



BANK OF BOTSWANA

National Payments System Oversight Policy

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List of Acronyms

<i>BIS</i>	<i>Bank for International Settlements</i>
<i>CLC</i>	<i>Code-Line Clearing</i>
<i>CPSIPS</i>	<i>Core Principles for Systemically Important Payment Systems</i>
<i>EFT</i>	<i>Electronic Funds Transfer (payments/transfer of funds from one account to another within the same or different bank)</i>
<i>FSI</i>	<i>Fund Settlement Instruction</i>
<i>BISS</i>	<i>Botswana Inter-bank Settlement System</i>
<i>NPS</i>	<i>National Payments System</i>
<i>ECHB</i>	<i>Electronic Clearing House (Botswana)</i>
<i>PSD</i>	<i>Payments and Settlement Department</i>
<i>SLA</i>	<i>Service Level Agreement</i>
<i>SIPS</i>	<i>Systemically Important Payment Systems</i>
<i>SWIPS</i>	<i>Payment Systems of System-Wide Importance</i>
<i>PCH</i>	<i>Payments Clearing House</i>
<i>NCSS</i>	<i>National Clearance and Settlement System</i>

1. ¹Purpose and Scope of the Policy

- 1.1 *This Payments System Oversight Policy document sets out the objectives, general principles and procedures that will guide the Bank of Botswana in the performance of its functions relating to the regulation and oversight of the National Payments System (NPS) in accordance with the National Clearance and Settlement Systems Act, 2003 and supporting regulations 2005. In performing these functions, the Bank shall endeavour to ensure effective compliance with the BIS Core Principles for Systemically Important Payment Systems (CPSIPS)¹; promote efficiency and safety of the national payment system, and, in general, enhance transparency.*
- 1.2 *Effective oversight is essential for the achievement of the public policy objectives relating to safety and efficiency of the NPS. Furthermore, effective oversight will ensure the financial and technical integrity of the NPS, including its overall management of systemic risks, accessibility and cost effectiveness through rules, standards, monitoring, analyses and enforcement.*
- 1.3 *The scope for the oversight function includes all payment systems which are recognised as Systemically Important Payment Systems (SIPS) or Payment Systems of System-Wide Importance (SWIPS). The guidelines apply to the whole NPS, together with those that provide clearance and settlement services and products e.g. Botswana Interbank Settlement System (BISS), Electronic Clearing House (ECH) Botswana, money transfer entities and Payment Intermediaries.*

2. Authority

- 2.1 *This Policy and guidelines document is issued pursuant to the requirements of Sections 3 - 9 and 16 of the NCSS Act, 2003 and its supporting regulations (2005).*

3. Definitions

In this Oversight Policy, unless the context otherwise indicates: –

“Act” means the National Clearance and Settlement Systems Act, 2003;

“Central Bank” means the Bank of Botswana as defined in the Bank of Botswana Act, Cap 55:01;

¹ Appendix 1

“Financial Institution” as defined in the National Clearance and Settlement Systems Act, shall mean;

- (a) a person licensed under section 3 of the Banking Act, Cap 46:04 to transact banking business in Botswana; or*
- (b) a broker-dealer, insurance company, investment scheme, central securities depository or pension fund;*

“recognised system” means a system recognised by the Central Bank that facilitates clearance or settlement of transfer of instructions regarding funds, securities or other financial instruments;

“Core Principles for Systemically Important Payment Systems” means the Core Principles issued by the Committee on Payment and Settlement Systems of the Bank for International Settlements by which national authorities benchmark the objectives of safety and efficiency in payment systems;

“credit risk” means the risk that arises when a counterparty in a transaction is unable to meet its obligations, whether in part or full as and when they fall due in payment terms. Default may also mean failure to deliver a security or funds as per agreed terms and standards;

“Electronic Funds Transfers” means an electronic means by which funds are transferred from payer to beneficiary requiring little or no human intervention;

“legal risk” means the risk arising from an unexpected interpretation of the law or legal uncertainty leading to payment system participants having unforeseen financial exposures;

“liquidity risk” means the risk experienced when one or more payment system participants are unable to fully settle their obligations in one settlement day due to cash flow problems;

“settlement risk” refers to a general term used to designate the risk to settlement in a transfer system when settlement will not take place as expected. This risk may comprise both liquidity and credit risk;

“systemic risk” means the risk that a settlement system fails to settle as a result of one or more system participants being unable to settle their obligations, thereby affecting the financial system in the country and crossborder financial markets;

“Payment Clearing House (PCH)” means an arrangement between two or more system participants governing the clearing of payment instructions between such system participants.

Systemically Important Payment Systems (SIPS) are defined as systems which, when insufficiently protected against risk, disruption within it could trigger or transmit further disruptions amongst participants or systemic disruptions in the financial area more widely.

“Payment Systems of System-Wide Importance (SWIPS)” are defined as payment systems which are of importance for the economy as a whole due to the values of transactions processed, but which are unlikely to generate or transmit financial instability shocks should they fail, however, such payment systems, are widely-used and have poor short-term substitutes.

“Payment system” means, systems or arrangements for the clearing or settlement of payment obligations, as well as systems or arrangements for the clearing and settlement of securities transactions, foreign exchange transactions, or other transactions, where the system or arrangement also clears or settles payment obligations arising from those transactions.

“Payment System Stream” means input and output data (transactions) for a given PCH.

4. National Payments System’s Main Players

4.1 *The main players in the National Payments System are those institutions and organisations that have an impact on the interface with or make use of payment, clearing and settlement systems or operations. The following have been identified as key stakeholders in the National Payments System:*

- (i) The Bank of Botswana as the BISS owner, operator and participant; as well as settlement agent for retail and card based transactions, regulator, overseer, facilitator and promoter of payments system reform;*
- (ii) Securities and Settlement Systems Regulators;*
- (iii) The Bankers Association of Botswana, Payments Clearing Houses, Botswana Stock Exchange, Operators both relating to central systems and to participants sub-contractors;*
- (iv) Providers of payments system products and services;*
- (v) Banking and financial institutions;*

- (vi) *Providers of telecommunications, electricity and transport infrastructures;*
- (vii) *Competition authorities;*
- (viii) *International regulatory authorities;*
- (ix) *BISS User Group; and*
- (x) *Government*
- (xi) *NBFI Regulatory Authority*

4.2 *Payments systems markets include wholesale, retail, foreign exchange and securities clearing and settlement services that settle on a gross or net basis.*

5. ***Objectives of Oversight and General Principles of Oversight***

5.1 *The oversight of payment systems is a public policy activity focused on fostering the efficiency and safety of payment systems. This function aims at monitoring and promoting the smooth and efficient functioning of payment systems and associated instruments, in order to ensure the attainment of the following goals:*

(i) *Safety and Reliability*

The safety and reliability of payment systems is to foster a sound and secure Botswana National Payment System, thus contributing to financial system stability;

(ii) *Risk Reduction*

The stability and reliability of payment systems by identifying, preventing and mitigation of potential risks, particularly, credit, systemic, settlement, legal, operational and liquidity risks;

(iii) *Maximising Efficiency*

The effectiveness and efficiency of any payment system in order to ensure that the cost of services provided to users appropriately reflects the value and timeliness of these services;

(iv) Transparency

Transparency of the operating rules of payment systems, as well as of the rights and obligations of systems' participants, system operators and users;

(v) Structures

Appropriate administrative, operational and technical structures for payment systems;

(vi) Public Confidence

Maintaining public confidence in the payment instruments used and the payment services offered, in particular regarding the settlement of payments under pre-specified terms (procedures, execution times, value dates, etc.), by ensuring technical and legal soundness and effective fraud prevention;

(vii) Straight Through Processing (STP)

Promoting "Straight Through Processing (STP)" in the use and processing of payment instruments as well as interoperability of supporting systems;

(viii) Equity

Ensuring that payment systems services and products are provided on an equitable basis and access to such products and services are not unreasonably restrictive;

(ix) Risk Responsibility

Ensuring that participants assume full responsibility for the risks they introduce to any payment system and, accordingly, put in place risk management systems to mitigate such risks.

(x) Legal Framework

Ensuring that all service providers and participants operate within the legal boundaries of the National Clearance and Settlement Systems Act, 2003 and supporting regulations, together with the associated rules, regulations and procedures, and any other related legislation.

(xi) Safeguarding Public Interest

To safeguard public interest, and responsibility to ensure that acceptance service levels and standards are maintained; ensure public interest as opposed to private interest; control and mitigation of risks and disturbances to meet the needs of the economy.

5.2 *Any payment system recognised by the Central Bank as a Systemically Important Payment System (SIPS) or Payment Systems of System-Wide Importance (SWIPS) shall comply with the following general principles which are based on the Botswana oversight standards as adopted from the BIS Core Principles for Systemically Important Payment Systems:*

- (a) *fully and clearly prescribe the rights and obligations of the system's operators and system participants;*
- (b) *specify the exact time of the day when the settlement of payments becomes final, as envisaged by the National Clearance and Settlement Systems Act 2003;*
- (c) *provide adequate information enabling participants to evaluate the credit and liquidity risks they incur through participation in the system;*
- (d) *maintain acceptable procedures for the management of all risks and define the responsibilities of the system's operators and system participants;*
- (e) *ensure the final settlement of payments on the day of value and at the latest at the end of the day;*
- (f) *state that the settlement of payments shall be effected through accounts within the BISS at the Bank of Botswana in central bank money;*
- (g) *establish objective and publicly disclosed criteria for participation, which allow fair and open access;*
- (h) *a high degree of security, operational reliability and efficient contingency and disaster recovery arrangements ensuring the timely completion of daily payments processing and facilitation of settlement; and*
- (i) *the enforceability of the legal framework of the system under all relevant jurisdictions.*

6. ***Focus of NPS Oversight***

6.1 *The oversight process shall primarily focus on the following:*

- (a) *The completeness and suitability of the operating rules and procedures of payment, clearing and settlement systems and their compliance with the applicable legal and regulatory requirements, in particular in terms of the criteria for participation in and the suspension or exclusion from such systems;*
- (b) *The adequacy of risk management measures for payment systems;*
- (c) *The adequacy of the technical infrastructure and of the procedures safeguarding the authenticity of transactions, the prevention of fraud and the system's capability to settle transactions at the end of the business day within the BISS in central bank money in the event of technical or operational difficulties;*
- (d) *The terms and conditions that shall include but not to be limited to execution times and value dates and cost for the use of payment products and services, the observance of provisions in the transparency of transactions, the adoption of internationally recognised standards and the interoperability of the systems, products and services that support the use of such payment products and services;*
- (e) *Examination of all cross-border payment, clearing and settlement arrangements, including Service Level Agreements for outsourced payment processing services.*
- (f) *Investigation of “unrecognised entities” operating illegally.*

6.2 *Oversight by the Central Bank will also focus on institutional arrangements, operational and technical platforms of such payment systems. Therefore, the Central Bank considers the following inter-bank payment systems as recognised SIPS or SWIPS:*

- (a) *The Botswana Inter-bank Settlement System (BISS);*
- (b) *The EFT system operated by the Electronic Clearing House Botswana;*
- (c) *The CLC systems operated by Electronic Clearing House Botswana;*
- (d) *The Card systems (credit, debit, e-purse etc);*
- (e) *Securities Settlement Systems;*
- (f) *Foreign Exchange Settlement Systems.*

7. *The Recognition Process for SIPS or SWIPS*

7.1 *The Central Bank may recognise a payment system as SIPS or SWIPS if it has the following characteristics:*

- (d) have two or more participant banking institutions;*
- (ii) clears or settles payment obligations that are all or partly in Botswana Pula; and*
- (iii) ultimately settles the payment obligations that arise from the clearing within the system through entries to the accounts of participant banking institutions held at the Bank of Botswana.*

8. *Requirements for a Recognised Payment System*

8.1 *Payment clearing houses that operate a recognised system are required to comply with the following requirements of the Central Bank:-*

(a) Advance Notice of Significant Changes

8.2 *A payment clearing house that operates a recognised system shall be required to provide the Central Bank with advance notice of any significant changes to operations, arrangements, rules, procedures, or other documentation in relation to any changes to the system prior to their implementation. In addition, a payment clearing house is required to provide the Central Bank with any other information that the Central Bank may request in writing within 48 hours (forty eight hours). The requirement to provide the Central Bank with advance notice of changes is a separate and distinct regulatory requirement which applies notwithstanding any knowledge of such changes which the Central Bank or its staff may acquire as a participant or service provider in the recognised system or as a member of the clearing house's management.*

(b) Agreements between the Bank and a Recognised Payment System

8.3 *Once a clearing and settlement system has been recognised, the Central Bank may enter into an agreement with the clearing house or participants (or both) concerning:*

- (i) the netting arrangements used by the system;*
- (ii) risk-control and risk-sharing mechanisms;*
- (iii) certainty of settlement and finality of payments to participants;*
- (iv) operational systems and financial soundness of the clearing house;*

- (v) *the advance notice required before any significant changes to the operations, arrangements, rules or procedures are implemented and the means for obtaining approval from the Central Bank for such changes;*
 - (vi) *any other matters related to systemic disturbances or risk associated with the operation of the clearing and settlement system as may be agreed upon by the parties to the satisfaction of the Central Bank; and*
 - (vii) *Failure to settle mechanisms.*
- (c) *Audits and Inspections of a Recognised Payment System and Its Participants*

8.4 *To carry out its oversight responsibilities under the National Clearance and Settlement Systems Act, 2003, the Central Bank shall conduct audits and inspections of a recognised system. A recognised system will be examined at such intervals as the Central Bank may determine, but not less than once a year. The inspection should focus on the internal controls and risk management procedures together with any other matters considered necessary, by the Bank, to carry out its oversight responsibilities.*

(d) *Request for Specific Information from a Recognised Payment System*

8.5 *The Central Bank may request specific information it deems necessary from a clearing house of a recognised payment system, a participant of a recognised payment system or the system itself in order to carry out its oversight obligations. Such information shall be provided within 48 hours (forty eight hours) or such other shorter period as may be specified by the Central Bank.*

(e) *Cost of Oversight and Regulation of a Recognised Payment System*

8.6 *The Central Bank reserves the right to impose an annual fee on a clearing house covering the cost to the Central Bank of the administration of the National Clearance and Settlement Systems Act, 2003, in respect of the clearing and settlement system. There is a fee for initial recognition and also annual renewal as in the NCSS Regulations, Sections 3.2 and 8 (2).*

(f) *Clearing and Settlement Rules of a Recognised Payment System*

8.7 *The clearing and settlement rules of a clearing and settlement system are those rules that provide the basis upon which payment obligations are calculated, netted, or settled and include rules for taking action in the event that a participant is unable or likely to become unable to meet its obligations to the payment clearing house or a counter-party. The operation of these rules will apply to a recognised payment system.*

(g) Day-to-day Operations of a Recognised Payment System

8.8 *Primary responsibility for reliable day-to-day operations of a recognised clearing and settlement system lies with the system's clearing house and participants.*

8.9 *The Central Bank, in carrying out its oversight activities, does not involve itself in the daily operations of recognised payments system and is not involved with the routine aspects of the payments system operators and their customers. However, if any operational or design issue has the potential to disrupt the operation of itself or others, the Central Bank reserves the right to become involved from a regulatory oversight standpoint.*

(h) Minimum Standards for Recognised Payment Systems

8.10 *A recognised payment system is required, at a minimum, to comply with the Botswana oversight standards consistent with the BIS Core Principles for Systemically Important Payment Systems. The Central Bank will require a clearing house of a recognised payment system, a participant of a recognised payment system or the system itself to complete a Self-Assessment Matrix (SAM) at such regular intervals as the Central Bank shall direct.*

9. **Oversight Cooperation within the Bank**

9.1 *Due to the nature of payment systems oversight and risk management compliance verification, there is considerable overlap with other Central Bank functions that include but are not limited to:*

(i) *legal function: effective oversight of the National Payment System is supplemented by the effective enforcement of the National Clearance and Settlement systems, 2003 together with all other Clearing House agreements, Service Level Agreements, Settlement Agreements which require significant legal input at various stages. Thus there is a need for clear understanding between the legal requirements and payment system functions in order to maintain an effective legal framework for the National Payments System;*

(ii) *auditing function: the Central Bank owns and operates the BISS, therefore to achieve internal safeguards for the operation and maintenance of the BISS system, the Central Bank requires cooperation between the auditing function and payment system function to ensure internal control and effective supervision of the BISS system;*

- (iii) *banking supervision: oversight of the payment system and supervision of licensed banking institutions, are considered complementary activities, which may be carried out by different departments or agencies. Regular exchanges of views and information between supervisors and overseers, including, where relevant, reporting on individual participants, can assist these complementary objectives. These exchanges often benefit from agreements on the sharing of information pertaining to the financial health of an institution; and*
- (iv) *financial markets: Oversight of payment systems and surveillance of the financial markets are considered complementary activities, which may be carried out by different departments or agencies. Regular exchanges of views and information between financial market analysts and overseers particularly concerning the level of market liquidity contribute to effective oversight. These exchanges often benefit from agreements on the sharing of information on financial market activities.*

9.2 *The Payments & Settlement Department will enter into bilateral arrangements with other Departments in the Bank to ensure collaboration, cooperation, efficient exchange of information and provide a clear definition of the boundary of responsibilities.*

10. Risk Management vs. Oversight

10.1 *These two areas are sometimes separated but more often intertwined. It is important to be able to differentiate these specific fields.*

- (i) *Risk management generally implies the identification, monitoring, control and mitigation of risks on a continuing basis. All service providers shall provide the Central Bank with their risk management strategies to include “failure to settle” arrangements in order that the Central Bank can assess their integrity, soundness and reliability.*
- (ii) *Oversight’s main objective is to ensure the smooth day-to-day operations of a payments system. As such, it involves liquidity provisioning, policy input, orientation towards preventing systemic disturbances and risk, compliance with CPSIPS, adherence to standards ensuring they are respected, clear and transparent for all operating procedures. Such elements can be further re-enforced by independent “Risk Analyses” being undertaken based on self-assessment carried out by participants, operators and clearing houses.*

10.2 *The Central Bank manages these two areas as described below, by managing and mitigating payment system risk through the effective oversight of the National Payment System.*

11. ***Practice for Oversight Management***

11.1 *The Central Bank will adopt the following methods for oversight management of the National Payments System:*

- (i) *The Central Bank will cooperate with other relevant stakeholders in overseeing the entire National Payment System in accordance with the National Clearance and Settlement Systems Act, 2003;*
- (ii) *Daily monitoring of payment systems usage by participants that would include, but not be limited to, liquidity (intraday and overnight), timely settlement, volumes and values cleared, rejected payments, delays for queued payments, end of day system extension requests);*
- (iii) *bilateral discussions with operators and participants on a regular basis depending on the results of the above monitoring;*
- (iv) *Responses by participants, operators and Clearing Houses to Oversight compliance matrices (e.g. SAM²);*
- (v) *On-site verification of compliance with laws, regulations and other policy and procedural requirements;*
- (vi) *Constant dialogue with related departments within the Central Bank which have an impact on Payment Systems activities and arrangements;*
- (vii) *Constant dialogue and sharing of information with the Bankers Association of Botswana in overseeing the activities of each recognised payment system.*
- (viii) *Cooperation with other competent supervisory authorities in Botswana and abroad together with market operators and participants;*
- (ix) *Moreover, whenever necessary, the Central Bank may use the services of experts, in particular for the technical evaluation of payment systems, electronic money schemes and other electronic payments; and*
- (x) *Continued review of legislation that affects and provides the legal foundation for the payment system.*

² *Self Assessment Matrices.*

12. Tools for Oversight Management

12.1 The Central Bank will use the following tools for oversight management in the National Payments System:

- (i) Continuous policy dialogue with the participants and stakeholders in the National Payments System;*
- (ii) Continuous monitoring of the operations of any payment system and risk management practices which shall include disaster backup facilities for recognised payment systems;*
- (iii) Continuous monitoring of participants behavior in the Botswana Inter-bank Settlement System (BISS) and taking actions to ensure compliance with these oversight principles;*
- (vi) Analysis of data and information acquired from Assessment Matrices (Assessment Matrices For CPSIPS compliance) and other sources;*
- (v) Participation in inter-bank management and treasury operations meetings to further understand and contribute to the resolution of disputes between participants;*
- (vi) Analysis of reports from related Departments within the Central Bank which impact on Payment Systems;*
- (vii) Ongoing appreciation of key ruling documents such as inter-bank agreements, legislation and international normalisation regarding payment systems; and*
- (viii) Evaluating the governance structure of the recognised payment system to engender adequate oversight and operational objectives.*

13. Methods for Payment System Risk Management

13.1 The Central Bank will adopt the following methods in order to manage and mitigate payment system risks in the National Payments System:

- (i) All participants, in a recognised payment system, shall have an active payment risk management plan for that recognised payment system approved by the Central Bank;*
- (ii) The Central Bank will continuously monitor and manage systemic and other payment system risk for the recognised payment system and the NPS as a whole, in accordance with National Clearance and Settlement Systems Act, 2003 and any other relevant legislation; and*

- (iii) *The Bank will monitor and manage systemic risk for the entire National Payment System in accordance with the National Clearance and Settlement Systems Act, 2003 and any other relevant legislation.*

14. Tools for Risk Management

(a) Tools for Liquidity Risk Management

14.1 *Liquidity risk can only be alleviated by sufficient funds being available in banking institutions' settlement accounts. The Central Bank, in keeping with best practice and the Bank for International Settlement's Core Principle 5, recommends that banking institutions should maintain sufficient liquidity to ensure that liquidity risk do not arise during the settlement process by employing the following tools:*

- (i) *Settlement account balance monitoring: each participant in a recognised payment system should have the capacity to monitor the balances in their settlement account in real-time. The Central Bank will monitor the settlement account balances of each participant in real-time and will take specific actions if a participant is experiencing a deterioration of liquidity. The BISS will reject any settlement instruction due to insufficient funds and may impose a penalty;*
- (ii) *Limit Exposure Monitoring: the Central Bank, participants and system operators have real-time monitoring of exposures per payment system stream thus participants will be expected to manage their position efficiently and ensure adequate liquidity;*
- (iii) *Intra-day liquidity facility: the Central Bank may provide an intra-day facility against acceptable collateral to enable participants to fund their accounts and maintain their liquidity obligations in the BISS in line with the operational guidelines for intraday/secured lending facility ;*
- (iv) *Overnight liquidity facility: the Central Bank provides an overnight loan facility (the SLF) against acceptable collateral to enable participants to meet their liquidity obligations. The Central Bank will impose a discretionary interest charge as a disincentive to discourage participants from utilising the overnight facility which shall be settled at the start of the following day, and enforce market discipline in accordance with international best practice;*
- (v) *Counseling of participants: the Central Bank will discuss measures that shall be taken with a participant experiencing constant liquidity shortages, for example, the participant making use of overnight liquidity*

facilities constantly or a disproportionate number of settlement instructions rejected by the BISS;

- (vi) Intra-day settlement: the Central Bank will encourage and promote intra-day settlement of all recognised payment systems in order to reduce liquidity need within the BISS; and*
- (vii) Participant profiles: the Central Bank will maintain up-to-date profiles for each participant in a recognised payment system and will utilise these during the counseling of a particular participant.*

(b) Tools for Credit Risk Management

14.2 The Central Bank will ensure that settlement obligations are final, promptly settled electronically, and on the day of value. In accordance with the BIS Core Principle 3, electronic payment systems should settle irrevocably in real-time or on the day of value and will not allow back - dating of payments thereby minimising payment failures. The Central Bank will employ the following tools to manage credit risk in recognised payment systems:

- (i) Prompt and Final Irrevocable Settlement: the Central Bank shall provide real-time irrevocable settlement through the BISS thereby mitigating credit risk to the receiving participant;*
- (ii) Collateralisation of Lending Facility: the Central Bank will require acceptable collateral in the form of Bank of Botswana Certificates (BoBCs) and government securities for its lending facilities as means to mitigate credit risk against the Central Bank;*
- (iii) Notification of Pending Credit Funds: the Central Bank will require funds notification to the beneficiary participant only after irrevocable settlement of such funds has taken place as means to eliminate credit risk to the beneficial participant;*
- (iv) Constant monitoring and evaluation of participants financial status with regard to capital adequacy and asset quality as a means to ascertain the participants' financial soundness;*
- (v) Intra-day Settlement: the Bank will demand intra-day settlement of all recognised payment systems in order to reduce credit risk;*
- (vi) Failure-to-Settle Arrangements: the Central Bank will require failure-to-settle arrangements for each recognised payment system as means to offset credit risk;*

(vii) *Exposure Limit: participants for each recognised payment system will be required to make use of exposure limits per payment system stream as a means to offset credit risk.*

(c) *Tools for Operational Risk Management*

14.3 *The Central Bank, in ensuring the general reliability and system robustness of electronic payment systems, will encourage banking institutions to ensure that all relevant international standards are adhered to. Also, banking institutions and clearing houses will, during disruption periods, ensure that they are able to recover data through specific disaster recovery methods and other procedures to the satisfaction of the Central Bank. The Central Bank will employ the following means and tools to mitigate operational risk:*

(i) *System Security Plan: each participant and recognised payment system is responsible for the security of its internal systems used to interface with any recognised payment system and is required to have a security plan endorsed by the Central Bank;*

(ii) *Encryption of Data Transmission: the Central Bank requires that payment system data be encrypted when being transmitted within the recognised payment system;*

(iii) *Business Continuity Plan: the Central Bank requires that each participant and each recognised payment system should have a comprehensive Business Continuity Plan that is endorsed by the Central Bank;*

(iv) *Disaster Recovery Plan: the Central Bank requires that each participant and each recognised payment system should have a comprehensive Disaster Recovery Plan that is endorsed by the Central Bank;*

(v) *Backup Facility: the Bank requires that each participant and each recognised payment system should have backup facilities that is endorsed by the Central Bank;*

(vi) *Logging and Reporting System Disruptions: the Central Bank requires that each participant and each recognised payment system should log and report to the Central Bank, every event of system disruption;*

(vii) *Periodic review and evaluation of operational security and reliability of recognised payment systems: the Central Bank will periodically review*

and evaluate security, backup and business continuity arrangements for each recognised payment system at both system operator level and participant level as a means to mitigate operational risk;

- (viii) Neither the Central Bank, participants or system operators, and clearing houses shall be liable for a failure to perform any of its obligations insofar as it proves that the failure was due to an event beyond its control or an impediment, which results from events such as the following, this enumeration not being exhaustive: war, civil war, civil violence, riots and revolutions, act of sabotage; acts of God or force majeure.*

(d) Tools for Legal Risk Management

14.4 The Central Bank will encourage the payment system participants to adhere to the provisions of the National Clearance and Settlement Systems Act 2003, and other relevant laws. The Central Bank adopts the following tools to manage and mitigate legal risk in the National Payment System:

- (i) National Clearance and Settlement Systems Act, 2003: the Central Bank requires each participant and recognised payment system to comply with the terms and conditions of the National Clearance and Settlement Systems Act, 2003 and its supporting regulations. The Act takes precedence in all issues related to the National Payment System within the Botswana jurisdiction;*
- (ii) Contractual Agreements: the Central Bank requires each participant and recognised payment system to comply with the terms and conditions of Clearing House Agreements, Service Level Agreements, Settlement Agreements, Directives, Memorandum of Understanding related to the National Payment System;*
- (iii) Cross-border Arrangements: the Central Bank requires that each participant and each recognised payment system to comply with the terms and conditions of cross-border arrangements and agreements.*
- (iv) Regular Review of the Legal Environment: the Central Bank will review the legal status of payment systems, instruments and agreements periodically in line with any innovations in technology and other developments affecting the National Payment System.*

(e) Tools for Systemic Risk Management

14.6 In the event that systemic risk is identified in the National Payment System, the Central Bank's action will be in interest of the National Payment System as

whole and not for individual participants or individual recognised payment systems. The Central Bank will deploy the following measures to mitigate systemic risk in the National Payment System:

- (i) Exclusion from Settlement: the Central Bank may exclude a participant or recognised payment system from the scheduled settlement per payment system stream; and*
- (ii) Provision of liquidity: the Central Bank, as a lender of last resort, may inject additional liquidity into the system, at a cost, in order to enable settlement to take place and avoid systemic risk.*

15. Sanctions

15.1 The Central Bank will adopt the following measures to encourage best practices within the National Payment System:

- (i) Impose financial penalties as deemed appropriate;*
- (ii) Impromptu “on-site” inspections by the BoB;*
- (iii) Publication of findings;*
- (iv) Partial or total exclusion of a participant, clearing house or operator;*
- (v) Withdrawal of recognition of a Payment System stream.*

16. Maintenance and Updates to Policy

16.1 The Payment System Oversight Policy document captures the general principles, tools and methods for managing various types of payment system risk and procedures that will enable the Bank of Botswana to perform its functions relating to the oversight of the National Payment System (NPS) in terms of the NCSS Act, 2003, and ensure Botswana NPS compliance with the BIS Core Principles for Systemically Important Payment Systems (CPSIPS) as adopted by the Botswana banking industry.

16.2 This oversight framework is a living document and shall be updated as required to ensure the robustness and efficient operations of the Botswana National Payments System.

17. The effective implementation date shall be July 1, 2009.

The Bank for International Settlements (BIS) Core Principle and Central Bank Responsibilities

Public Policy Objectives: Safety and Efficiency in Systemically Important Payment Systems

Core Principles on Systemically Important Payment Systems

- (i) *The system should have a well-founded legal basis under all relevant jurisdictions.*
- (ii) *The system's rules and procedures should enable participants to have a clear understanding of the system's impact on each of the financial risks they incur through participation in it.*
- (iii) *The system should have clearly defined procedures for the management of credit risks and liquidity risks, which specify the respective responsibilities of the system operator and the participants and which provide appropriate incentives to manage and contain those risks.*
- (iv)* *The system should provide prompt final settlement on the day of value, preferably during the day and at a minimum at the end of the day.*
- (v)* *A system in which multilateral netting takes place should, at a minimum, be capable of ensuring the timely completion of daily settlements in the event of an inability to settle by the participant with the largest single settlement obligation.*
- (vi) *Assets used for settlement should preferably be a claim on the central bank; where other assets are used, they should carry little or no credit risk and little or no liquidity risk.*
- (vii) *The system should ensure a high degree of security and operational reliability and should have contingency arrangements for timely completion of daily processing.*
- (viii) *The system should provide a means of making payments which is practical for its users and efficient for the economy.*

* *Systems should seek to exceed the minima included in these two principles.*

- (ix) *The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.*
- (xi) *The system's governance arrangements should be effective, accountable and transparent.*

Responsibilities of the Central Bank in Applying the Core Principles

- (a) The central bank should define clearly its payment system objectives and should disclose publicly its role and major policies with respect to systemically important payment systems.*
- (b) The central bank should ensure that the systems it operates comply with the core principles.*
- (c) The central bank should oversee compliance with the core principles by systems it does not operate and it should have the ability to carry out this oversight.*
- (d) The central bank, in promoting payment system safety and efficiency through the core principles, should co-operate with other central banks and with any other relevant domestic or foreign authorities.*