems and the criteria for determining which systems these apply to.

Bank of Uganda ensures transparent oversight policies to enable payment and settlement system operators to understand and observe applicable policy requirements and standards. Through transparency central banks can also demonstrate an appropriate degree of consistency of oversight approach. Transparency provides a basis for judging the effectiveness of the central bank's policies and thus for the accountability of the central bank for the performance of its oversight.

To enhance transparency the oversight framework will be published in the BoU website and public statements will be made from time to time.

B: International standards

Central banks should adopt, where relevant, internationally recognised standards for payment and settlement systems.

Bank of Uganda makes use of the relevant international standards concerning safety and efficiency to enhance the central bank oversight of payment and settlement systems. Such standards include the CPSS Core principles for systemically important payment systems and the CPSS-IOSCO recommendations for securities settlement systems and recommendations for central counterparties. This will make it easier for BoU to work with other central banks and make the cooperative oversight more effective.

C: Effective powers and capacity

Central banks should have the powers and capacity to carry out their oversight responsibilities effectively.

Bank of Uganda has the powers (NPS Act 2020) to obtain information and induce change in the payment and settlement systems in line with the oversight responsibilities for those systems. BoU will use moral suasion for the day-to-day oversight together with other existing tools and statutory powers to obtain information and induce change.

Bank of Uganda as illustrated above deploys sufficient resources, with suitably qualified personnel, and an organisational structure that allows the resources to be used effectively. Those involved in carrying out oversight will need to be able to draw on the skills and expertise of other central bank functions/departments including legal, financial markets, bank supervision, audit and IT.

D: Consistency

Oversight standards should be applied consistently to comparable payment and settlement systems, including systems operated by the central bank.

Bank of Uganda ensures consistent application of policy requirements and standards, including the systems operated by itself. As discussed under the oversight methodology BoU will indicate the criteria for determining comparability (for example, the types of instruments used by a system, the types of participants in a system, or the risk attributes of a system).

Consistency is promoted by the Bank's desire to maintain transparency about its own policies for own systems and to ensure that the same policy requirements and standards are applied with the same rigor for comparable private sector systems. Organisational separation between the central bank's oversight and operational functions helps to ensure the consistent application of policy requirements and standards.

E: Cooperation with other authorities

Central banks, in promoting the safety and efficiency of payment and settlement systems, should cooperate with other relevant central banks and authorities.

Bank of Uganda has to put in place cooperative arrangements with other authorities such as securities regulators and banking supervisors as a mechanism to ensure that the individual responsibilities of the Central Bank as the overseer of payment and settlement systems can be fulfilled more effectively through mutual cooperation.

Cooperation enhances oversight efficiency by minimising the potential duplication of effort and the burden on the overseen system. It also helps to avoid the inconsistency of policy approach that could arise if different authorities acted independently, and it reduces the possibility of gaps in oversight. One of the areas of cooperation is through the EAC Secretariat

Cooperative oversight arrangements will be established for cross-border and multicurrency systems. In 2013 the EAC partner states implemented the East African Payments System (EAPS) through the integration of the RTGS.

6.2 International Cooperative Oversight among Central Banks and with other authorities

In promoting the safety and efficiency of payment systems, the BOU cooperates with other central banks and authorities.

The CPSS recommends a number of principles for cooperation between Central Banks and other authorities such as securities regulators. This can increase the efficiency and minimize duplication of effort that can be onerous for the parties concerned. They propose five (5) principles that can be applied to cross border and domestic cooperative arrangements.

Cooperation, both between domestic and cross border regulatory agencies is crucial in the achievement of effective oversight of the payment and settlement systems. All Ugandan authorities; the Bank, Capital Market Authority (CMA) and Communications Commission (UCC), are working under a framework to promote collaborative oversight of their systems.

The five principles[6] are listed below;

a. Notification

Each central bank that has identified the actual or proposed operation of a cross-border or multicurrency payment or settlement system should inform other central banks that may have an interest in the prudent design and management of the system.

The BoU needs to inform and be informed if there are operators in Uganda providing services for other countries and vice versa. The bank which issues the currency being processed and the Central Bank within whose jurisdiction the system is located needs to be in a cooperative oversight agreement.

b. Primary responsibility

Cross-border and multicurrency payment and settlement systems should be subject to oversight by a central bank which accepts primary responsibility for such oversight, and there should be a presumption that the central bank where the system is located will have this primary responsibility.

[6] CPSS – Oversight Report- May 2005 Annex 4; Lamfalussy Principles

The BoU and other regional Central Banks by mutual agreement will decide on the primary responsibility to apply the oversight principles as well as the assessment of the system as a whole. In the domestic situation the BoU will take responsibility.

c. Assessment of the system as a whole

In its oversight of a system, the authority with primary responsibility should periodically assess the design and operation of the system as a whole. In doing so it should consult with other relevant authorities.

Where BoU is the primary authority it will carry out a full assessment of the system on the basis of agreed standards and other functions relating to that cooperative agreement. These include:

(a) Organising an effective, efficient and clear process for cooperation,
(b) Facilitating the distribution of the information needed to satisfy the respective responsibilities of the central banks and other authorities in the arrangement,
(c) Seeking agreement on the policies and standards to apply in carrying out the assessments,
(d) Seeking consensus on issues of common interest related to risks and risk management of the system,
(e) Providing effective communication and coordination in both routine and stressful situations involving the system, and
(f) Where appropriate, using its powers and influence over the system to induce necessary change.

d. Settlement arrangements

The determination of the adequacy of a system's settlement and failure-to-settle procedures in a currency should be the joint responsibility of the central bank of issue and the authority with primary responsibility for oversight of the system.

The main factors considered where BoU holds the primary responsibility are: the soundness of the legal regime; credit and liquidity implications for a settlement disruption for the domestic market; as well as the solvency and liquidity of the settlement institution for each currency. The authority with primary responsibility should consult the other central bank on issues concerning the adequacy of the system's settlement and failure to settle procedures for a currency or financial assets denominated therein. The Bank of Uganda will execute Memoranda of Understanding with other regional authorities clearly stating responsibilities.

e. Unsound systems

In the absence of confidence in the soundness or management of any cross-border or multicurrency payment or settlement system, a central bank should, if necessary, discourage use of the system or the provision of services to the system, for example by identifying these activities as unsafe and unsound practices.

The BoU, through its system of licensing/authorisation, will discourage the use of particular systems which it considers to be unsound. This could include disallowing the use of UNISS for settlement of certain securities systems if there is good reason to believe that they create a risk to the payment system or its participants.
The arrangements between authorities will be formalized regarding oversight of payment systems through Memoranda of Understanding.

7. Conclusion

This Oversight Policy Framework describes how the BoU oversees the national payment system, in compliance with international standards and the relevant laws. Owing to the nature of the payment and settlement system and in compliance with the international standards, cooperative arrangements are in place with other domestic (Ugandan) regulatory agencies, other central banks and cross border regulatory agencies responsible for constituents of systems that may affect the national payment and settlement system. Ultimately, this comprehensive Oversight Policy Framework enables Uganda to confirm its international position as a jurisdiction in which best practices in financial infrastructure are observed.

8. Appendix I: Principles for FMIs (BIS-IOSCO: 2012).

General organisation

Principle 1: Legal basis

An FMI should have a well-founded, clear, transparent, and enforceable legal basis for each material aspect of its activities in all relevant jurisdictions.

Principle 2: Governance

An FMI should have governance arrangements that are clear and transparent, promote the safety and efficiency of the FMI, and support the stability of the broader financial system, other relevant public interest considerations, and the objectives of relevant stakeholders.

Principle 3: Framework for the comprehensive management of risks

An FMI should have a sound risk-management framework for comprehensively managing legal, credit, liquidity, operational, and other risks.

Credit and liquidity risk management

Principle 4: Credit risk

An FMI should effectively measure, monitor, and manage its credit exposures to participants and those arising from its payment, clearing, and settlement processes.

Principle 5: Collateral

An FMI that requires collateral to manage its or its participants' credit exposure should accept collateral with low credit, liquidity, and market risks. An FMI should also set and enforce appropriately conservative haircuts and concentration limits.

Principle 6: Margin

A CCP should cover its credit exposures to its participants for all products through an effective margin system that is risk-based and regularly reviewed.

Principle 7: Liquidity risk

An FMI should effectively measure, monitor, and manage its liquidity risk. An FMI should maintain sufficient liquid resources in all relevant currencies to effect same-day and, where appropriate, intraday and multiday settlement of payment obligations with a high degree of confidence under a wide range of potential stress scenarios that should include, but not be limited to, the default of the participant and its affiliates that would generate the largest aggregate liquidity obligation for the FMI in extreme but plausible market conditions.

Settlement

Principle 8: Settlement finality

An FMI should provide clear and certain final settlement, at a minimum by the end of the value date. Where necessary or preferable, an FMI should provide final settlement intraday or in real time.

Principle 9: Money settlements

An FMI should conduct its money settlements in central bank money where practical and available. If central bank money is not used, an FMI should minimise and strictly control the credit and liquidity risk arising from the use of commercial bank money.

Principle 10: Physical deliveries

An FMI should clearly state its obligations with respect to the delivery of physical instruments or commodities and should identify, monitor, and manage the risks associated with such physical deliveries.

Central securities depositories and exchange-of-value settlement systems

Principle 11: Central securities depositories

A CSD should have appropriate rules and procedures to help ensure the integrity of securities issues and minimize and manage the risks associated with the safekeeping and transfer of securities. A CSD should maintain securities in an immobilized or dematerialized form for their transfer by book entry.

Principle 12: Exchange-of-value settlement systems

If an FMI settles transactions that involve the settlement of two linked obligations (for example, securities or foreign exchange transactions), it should eliminate principal risk by conditioning the final settlement of one obligation upon the final settlement of the other.

Default management

Principle 13: Participant-default rules and procedures

An FMI should have effective and clearly defined rules and procedures to manage a participant default. These rules and procedures should be designed to ensure that the FMI can take timely action to contain losses and liquidity pressures and continue to meet its obligations.

Principle 14: Segregation and portability

A CCP should have rules and procedures that enable the segregation and portability of positions of a participant's customers and the collateral provided to the CCP with respect to those positions.

General business and operational risk management

Principle 15: General business risk

An FMI should identify, monitor, and manage its general business risk and hold sufficient liquid net assets funded by equity to cover potential general business losses so that it can continue operations and services as a going concern if those losses materialise. Further, liquid net assets should at all times be sufficient to ensure a recovery or orderly wind-down of critical operations and services.

Principle 16: Custody and investment risks

An FMI should safeguard its own and its participants' assets and minimise the risk of loss on and delay in access to these assets. An FMI's investments should be in instruments with minimal credit, market, and liquidity risks.

Principle 17: Operational risk

An FMI should identify the plausible sources of operational risk, both internal and external, and mitigate their impact through the use of appropriate systems, policies, procedures, and controls. Systems should be designed to ensure a high degree of security and operational reliability and should have adequate, scalable capacity. Business continuity management should aim for timely recovery of operations and fulfilment of the FMI's obligations, including in the event of a wide-scale or major disruption.

Principle 18: Access and participation requirements

An FMI should have objective, risk-based, and publicly disclosed criteria for participation, which permit fair and open access.

Principle 19: Tiered participation arrangements

An FMI should identify, monitor, and manage the material risks to the FMI arising from tiered participation arrangements.

Principle 20: FMI links

An FMI that establishes a link with one or more FMIs should identify, monitor, and manage link-related risks.

Efficiency

Principle 21: Efficiency and effectiveness

An FMI should be efficient and effective in meeting the requirements of its participants and the markets it serves.

Principle 22: Communication procedures and standards

An FMI should use, or at a minimum accommodate, relevant internationally accepted communication procedures and standards in order to facilitate efficient payment, clearing, settlement, and recording.

Transparency

Principle 23: Disclosure of rules, key procedures, and market data

An FMI should have clear and comprehensive rules and procedures and should provide sufficient information to enable participants to have an accurate understanding of the risks, fees, and other material costs they incur by participating in the FMI. All relevant rules and key procedures should be publicly disclosed.

Principle 24: Disclosure of market data by trade repositories

A TR should provide timely and accurate data to relevant authorities and the public in line with their respective needs.

Please refer to the detailed key considerations under each principle

9. Appendix II: Responsibilities of Central Banks, Market Regulators & other Authorities

Responsibility A: Regulation, supervision, and oversight of FMIs

FMIs should be subject to appropriate and effective regulation, supervision, and oversight by a central bank, market regulator, or other relevant authority.

Responsibility B: Regulatory, supervisory, and oversight powers and resources

Central banks, market regulators, and other relevant authorities should have the powers and resources to carry out effectively their responsibilities in regulating, supervising, and overseeing FMIs.

Responsibility C: Disclosure of policies with respect to FMIs

Central banks, market regulators, and other relevant authorities should clearly define and disclose their regulatory, supervisory, and oversight policies with respect to FMIs.

Responsibility D: Application of the principles for FMIs

Central banks, market regulators, and other relevant authorities should adopt the CPSS-IOSCO Principles for financial market infrastructures and apply them consistently.

Responsibility E: Cooperation with other authorities

Central banks, market regulators, and other relevant authorities should cooperate with each other, both domestically and internationally, as appropriate, in promoting the safety and efficiency of FMIs.

10. Appendix III: Risks in Payment and Settlement Systems and Mitigation Measures

	Types of Risk	Mitigation
1	Legal Risk; risk of unexpected application of law or regulation usually resulting into a loss	• Robust Legal framework (NPS Law, regulations and rules) • Continuous review of legal framework • Contractual agreements • Cross-border arrangements • Enforcement of the legal framework through the oversight Function
2	Operational Risk; risk of direct or indirect losses resulting from inadequate or failed internal processes, people and systems or from external events	• Encryption of Data Transmission • Operational rules and procedures • Periodic review of rules and procedures • Use of the Business Continuity facilities • Presence of an audit trail in the systems • Continuous monitoring of the systems • Training and multi-skilling of staff • Adequate human resources with experience, qualified and competent. • Backup Facility • Logging and Reporting System Disruptions
3	Systemic Risk; the possibility of one or more participants to fail to complete settlement could cause	• Collateralization of Clearing obligations • Oversight activities • Robust UNISS

	other participants to be unable to meet their obligation when it falls due	• Provision of liquidity by BOU • Real time monitoring of participants' accounts • Implementation of adequate "failure to settle" arrangements • Maintain profiles of all participants
4	Credit Risk; is the risk that a counter party whether a participant or other entity will be unable to meet fully the financial obligation when due or at any time in future e.g. the risk that the settlement of a financial asset will irrevocably deliver the asset but not receive payment	• Collateralization of obligations. • Intra-day credit limits • Clearing and Settlement procedures • Prompt and final irrevocable settlement • Constant monitoring and evaluation of participants' financial status • Failure-to-settle arrangements • Intra-day settlement
5	Liquidity Risk; a risk that a payment will not occur on the due date but some date later. It includes the risk that the seller of an asset will not receive payment when due and may have to borrow or liquidate assets to complete other payments.	• Settlement account balance monitoring • Queuing of transactions in UNISS • Intraday facility and Overnight accommodation • Counseling of participants • Intra-day settlement • Participant profiles • Minimum Reserve Requirements
6	Reputational Risk is a consequential risk directly related to other types of risks e.g. the risk of significant negative opinion	• Enforcement of rules and regulations • Training • Adoption of international best practice • Transparent oversight framework and risk management • frameworks are in place
7	Settlement Risk; the risk that a settlement in a transfer system will not take place	• Enforcement of rules and procedures • Failure to settle arrangement • System uptime/availability.

11. Appendix IV: Payment and Settlement Systems Risk Assessment Matrix

Example of an oversight assessment Matrix for Retail Payment Systems

Colour	Meaning	Explanation
	Observed	Meets all the key considerations/Requirements
	Broadly Observed	There are minor deficiencies, which have a limited impact on the security and efficiency of the system
	Partly Observed	There are serious deficiencies for which measures are being taken in the short term
	Not Observed	There are serious deficiencies for which no measures are planned in the short term
	Not Applicable	**N/A**
	Not Assessed	Initial assessment against this standard has not yet taken place

Example of an Assessment Matrix – Demo.

	Observed		Not Observed
	Broadly Observed		Not applicable
	Partly Observed		Not assessed

PFMIs	2019	2020
Legal Basis	NO	O
Governance	PO	BO
Framework for the comprehensive management of risks	BO	O
Settlement finality	O	O
General Business Risk	PO	O
Disclosure of rules, key procedures and market data	PO	O
Overall Assessment	PO	O

12. Appendix V: Payment Systems Categories

Category	Components	Criteria
Large Value Payment Systems	RTGS/UNISS	Handles large values Handles Interbank Payments Transfers of financial assets such as securities and related funds transfers
Retail payment systems	Card based payment Mobile Payment Mobile banking Internet banking Paper based payment: Cheques, Credit Transfers Remittances	Handles large volumes of payments of relatively low value.

13. Appendix VI: Designation Criteria for Payment Systems in Uganda

a. Large Value Payments Systems (LPS)

BOU categorizes a LPS to be of systemic importance based on the following criteria:

i. If it settles high values and interbank transactions.
ii. If it transfers and settles financial assets such as securities and related funds transfers.

b. Systemically Important Retail Payment Systems (SIRPs)

A disruption in this system can threaten the stability of the financial markets. Bank of Uganda categorises SIRP as follows:

i. When it is the only one such system in the country;
ii. When it is the principal retail payments system operating in the country;
iii. When it has market share of 75% of the existing retail payments market;
iv. If it is processes payments in excess of 10% of the value of the real time gross settlement system;

v. When the concentration ratio of the net debit position of one of the largest participants exceeds 70%;

vi. When it is used for the settlement of financial market transactions or for the settlement of other payments.

c. Prominently Important Retail Payment System (PIRPs)

A disruption in this system could severely impact financial market operations and undermine public confidence in the payments systems and in the currency. BoU categories PIRPs as follows:

i. When it has market share of more than 25% of the retail payments market;

ii. The only existing system of this nature processing payments through the interbank market.

14. Appendix VII: List of Payment Systems Subject to Bank of Uganda Oversight

This list is likely to change from time to time and therefore this Annex will be up-dated regularly.

Oversight scope:

The BoU exercises Oversight responsibilities over the following systems:

i. BoU Operated Systems:
   a. UNISS
   b. Automated Clearing House for cheques and EFTs

ii. Other BoU Systems:
   a. CSD - Central Securities Depository

iii. Retail payment systems, considered to be of Prominent Importance:
   a. Inter switch
   b. ABC Shared Banking Platform
   c. Payment services, such as mobile/electronic money, run by Mobile Network Operators, Agents, Aggregators and Fintechs.

15. References

1. BIS, Central bank oversight of payment and settlement systems (2005);
2. BIS, CPSS-IOSCO, (2012), *Principles for financial market infrastructures,* Switzerland ;
3. BIS, (Committee on Payment and Settlement Systems (CPSS), (2005). *General principles for international remittance services,* Switzerland ;
3. BIS, (Committee on Payment and Settlement Systems (CPSS), (2007). *Central Bank oversight of payment and settlement systems,* Switzerland ;
4. BIS, (Committee on Payment and Settlement Systems (CPSS), (2003). A glossary of terms used in payments and settlement systems, Switzerland.
5. ECB, Assessment of Euro Retail Payment Systems against the Applicable Core Principles, August 2005-July 2012.

THE NATIONAL PAYMENT SYSTEMS REGULATORY SANDBOX FRAMEWORK, 2021

Table of Contents

Clauses
1. Introduction.
2. Objectives.
3. Scope.
4. Type of Applicants.
5. Application and approval process.
6. Consultation with the Fintech office.
7. Lifecycle of sandbox.
8. Application stage.
9. Evaluation stage.
10. Testing stage.
11. Exit stage.
12. Fees.

1. Introduction:

In order to support technology-enabled innovation in the financial services space, Bank of Uganda (BOU) has deemed it pertinent to ensure new, more flexible ways of engaging with the financial services industry. One of the options being the use of a Regulatory Sandbox Framework established pursuant to section 16 of the National Payment Systems Act, 2020.

The Regulatory Sandbox Framework is a tailored regulatory environment for conducting limited scale, live tests of new, innovative products, services, solutions, delivery channels, or business models in a controlled environment, with regulatory oversight, subject to appropriate conditions and safeguards. This would enable BOU stay abreast of innovations while promoting safe, reliable and efficient payment systems to foster innovation without compromising on the delivery of its mandate.

The National Payment Systems Policy among others highlights the broadening of access to payment systems as a key objective. Under this objective, the Bank aims to promote electronic payments and financial innovations in general.
Drawing on emerging global best practices, BOU seeks to position the Regulatory Sandbox as a tool for facilitating innovation and advancing BOU's goal to promote effective competition, embrace new technology, encourage financial inclusion and improve customer experience, with a view to engendering public confidence in the financial system.

This Framework sets forth the eligibility, application, safeguard and testing requirements for applicants interested in live testing of innovative products, services, solutions, delivery channels, or business models in the Regulatory Sandbox. The Regulatory Sandbox Application Form is attached as **Annex A.**

2. Objectives:

The objectives of the regulatory sandbox framework are -

(a) to increase the potential for innovative business models that advance financial inclusion;
(b) to increase competition and quality of services, widen consumer choice and lower costs;
(c) to institute appropriate consumer protection safeguards in innovative products and services;
(d) to clearly define the roles and responsibilities of stakeholders and the operations of the Regulatory Sandbox for the payment systems industry;
(e) to create an enabling environment for innovators to test their solutions in a controlled environment without compromising safety for consumers and of the overall payment system;
(f) to provide an avenue for regulatory engagement with Fintech firms in the payment space, while contributing to economic growth;
(g) to reduce time-to-market for innovative products, services, and business models; and
(h) to enable BOU collect information that can be used to draft guidelines, improve existing laws, regulations or issue new laws and regulations for new technologies, stay updated with the latest innovation in the sector, and mitigate any risks.

3. Scope:

(1) The framework is open to -
   (a) innovators whose proposed solution involves a different technology or an existing technology being applied differently which are currently not covered under existing regulations and require an amendment to the existing regulations; or
   (b) innovators whose proposed solution involves a digital business model that is not currently covered whether explicitly or implicitly under the regulations and requires issuance of new regulations and licenses for those solutions.

(2) The framework is not open to innovators proposing -
   (a) solutions that add little or no material value to similar solutions already deployed in the payment system industry in Uganda unless it involves a different technology or an existing technology being applied differently;
   (b) technologies that are not at sufficient stage of maturity or development. The sandbox is not an accelerator or an incubator; or
   (c) to test products, services or solutions that are not sufficiently developed.

(3) The sandbox cannot be used to circumvent existing laws and regulations and is therefore not suitable for a proposed product, service or solution that is already appropriately addressed under prevailing laws and regulations.

4. Type of applicants:

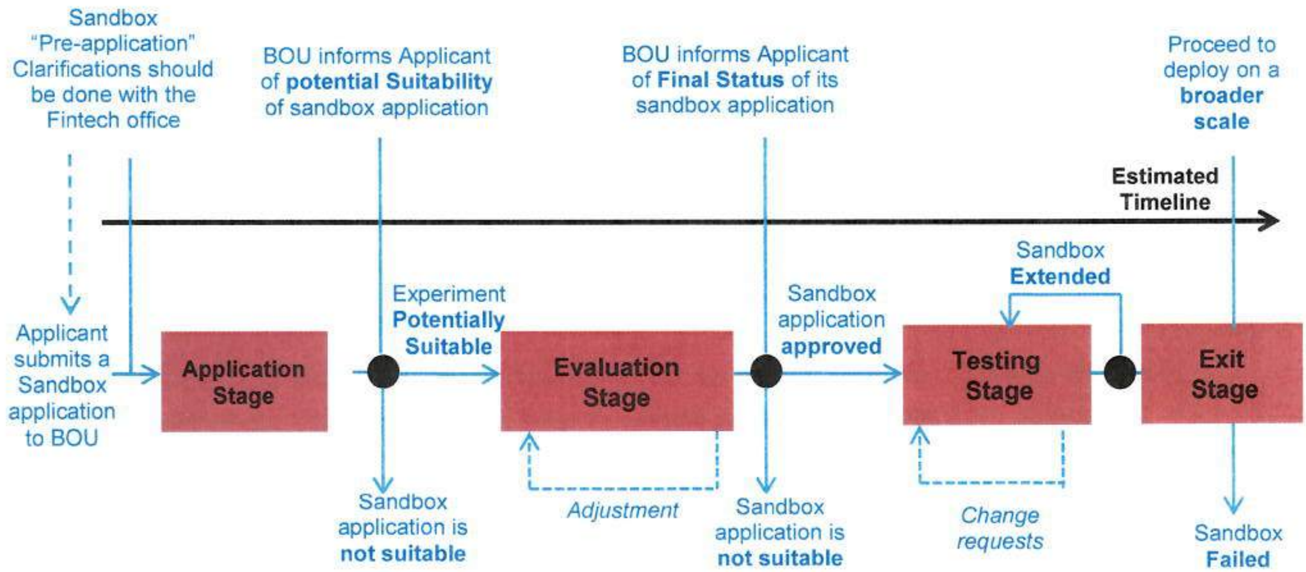
Applicants are categorised as follows -
   (a) Innovators already licensed by BOU under the National Payment System Act.
   (b) Non-licensed local Fintechs or start-ups developing a new Fintech solution with a view to deploying it in Uganda. Access to the Sandbox may be through one of the following options -
      (i) partnering with institutions licensed by BOU. In this scenario, the party accountable to BOU for the content of the application and execution of the testing will be the licensed institution; or
      (ii) applying directly to BOU.

   (c) Non-licensed international Fintech. As a general rule, innovators not registered in Uganda are not allowed to operate in Uganda and cannot apply directly to enter the Sandbox. Access to the Sandbox can therefore be granted indirectly through a partnership agreement between the international innovator and an institution licensed by BOU. In this case the latter will be the applicant to the Sandbox and will remain responsible for the submission of the application, the testing and any associated risks.

5. Application and approval process:

(1) The applicant should ensure that the objective (clause 2), scope (Clause 3) and criteria as provided for in the regulation 3 of the National Payment Systems (Sandbox) Regulations, 2021 are satisfied before submitting the application to BOU. The application shall be submitted to the office of the Director National Payment Systems Department.

(2) The diagram below summarises the application and approval process.



6. Consultation with the Fintech office:

(1) An applicant who wishes to operate a sandbox shall seek regulatory clarification or advice from the Fintech office at BOU prior to submission of an application. The request for clarification or advice may be emailed to: fintechoffice@bou.or.ug

(2) The Fintech office shall respond to the applicant's request within five (5) working days.

7. Lifecycle of sandbox:

The life cycle of the sandbox is composed of four stages -

(a) application;
(b) evaluation;
(c) testing; and
(d) exit.

8. Application stage:

(1) Upon submission of the application, BOU shall review the application and inform the applicant of its potential suitability for a sandbox within ten days from the date of the application.

(2) In reviewing the application, BOU shall consider four key criteria -

(a) genuine innovation;
(b) consumer benefits and safeguards;
(c) readiness for testing; and
(d) exit plan.

(3) For purposes of a genuine innovation, the innovation must demonstrate one of the following in its proposed solution -

(a) significantly differs from existing offerings in Uganda;

(b) offers a new use for existing technologies deployed in Uganda; or

(c) represents a significant scale-up in existing technologies deployed in Uganda.

(4) For purposes of consumer benefits and safeguards , the applicant must produce sufficient evidence showing that -

(a) the innovation proposed offers an identifiable and direct benefit (e.g. improving security or quality of service) or indirect benefits to consumers (e.g. increasing competition);

(b) it has adequately identified and addressed any risks for consumers and markets resulting from its proposed innovation; and

(c) it has put in place a suitable mitigation plan to manage those risks and ensure protection to consumers throughout the testing.

(5) For purposes of readiness for testing, the applicant shall produce a well-developed testing plan that at a minimum contains -

(a) timelines for execution including milestones;

(b) reporting schedule stating the format and content (e.g. key performance indicators) of the report that will be submitted to BOU throughout the testing; and

(c) clear methodology of the testing and controls required.

(6) For purposes of the exit plan, the applicant shall include a description of the future development and deployment of the solution tested, including an explanation of -

(a) how it intends to deploy the product, service or solution on a commercial scale in Uganda should the testing be successful;

(b) how it intends to ensure that consumers do not suffer a detriment as a result of unsuccessful testing; and

(c) how it intends to ensure that consumers do not suffer a detriment as a result of the test being discontinued at the request of BOU or the applicant.

(7) If the application is deemed to meet the above eligibility criteria, the applicant shall be informed that the application has progressed to the evaluation stage.

9. Evaluation stage:

(1) Under the evaluation stage which is estimated to take fifty days to complete, BOU shall -

(a) establish the customer safeguards to be deployed by the applicant;

(b) establish the reporting requirements to be complied with by the applicant; and

(c) determine whether or not to issue the applicant a letter of approval.

(2) For purposes of (1)(a), customer safeguards are a set of prohibitions, limitations and conditions that BOU shall require the applicant to put in place in order to provide adequate customer protection throughout the test. The minimum requirements for customer safeguards are –

(a) a clear statement informing customers that they are participating in the test;

(b) a clear statement indicating that the company and the product is permitted under the sandbox framework;

(c) limitations on the number and type of consumers that will participate in the test;
(d) limitations on the type and size of transactions;
(e) restriction or prohibition to hold or control customer money or financial assets;
(f) to obtain consumers' prior written consent to their participation in the test;
(g) to include prominent statements in some or all communications to consumers informing them of their participation in the test;
(h) to carry out system penetration simulations;
(i) extra requirements related to the prevention of anti-money laundering and financing of terrorism;
(j) to clarify the risks of the product in case it is a high risk product;
(k) to safeguard customers against losses through provision of extra capital, ring-fencing funds, guarantees, insurance or any other mechanisms as shall be agreed with BOU to ensure redress to consumers should the test result in consumers suffering a financial detriment;
(l) extra requirements related to the handling and protection of consumer data;
(m) reporting requirements to be added to those proposed by the innovator to ensure a robust risk identification and management during the testing exercise; or
(n) requirements to have customer service to handle complaints and suggestions by customers.

(3) For purposes of (1)(b), the applicant shall –
(a) submit interim reports to BOU on the progress of the test, which includes the following -
(i) key performance indicators, key milestones and statistical information;
(ii) issues arising as observed from fraud or operational incident reports;
(iii) an updated risk register including possibility and treatment of any emerging risk(s);
(iv) details on any audits conducted and where applicable, submission of signed audit reports;
(v) customer satisfaction report, including complaints, if any;
(vi) a detailed log of operational or technical incidents, if any, and steps taken to address the same; and
(vii) any other information as requested by BOU.

(b) submit a final report to BOU within 30 calendar days from the expiry of the testing period containing the following -
(i) key outcomes, key performance indicators against agreed measures for the success or failure of the test and findings of the test;
(ii) a full account of all incident reports and resolution of customer complaints;
(iii) in the case of a failed or unsuccessful test, lessons learnt from the test and how the applicant intends to wind down the test; and
(iv) any other information as requested by BOU.

(c) Have the Chief Executive Officer confirm both the interim and final reports of the applicant.

(4) For an applicant that has been accepted into the sandbox, BOU shall issue a letter of approval that in summary will -
(a) confirm that the application has been accepted and specifying the period of time of the testing;

(b) include a brief description of the innovation to be tested;
(c) list the sandbox tools deployed;
(d) list the permissions granted and any limitation applicable to them;
(e) list the customer safeguards agreed at the evaluation stage including the treatment of customers after BOU withdraws the letter of approval in 9(4)(g);
(f) outline the content and frequency of the reports to be submitted by the applicant to BOU during the testing stage;
(g) explain that BOU reserves the right to suspend the test and withdraw the letter of approval should it become aware of a breach of the conditions and limitations contained in the letter of approval, or if it becomes aware of consumer detriment; and
(h) confirm that the letter of approval can be used by an applicant in their interaction with other financial services firms to certify that they have been permitted by BOU or authorized to carry out a test in the sandbox environment.

(5) The BOU shall publish on its website a list of innovations being tested on the sandbox.

10. Testing stage:

(1) Once the applicant has received the letter of approval, the applicant shall proceed with its testing plan as detailed during the evaluation stage and in accordance with the terms contained in the letter of approval.

(2) A participant shall complete testing their innovation in the sandbox environment within a period of six (6) months from receipt of the letter of approval. This period may be extended for a further maximum period of six months at the discretion of BOU.

(3) During the testing stage the participant shall provide BOU with the results of their monitoring activity as stated in their letter of approval.

(4) At any point during the testing stage, BOU may raise questions to the participant based on the progress made and results of the testing exercise.

(5) In cases where BOU believes that the participant has failed to adhere to the terms of the letter of approval, BOU may request the participant to temporarily discontinue the test until the matters in question are fully clarified.

(6) In cases where BOU finds indications of potential or actual consumer detriment BOU may ask the participant to terminate its testing exercise and present an exit plan that may include a remediation plan. In this case, BOU will communicate to the participant that its letter of approval has been revoked.

(7) Similarly, the participant may encounter unexpected technical or non-technical difficulties beyond their control that may lead them to suspend the test until these are fully resolved. In these exceptional circumstances the participant may submit a written request for an extension of the testing stage.

(8) At the end of the testing period the participant shall submit a final report to BOU in line with clause 9(3) (b).

11. Exit stage.

Upon expiry of the testing period, BOU may –

(a) grant the participant a license to operate in Uganda subject to compliance with existing legal and regulatory requirements;

(b) issue new regulations, guidelines or notices based on insights gained from the sandbox test; or

(c) prohibit the participant from deploying the innovation in Uganda under prevailing legal and regulatory requirements.

12. Fees:

Applicants to the regulatory sandbox shall pay a non-refundable fee of **Uganda Shillings One Million.**

Annex A
Application Form

Thank you for your interest in BOU's Regulatory Sandbox. The Regulatory Sandbox is intended to allow for testing of innovative products, solutions and services that have the potential to deepen or broaden the financial sector.

Eligible firms may participate in the Regulatory Sandbox if they meet the criteria set in this Framework. This application form is intended to assist BOU in understanding your innovative product, solution or service and to help BOU determine whether you qualify for participation in the Regulatory Sandbox.

The completed application form, along with all required supporting documentation, must be submitted to BOU. If BOU has questions or require additional information, BOU will contact you within fourteen working days.

1. General Information

Name of applicant Full names of substantial shareholder, managers and directors Physical address Contact details of applicant	
Website URL (if available; if password protected, please provide relevant access details) Contact person: Name Title Telephone number Email address Is the applicant, affiliated entity, their shareholders or employees involved in a dispute or enforcement action? If yes, please provide details of the dispute. Is the applicant, affiliated entity, their shareholders or employees registered, licensed, or supervised by any other authority or agency in Uganda or other jurisdiction? If yes, please provide names of the regulating authority and the nature of regulated business.	

2. Details of the Sandbox Proposal

Additional information may be provided as supporting documents

Describe your innovative product, solution or service. Attach a business model or project synopsis. Describe the technology or methodology that will be used to offer your product, solution or service. Explain how your product, service, or solution will foster or accelerate the development of the Ugandan payment ecosystem. Identify the type of customers you will target to participate in the Regulatory Sandbox test.	
How do you intend to acquire and engage customers? Identify any other businesses or partners or institutions that you are working with or plan to work with if you are selected to participate in the Regulatory Sandbox. Describe the business strategy or plan to deploy the product, solution or service in the broader Uganda marketplace after exiting the Regulatory Sandbox.	
Explain why your product, solution or service would benefit from participation in the Regulatory Sandbox.	
Identify the specific legal and regulatory requirements prescribed by BOU that would need to be varied or waived in connection with a Regulatory Sandbox test of your product, solution or service, if any If you think your product, solution or service raises new or complex regulatory concerns, please describe. Describe the current stage of development of your product, solution or service. If the product is not sufficiently developed, what is the anticipated development path and timeline for live testing? Describe the key consumer protection, market stability and any other risks associated with your product, solution or service and how you have or intend to address those risks. Describe your plan for exiting from the Regulatory Sandbox.	
If you are successful, what is your plan for offering your product, service or solution on a broader scale within Uganda?	

If you are unsuccessful, what is your plan for winding down the product or service and addressing consumer interests or developing an alternative approach? Briefly describe or attach short biography on your key personnel's technology or financial industry experience.	
Please describe the source of funds including any venture funding or potential funding, you intend to use to develop and test your product, service, or solution in the Sandbox.	

3. Testing Criteria

Describe the use case that you are proposing to test in the Regulatory Sandbox. Describe in detail the testing program you propose, including: (a) test objectives and intended outcomes; (b) test parameters to measure the success of the test objectives or outcomes; (c) control boundaries for the test, including, among others, customer type and number, and transaction size and total exposure limit; (d) customer acquisition plan for the test; (e) customer communication plans and templates, including sample risk disclosures for the live-test; (f) key testing milestones and timelines; (g) anticipated duration; and (h) an exit strategy for customers upon completion or discontinuation of the live test.	
Describe the proposed control program and safeguards for a live test, including: (a) measures to monitor and ensure compliance with the safeguards to be established for the test; (b) measures to mitigate risks and impact to customers arising from any test failures; (c) reliance on other test partners (such as regulated financial institutions) to monitor or mitigate regulatory risks; (d) measures to handle customer inquiries, after-test services and complaints in a fair and effective manner; and (e) any programs for compensating customers who may have suffered damage as a result of participating in the test.	

I/WE...
....
.... declare that all information given in this application and in the attached documents is true and correct.

Dated this .... day of ....20.....

Signed ....
Name ....
Position ....
Name ....
Position ....

4. Attachments

Please attach:

- Certified copies of all incorporation documents
- Certified list of directors and shareholders
- CVs for substantial shareholders, directors and managers
- Fit and proper person for substantial shareholders, directors and managers
- Testing Plan
- Safeguards Plan (risk management plan)

5. Submission

The application form and any supporting documentation must be submitted to BOU. All application materials will remain confidential, although BOU may disclose data on the number and types of firms that have applied to participate in the sandbox.

If you have questions during the application and review process, you may contact BOU at: Plot 37 - 45 Kampala Road, P.O. Box 7120, Kampala, Uganda.

Email: fintechoffice@bou.or.ug