

2009
to
2016

Swaziland National Payment System Vision 2016

NPS Vision and Strategy Document
from 2009 to 2016

The NPS Vision 2016 document seeks to analyze the current NPS landscape in Swaziland; identify the shortcomings and risks and to develop a strategic vision for the Swaziland NPS, with the view to ensuring that Swaziland is well placed to fully participate in all regional initiatives.



1. Executive Summary

Since the publication of the Swaziland National Payment Systems (NPS) strategic framework document in November 2000, the Central Bank of Swaziland (CBS) and the Banking industry have succeeded in the implementation of the systems; regulations; strategies and the key domestic risk-reduction mechanisms. However, the dynamically changing global economic environment coupled with the near-borderless global payments systems, has necessitated the review of the Swaziland National Payments System (NPS) landscape with a view of developing a set of comprehensive strategic objectives to take the Swaziland NPS to 2016 and beyond.

The Central Bank of Swaziland (CBS), together with the banking industry, has made significant progress in achieving the strategies documented in the NPS Strategic Framework published in November 2000. The drafting of the National Clearing and Settlement System (NCSS) Bill in addition to the implementation of numerous additional risk-reduction measures from 2000 onwards to reduce risks in the retail payment environment; and the implementation of the Swaziland Automated Electronic Clearing House (SAECH).

The strategic objectives of the NPS Vision 2016 are to take account of the growing sophistication and needs of the people of Swaziland and provide financial systems; mechanisms and instruments to cater for these changes. These changes coupled with the increased integration to the fast; efficient and complex global payments village requires additional regulatory oversight mechanisms and national strategies to effectively manage the clearing; switching and settlement systems within Swaziland. Therefore, this document set out the relevant strategies and actions to meet the demands and challenges of the changing payments environment.

The NPS Vision 2016 is evidence of the co-operation between the Central Bank of Swaziland, the banking industry; SEACH; and other relevant stakeholders (including the Swaziland Post and Telecommunications Corporation; Swaziland Building Society; MTN Swaziland; and the Swaziland Government Departments). This document contains a high-level vision and strategies in order to continue developing and maintaining a world-class payment system and also meets domestic and regional payment system requirements.

The non-promulgation of the National Clearing and Settlement Systems (NCSS) bill would create a significant impediment to the progress of the NPS Vision 2016. It would be essential that this bill is enacted into law to ensure that the legal foundation of the NPS is in place in order to enable the CBS to ensure the safety and efficiency of the NPS in line with the BIS core principles and international best practice.



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3. Overarching NPS Strategic Focus Areas

3. Overarching NPS Strategic Focus Areas

A. The National Payment System (NPS) encompasses all payment-related activities¹; Processes; Mechanisms/Infrastructure; Institutions and users. This includes all:

- National Issues (economic and foreign direct investment);
- Monitoring and Management of the Payments System;
- Roles and Structures (central banks; banks; operators & other stakeholders)
- Legal Frameworks and Regulatory Oversight Models;
- Financial Risk and Settlement Management (legal certainty in settlement);
- Payment System Architectures (settlement; switching & clearing);
- NPS Operators (providing clearing; switching and settlement services);
- Non-bank participants (including, but not limited to, beneficiary service providers; payment service providers; system operators; switches.)

The **Central Bank of Swaziland** provides the regulatory oversight in the NPS, using:

- Central Bank and Financial Institutions Act
- National Clearing and Settlement System (NCSS) Act (proposed).
- BIS Core Principles for Systemically Important Payment Systems. Responsibilities of central banks in applying the Core Principles are the following:
 - A. A 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. A central bank should ensure that the systems it operates comply with the Core Principles
 - C. A central bank should oversee compliance with the Core Principles by systems it does not operate and it should have the ability to carry out its oversight.

¹ The CBS has primary accountability for the safety and efficiency of the NPS, therefore their regulatory oversight is extended to NBFIs (non-bank financial intermediaries). This oversight role will be predominantly indirect, however the role of CBS will be direct regulation should a NBFi issue a payment instrument to their customer and/or allow 3rd parties to debit their customers accounts directly,



- D. A 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.

Core Principles for 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 payment which is practical for its users and efficient for the economy.
- ix. The system should have objective and publicly disclosed criteria for participation, which permit fair and open access.
- x. The system's governance arrangements should be effective, accountable and transparent.

BIS 14 Guiding Principles for Payment System Modernisation.

- i. **Keep the central bank at the centre:** *due to its overall responsibility for a sound currency, the central bank has a central role in the development of the use of money as an effective means of payment.*
- ii. **Promote the role of a sound banking system:** *payment accounts, instruments and services available to end users are mainly provided by banks, which compete individually but often need to act cooperatively as a system.*



- iii. **Recognise complexity:** *planning should be based on a comprehensive understanding of all the core elements of the system and the principal factors influencing its development.*
 - iv. **Focus on needs:** *identify, and be guided by, the payment needs of all users in the system and by the capabilities of the economy.*
 - v. **Set clear priorities:** *plan and prioritise payment system development strategically.*
 - vi. **Implementation is key:** *ensure effective implementation of the strategic plan.*
 - vii. **Promote market development:** *the expansion and strengthening of market arrangements is a key aspect of the evolution of the payment system.*
 - viii. **Involve relevant stakeholders:** *encourage the development of effective consultation among relevant stakeholders in the payment system.*
 - ix. **Cooperate with other authorities:** *effective payment system oversight by the central bank requires collaborative arrangements with other authorities.*
 - x. **Promote legal certainty:** *develop a transparent, comprehensive and sound legal framework for the system.*
 - xi. **Retail – give more choice to more people:** *extend the coverage and choice of non-cash payment instruments and services available to end users by expanding and improving infrastructures.*
 - xii. **Large value – business case leads, technology follows:** *develop a large-value payment system based primarily on the needs of financial markets and the growth in time-critical interbank payments*
 - xiii. **Securities – plan securities and payment systems together:** *coordinate the development of the infrastructures for securities and large-value payments*
 - xiv. **Retail, large value and securities – coordinate settlement:** *coordinate settlement processes for the core systems to effectively manage the interrelated liquidity needs and settlement risks among them.*
- Payment System Management Body (PSMB) would also enhance Regulatory Oversight Framework.
 - International best Practice would also enhance safety and efficiency of payment systems.

B. Principles for managing the NPS include the following:

- Systemic Risk Reduction and Financial Stability in the NPS and the Country



- Settlement Assurance and Liquidity Management
- Bank failure Rules and Legal Certainty
- Mechanisms:
 - payment processing utilities;
 - networks; telecommunications;
 - computer systems; etc

C. The **six key Strategic Focus Areas** that support the NPS Vision 2016, and which are aimed at taking the Swaziland NPS from 2009 to 2016 and beyond, are summarised as follows:

1. NPS Regulatory Oversight

- a. The NPS is Neutral – all NPS participants are required to co-operate in realising national issues.
- b. As it relates to payments, the Regulatory Oversight framework extends beyond the licensed banks to Non-banks and other stakeholders.
- c. The management of systemic risk in the NPS (all components; infrastructures and participants).
- d. Adherence to BIS Core Principles for Systemically Important Payment Systems and ensure that these are relevant to Swaziland.
- e. Dependencies:**
 - i. Without the promulgation of the NCSS Act, this cannot be implemented.

2. Access to the NPS

- a. Development of sound risk-based entry and ongoing participation criteria.
- b. Ensuring that the NPS is open to facilitate wider access to the payment system by the public.
- c. The NPS, structures; rules and systems, should facilitate the provision of access to affordable banking by the large un-banked and under-banked population of Swaziland.
- d. Strive for transparency in the NPS by publishing the entry and participation criteria, for the NPS, in an open environment.
- e. Ensure that the NPS is neutral, thus removing all forms of preferential processing of payment instructions and/or payment systems, including no preferential treatment for one participant over another.
- f. Dependencies:**
 - i. The NCSS Act is required to give rise to the establishment of the correct risk-based criteria for access.

3. Global Standards & Interoperability

- a. Adopt international best practices and standards



- b. Take into account future developments in traditional² and non-traditional³ payment products and systems
- c. Develop open (non-proprietary) technological platform that is compliant with international (global interoperable) standards for all systems operating within the NPS
- d. Develop the criteria whereby all payment instrument and acquiring device issuers are required to provide international certification and/or (e.g. EMV; Visa; MasterCard) to the central bank.
- e. Dependencies:**
 - i. The development of standards and guidelines for regulation of emerging payment systems; visions and strategic frameworks with clear priorities.

4. Information; Communication; Technology Developments and Standards

- a. Implement payment system technology that supports safety; efficiency; global standards and interoperability, including leveraging off common architectures (open standard component driven platform).
- b. Ensure NPS Operators function as a "National Utility" which has the core clearing systems as its focus Identify operational risks and proactively manage/mitigate these.
- c. Ensure awareness, within the payment system of developments in technology for traditional and non-traditional payment mechanisms.
- d. Industry wide co-operation to maintain safety, security and interoperability.
- e. Ensure that the appropriate DRP (disaster recovery plans) and BCP (business continuity plans) are in place in all payment systems.
- f. Dependencies:**
 - i. The connection and effective testing, between the central bank and the banks, of the SWIPSS DRP system must be performed to ensure the safety of the NPS settlement systems.

5. Remittances – Domestic and Cross-Border (in line with the BIS/WB guiding principles (G.P.))

- a. Establish a common platform and channel for cross border remittance payments (taking account of all relevant payment and exchange control regulations)

² Traditional payment products would typically include cash; cheques; EFT; debit cards; credit cards; internet banking.

³ Non-traditional payment products would typically include tokens; pre-paid airtime; cell phone SIM cards used as electronic money value receptacles.



- b. **GP1:** The market for remittances should be transparent and have adequate consumer protection
- c. **GP2:** Improvements to payment system infrastructure that have the potential to increase the efficiency of remittance services should be encouraged
- d. **GP3:** Remittance services should be supported by a sound, predictable, non-discriminatory and proportionate legal and regulatory framework
- e. **GP4:** Competitive market conditions, including appropriate access to domestic payments infrastructures, should be fostered in the remittance service industry
- f. **GP5:** Remittance services should be supported by appropriate governance and risk management practices
- g. **Dependencies:**
 - i. Promulgation of the NCSS Act.

6. Cross Border Developments for Regional and International Payments

- a. The credit push payment principle is preferred (put responsibility on the payer not the beneficiary)
- b. Payment versus payment is preferred for cross-border settlement
- c. Harmonised, regional clearing, payment and settlement framework must be developed.
- d. Legal framework for the cross-border payment system must be developed.
- e. All cross-border payments must be done through a correspondent banking relationship.
- f. If feasible, cross Border operator Clearing arrangements; Infrastructure must be facilitated by the in country NPS operator and/or ACH rather than individual banks.
- g. The development of some cross border systems, such as REPSS, are intended to reduce and/or eliminate correspondent banking relationships leading to:
 - Reduction in foreign correspondent banking charges.
 - Reduction in foreign counterparty exposures.
 - Reduction in foreign funding.
 - Reduction in settlement transactions.
 - Reduction in settlement time periods.
 - Legal certainty and settlement finality.
 - Reduction in collateral requirements for settlement.
- h. **Dependencies:**
 - i. The development of an effective; cooperative oversight framework and sound legal basis for the purpose of settling disputes between participants.



4. Introduction and Approach

4.1 Introduction

The mandate and authority of the Central Bank of Swaziland (CBS) National payment System Department (NPSD) to oversee the payment system is entrenched in law.

The **National Clearing and Settlement System Act** (NCSS) is in a draft bill form and is due for finalisation during 2009. The Act will enhance the regulatory and supervisory powers of the Bank to manage and control payment system risks. From 2000 onwards many risk-reduction measures were introduced, mainly to reduce risks in the retail / consumer payment environment. These included the introduction of SAECH (Swaziland Automated Electronic Clearing House) including the service level agreements and rules, item limits, the weekly monitoring of liquidity usage and the introduction of same-day settlement and same-day square-off. The Bank also kept abreast of international developments in the e-money environment and monitored and evaluated several emerging products and systems in this regard.

Therefore, new challenges are facing the national payment system (NPS) and new strategic direction is required. The **purpose** of this framework is to provide **high-level strategic direction** for the payment system up to 2016. New objectives and strategies have been developed and some of the original objectives and strategies have been reconsidered resulting in a refocus and/or redefinition for the NPS Vision 2016.

This document takes the form of a working document, and where necessary, new objectives and strategies will be added and in keeping with the overall objectives of a safe; efficient and sound NPS, some may be reconsidered and/or replaced with more appropriate strategies for the benefit of the Swaziland NPS.



4.2 Approach

In approaching the revision of the NPS Vision and Strategy, CBS consulted all the relevant stakeholders (banks; NPS Operator; non-banks; insurance companies; micro-lenders association; etc). This approach will ensure that the NPS Vision 2016 would effectively serve the changing needs of the Swaziland citizens, the central bank, the banks, non-bank stakeholders and paves the way for Swaziland to play a leading role in the regional initiatives while keeping abreast of the globalisation of payments.

The CBS engaged a consultant, J Y Consulting (Pty) Ltd, to conduct interviews and workshops with the relevant stakeholders. These workshops accompanied with a thorough review of all existing payments system agreements and clearing rules and procedures were done as part of the preparation for the NPS Vision 2016.

In addition to this, a high-level review of the existing NPS infrastructure was also done. However, a more detailed evaluation is required and will result in the documentation of the NPS Infrastructure and Integration Document, which will form part of the overarching NPS Vision and Strategy for Swaziland.

Final



5. Oversight of the NPS

Oversight, by definition, refers to management, supervision; administration and control. In the context of the Swaziland NPS, oversight by CBS would include the management of systemic risks, in the broadest sense, of both banks and non-banks who provide **payment**⁴ services and/or mechanisms to the public.

The Bank of International Settlements (BIS) is an international organisation that fosters international monetary and financial cooperation, through a forum to promote discussion and policy analysis among central banks and within the international financial community. As part of this policy making forum, the BIS have developed a set of "Core Principles for Systemically Important Payment Systems, in which they state that at a principle level, oversight promotes the smooth functioning of the payment system and serves to protect the financial system in the country from systemic risks. These risks include credit risk, liquidity risk and failure by one or more settlement system participants.

Furthermore, the BIS have now expanded their definition of oversight to encompass a function whereby the objectives of safety and efficiency are promoted by monitoring existing and planned systems, mechanisms and procedures, assessing them against the stated NPS objectives and, where necessary, bringing about changes to the oversight model and/or the systems.

5.1. Oversight Vision

Oversight covers the end-to-end payment process and includes the making of payments (transfer of value), the transfer of the information relating to the payment and the final settlement of such payments. This process includes banks and non-banks (third-person payment providers, system operators, NPS operators, system operators and agents of payers and/or beneficiaries). To ensure that all payment related activities fall within the oversight framework of CBS, banks own on-us payments (payments arising from customers of the same bank that don't result in interbank settlement).

Another part of the oversight framework, incorporated in the BIS Core Principles is the management of "systemically important payment systems" (SIPS). The classification of SIPS is one that if a disruption occurs within the payment system it will cause a

⁴ Payment is defined as a transfer of value and the related information.



disruption in other payment systems and/or participants resulting in a systemic disruption to the financial stability of the country (typically known as the domino-effect).

The oversight domain of Swaziland encompasses both SIPS and non-SIPS, the reason being that non-SIPS have grown in value and volume and if they are not monitored, they could cause systemic risk in the NPS. Therefore, the oversight role of CBS also extends to the payment system infrastructure (instruments, systems, applications, networks, payment, operational aspects of clearing and settlement systems).

The oversight framework could include surveillance, monitoring and additional risk reduction measures that are applicable to all banks or a single bank depending on the circumstances and/or requirements.

To ensure that the oversight of the payment system is effective it should take cognisance of other legislation (for example, anti-money laundering legislation) and/or international best practice oversight arrangements in the region, which may have an effect on the Swaziland payment system.

The neutrality of the NPS, the oversight framework and the risk-reduction measures introduced by CBS, seek to ensure the NPS is safe; secure; efficient and cost effective so as to benefit all stakeholders in Swaziland, including the public (the man in the street).

5.2. Oversight Roles and Responsibilities

5.2.1 Central Bank of Swaziland

The role of primary regulatory oversight, of the NPS, is laid at the door of the NPS Department (NPSD) of CBS. However, there is a need for a high-level of interaction and co-operation between the NPSD and the BSD (banking supervision department) as they jointly have the responsibility of overseeing the safety and efficiency of the NPS in Swaziland and are required to ensure that the provisions of the NCSS Act are carried out. CBS, and more specifically the NPSD, oversees the safety and soundness of the payment system in terms of applicable supporting legislation.

Depending on the nature and/or the impact of payment system issues as well as whether intervention is required or not, directives (which provide for a more detailed interpretation of the Act or prohibiting of certain behaviour) may be issued by CBS to address such issues. In addition, position papers are issued by CBS; these papers are guidelines that address practices which need to be aligned with sound payment system arrangements and practices.



The Bank Supervision Department (BSD) of the CBS regulates deposit-taking in the financial system. Because payments are primarily made from funds on deposit, close co-operation is required between all parties within CBS who oversee payments, to prevent regulatory arbitrage and/or duplication. All registered banks are allowed to take deposits but only those banks qualifying in terms of CBS's payment criteria are eligible to clear in their own name and settle in the books of the CBS in their own name.

5.2.2 Payments Association of Swaziland

Under the delegated authority from CBS, and in line with the proposed NCSS Act, the payment system management body (the Payments Association of Swaziland), once established would manage the conduct of its members in relation to all matters affecting allocated payment systems.

The association's mission would be to provide a safe and sound payment system to the Swaziland banking industry on a fair and equitable basis for benefit of the Swaziland community. PASWA would have the responsibility to manage the Swaziland inter-bank payments and clearing systems in order to:

- supports CBS in its role as overseer of the payment system by ensuring compliance and imposing penalties against and sanctions for its members;
- provide the Swaziland community with safe and efficient facilities to exchange payments;
- protect the safety and integrity of the payment system;
- manage the clearing and settlement risks in the payment system;
- facilitate access of participants and prospective participants to the payment system on a fair and equitable basis;
- facilitate communication between participants;
- enable proper understanding of the system and the rules applicable to it.
- provides a forum to its members for the consideration of policy matters and foster co-operation ;



5.2.3. Non-Bank Payments System Forum

In support of the extended regulatory oversight domain of CBS, the establishment of a non-bank payment system forum would be recommended. This forum, The Non-Bank Payments System Forum (NPSF) should consist of relevant government departments and other payment system stakeholder associations and/or bodies (retailers; micro-lenders; insurance companies and other payment service providers) that represent persons actively involved in the payment system in one form or another. This forum would extend to and include both domestic and international operators and switches such as Visa & MasterCard.

NPSF would be established and managed by CBS in order to provide a platform for information sharing, discussions and to introduce regulatory compliance directives to the non-bank payment system participants.

This forum would also be used for communication and/or information sharing as it relates to payment systems developments and policies.

5.3. Strategic Objectives

The strategic objectives of the oversight function seek to ensure that CBS is well positioned to manage the systemic risk in the NPS by managing the liquidity, operational, credit, settlement and/or legal risks. Oversight also empowers CBS to promote safety and efficiency of the NPS while ensuring that the Swaziland NPS is aligned to the regional and international payment oversight frameworks. The following strategies are envisaged to achieve these oversight objectives:

- i. align the Swaziland NPS with international payment system oversight objectives and governance frameworks;
- ii. provide legal clarity and frameworks to govern and manage the roles and responsibilities of all key stakeholders in the NPS;
- iii. establish the NPSF and develop the appropriate regulatory oversight structure to manage the participation of non-banks in the NPS;
- iv. define and develop guiding principles and/or requirements for the issuing of payment products and/or mechanisms by banks and non-banks;



- v. promote, and where feasible convert existing debit-pull mechanisms, to credit-push payment methodology;
- vi. recognise other regulatory and relevant financial systems developments and align the payment system where required (for example Basel II; anti-money laundering legislation; anti-terrorism legislation; Financial Services Regulatory Authority Bill; etc).

Final



6. Access and Participation in the NPS

In general terms for access to the payment system can be categorised into access by a licensed bank; access by non-bank payment and beneficiary service providers and access to payment system services by the general public. In all instances, access to the NPS must fall under the regulatory oversight domain of CBS.

While access to the NPS is open to all people; companies and organisations in Swaziland, participation in the payments system is confined to those entities who qualify under the provisions of the relevant supporting legislation. These entities include; banks; non-banks; switches; operators; beneficiary service providers; payment service providers and utilities.

6.1. Vision for Access and Participation

Acknowledging that the NPS is neutral, access to the payments system and related systems and/or mechanisms should be open to all persons in Swaziland in order to facilitate the making of payments and the transfer of value accompanied with the related payments information. Persons requiring access can therefore be categorised into:

6.1.1. Inner Core Payment System Participants – Banks

Banks access the payment system for their own use and provide accessibility to other participants to facilitate payments and collections. Banks also issue payment instruments to customers and provide systems and/or mechanisms for non-bank payment and beneficiary services providers to make; collect; clear; switch and settle payment transactions.

The Swaziland banks participating in the inner-core of the NPS are highly regulated and form the backbone of the NPS and the economy, and therefore have unfettered access to all aspects of the NPS. Banks, together with CBS and PASWA, provide the platform; rules and regulations for systemic risk reduction and the development of access standards in the NPS.

Clearing and Settlement is exclusively the domain of licensed banks, who qualify as such, in terms of the CBS payment system criteria. These banks are also eligible to



hold settlement accounts in the books of CBS (General Ledger and Swaziland Interbank Settlement System).

Only clearing and settlement banks may issue payment instruments which access bank accounts. Payment instruments issued by banks are linked to a deposit in a bank account or to accounts linked to a credit line (for example credit cards).

6.1.2. Outer Core Payment System Participants – NBFIs

NBFI participants, who are defined as any person who provides payment services and/or mechanisms as a regular feature of their business, require access to the NPS in order to provide business and/or commercial services to the public which generally fall outside of the domain of banks.

These NBFI participants play an integral role in the facilitation of payment services; credit provision and the circulation of money in the economy. NBFI who are excluded ad/or exempted from the relevant legislation and/or criteria (e.g. Swaziland Post Office and Swazi Building Society) do not qualify to hold settlement accounts with the CBS. Such entities must be managed by PASWA and CBS will provide the required payments system regulatory oversight.

Criteria for the issuance of payment instruments, collection of payment instructions, the provision of payment services to third persons, as well as clearing and settlement, determine what type of institution may provide these services.

6.2. Strategic Objectives

- i. Risk based entry and ongoing participation criteria for participants, within the payment system, should be fair and transparent; aligned with global standards and international best practice
- ii. Enhance and develop additional criteria for third-person payment service providers to facilitate wider access to payment system services is available for the public, specifically enhanced access for the unbanked community;
- iii. Define and develop appropriate agency agreements, which must be in place between third-party service providers and their principals;
- iv. To eliminate and/or reduce the presence of excluded and/or exempted entities (such as Swaziland Post and Telecommunication and Swaziland Building Society), create development paths for these entities to become tiered clearing and/or settlement banks within the NPS;



- v. Define and develop entry and ongoing participation criteria, that are aligned with international best practice, for banks according to their level of liquidity, operational, credit, settlement, legal, systemic and reputational risks;
- vi. Define and develop entry and ongoing participation criteria, that are aligned with international best practice, for non-banks (payment service providers; beneficiary service providers) according to their level of liquidity, operational, credit, settlement, legal, systemic and reputational risks;
- vii. Define and develop entry and ongoing participation criteria, that are aligned with international best practice, for operators (NPS operators; system operators; switches and other vendors providing payment related infrastructures) according to their level of liquidity, operational, credit, settlement, legal, systemic and reputational risks;

Final



7. Interoperability and Standards in the NPS

Interoperability and standards within the NPS facilitate interconnectivity and a common understanding of the payment system requirements. Standards represent the minimum requirements for the provision of payments related services in order to facilitate the correct payments infrastructure design; development and deployment (for example technology, security and payment products). These interoperability standards extend to the business aspects of products; practices and arrangements between industry participants.

The primary objective for implementing global standards is to enhance security and enable interoperability within the payment systems. These standards focus on creating an enabling environment for the prevention of fraud, increasing trust, integrity, legal certainty and confidence in the payment system, which in turn leads to a platform for foreign direct investment (FDI).

7.1. Interoperability Vision

The Swaziland NPS strives for global interoperable standards, which conform to international best practice. The use of proprietary standards and/or infrastructures will be phased out over time.

The Swaziland NPS strives for transparency and promote wider access to interoperability standards to interested and/or relevant stakeholders.

All current and future payment products and payment systems conform to uniform standards and rules, which lay the foundation for global interoperable payment systems and services. These standards have been and will continue be established by the industry, through stakeholder work groups and are acceptable to the wider payments system community.

The development of emerging (non-traditional) payment products and/or systems are measured by CBS on how they conform to the standards; flexibility and how these address the customer needs, specifically the unbanked community.

The level of payment system risk introduced by traditional and non-traditional payment products and systems are supported by appropriate security standards. These security

standards strive for the appropriate balance between security, cost and risk mitigation required.

7.2. Strategic Objectives

- i. Adopt international best practices and standards to facilitate global interoperability within the NPS.
- ii. Take account of current and future traditional and non-traditional payment products and systems and develop the appropriate standards to accommodate these.
- iii. Promote common standards that are geared towards reducing risk; enhancing security and interoperability within payment systems.
- iv. Engage with the Swaziland Standards Authority, by establishing a stakeholder group, for the development of appropriate standards for certification of payment systems for the Swaziland NPS.
- v. Enhanced levels of authentication, for all payment systems and/or products, are implemented within Swaziland.
- vi. The management; implementation and compliance to all payment system standards, by all participants and users, are executed by PASWA.
- vii. Keep abreast of international and regional developments, for standards and interoperability, by participation in the appropriate initiatives and/or forums.



8. NPS Infrastructure and Technology

The NPS infrastructure, and the related technology and communication networks, forms the backbone of how payments are initiated; processed; switched; cleared and settled in Swaziland. The computer systems, computer networks, computer processing capacity are all part of an integrated financial network, which facilitates the transfer of value and the related information.

The safety and security of the NPS infrastructure and the related technology hinges on the effective management of operational risk which could result in settlement risks in the NPS. One of the key responsibilities of CBS and PASWA is to monitor and manage operational effectiveness, which facilitates the circulation of money in the financial system and enables efficient liquidity management by participants.

8.1. NPS Infrastructure and Technology Vision

The NPS infrastructure and technology is classified as a “co-operative” space in which participants work together to define, develop and deploy the appropriate payment systems and mechanisms that serve all users of the payment system in Swaziland. To this end:

- i. Both banks and non-bank participants compete on cost-effective, efficient service offering rather than technology infrastructure.
- ii. Appropriate levels of security apply to different categories of transactions and/or messages for the issuing; acquiring; switching and clearing of electronic and card payment transactions.
- iii. Internationally acceptable Business Continuity Planning (BCP) and Disaster Recovery Planning (DRP) systems are in place.
- iv. All payments must be processed internally using the international open standard ISO 8583 or ISO 20022 formats.
- v. Payment and management information, including clearing and settlement information, must be available in real-time.



- vi. Emerging payment system technologies (traditional and non-traditional) are monitored, researched and evaluated on a regular basis. Global technology standards for security, interoperability and integration exist and are adhered to.

8.2. Strategic objectives

- i. The Swaziland Interbank Settlement System (SWIPSS) is owned, run and managed by CBS on a full cost-recovery basis.
- ii. Customer needs, business strategies and/or technological development drive the development and deployment of technology in the Swaziland NPS.
- iii. The implementation of NPS infrastructure and technology is done on the basis of “a payment is a payment”.
- iv. The primary measures of what is the appropriate NPS infrastructure and technology is based on the appropriateness; safety; security and cost-effectiveness of the technologies and/or systems deployed.
- v. Banks are accountable for the operational risk they introduce into the payment system. This applies to their own infrastructure and in respect of technical outsourcing arrangements and other functionalities.
- vi. All NPS infrastructure and technologies deployed in the Swaziland NPS, whether owned by CBS; the banks or privately, is maintained and adheres to all the relevant standards (domestic and international)
- vii. Identify and rectify potential operational risks on a pro-active basis, including the elimination of single points of failure in the payment system.



9. Cross-Border Remittances

As defined by the BIS-WB (bank of international Settlements and the World Bank): an international remittance is a cross-border, person-to-person payment of relatively low value.

The Central Bank of Swaziland together with key industry participant is striving for improvements in the remittance market. These improvements are achievable, when international and national authorities work with the private sector to achieve the goals of the Principles.

The focus, with regard to remittances, is on payment system aspects (not developmental, immigration, balance-of-payments or other aspects)

Drive the “bank-lead” remittance model, whereby a registered bank partners with mobile operators, to develop the appropriate service and delivery mechanisms (secure and cost effective);

At a regional level regional cross-border payment, clearing and settlement systems are paramount in facilitating regional economic development. Sound regional payment, clearing and settlement systems enhance regional financial stability by providing, *inter alia*, appropriate regional payment system risk-reduction measures.

9.1. Cross-border Remittances Vision

- i. An appropriate cross-border remittance settlement model for the region, based on the specific requirements of the region, is in place.
- ii. A sound legal framework in all jurisdictions underpins the remittance payment, clearing and settlement developments in the region.
- iii. Standards exist for regional remittance payment, clearing and settlement arrangements, which are aligned with international best practice.
- iv. Risk-reduction measures are determined by the regional Oversight Group and implemented on a regional basis, taking the BIS-WB guiding principles into account



- v. CBS remains abreast of cross-border remittance developments and best practice to reduce foreign exchange settlement risk.
- vi. CBS participates in international work groups to discuss cross-border remittance developments pertaining to payment, clearing and settlement.
- vii. CBS interacts and communicates with central banks and regulators, locally and internationally, on cross-border remittance payment, clearing and settlement developments.

9.2. Strategic Objectives

- i. Swaziland will use the guiding principles developed by the Bank for International Settlements-World Bank (BIS-WB) for the development and deployment of domestic and cross-border remittances. These guiding principles are:
 - a. GP1 - The market for remittances should be transparent and have adequate consumer protection.
 - b. GP2 - Improvements to payment system infrastructure that have the potential to increase the efficiency of remittance services should be encouraged.
 - c. GP3 - Remittance services should be supported by a sound, predictable, non-discriminatory and proportionate legal and regulatory framework.
 - d. GP4 - Competitive market conditions, including appropriate access to domestic payments infrastructures, should be fostered in the remittance service industry.
 - e. GP5 - Remittance services should be supported by appropriate governance and risk management practices.
- ii. The credit-push payment-vs-payment principle is the preferred payment method for all domestic and cross-border remittances.
- iii. CBS will participate in regional remittance initiatives, with the view to achieve a low-cost; safe cross border remittance service that has a sound regional legal framework and conforms to the BIS-WB principles.



10. Regional Participation

For regional participation, regional cross-border payment, clearing and settlement systems are the key to facilitating regional trade and economic development which may include macro-economic convergence in the region.

As a member of region, Swaziland through CBS have and will continue to participate in the development of a sound regional payment clearing and settlement system that in turn will enhance the regional financial stability. The primary objectives are to facilitate the development of sound, inter regional, financial monitoring and risk reduction measures.

10.1. Vision for Regional Participation

- i. A well defined cross-border clearing and settlement model for the region, applicable for the region, is in place.
- ii. A harmonised and sound legal framework, underpins the payment clearing and settlement systems deployed across the region.
- iii. Global interoperable standards, founded on international best practices, are in place for regional cross-border clearing and settlement arrangements.
- iv. A regional Regulatory Oversight Group will be in place, which will oversee the risk-reduction measures for the region.
- v. International best practice cross-border foreign exchange principles, to eliminate foreign exchange settlement risk, will be in place and monitored by CBS.
- vi. CBS will interact with counterparty regulators within the region and internationally, to keep abreast and have input into developments in cross-border clearing and settlement models.



10.2. Strategic Objectives

- i. The credit-push payment-Vs.-payment principle is the preferred payment method for all cross-border transactions.
- ii. Swaziland, through the direct participation of CBS, would participate in regional payment, clearing, settlement systems and legal and/or regulatory oversight initiatives.
- iii. Swaziland would enhance and align their payment clearing and settlement systems to open global interoperable standards with a view to becoming a full participant in the regional clearing and settlement.
- iv. Stay abreast of international and other payment system developments on the African continent.

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11. Implementation & Responsibility

11.1. Responsibility

The Central Bank of Swaziland, as the National Payment System regulatory authority, would drive the implementation of the vision and strategic objectives contained in this document.

To enable CBS to successfully implement these visions and strategies, which are of national interests, the co-operation of all participants (bank; non-bank service providers; credit providers; operators; vendors and other relevant stakeholders) would be required.

In accordance with the provisions contained in the NCSS Act, CBS would use PASWA to drive the implementation and foster co-operation between the banks and other key participants. The PASWA Strategy 2012 document would be used as the basis for the implementation of the correct structures, strategies, procedures, operational risk management and technologies required to give effect to vision and strategic objectives contained in this document.

In support of this document, the NPS Conceptual Infrastructure Blueprint document would be used as the basis of the implementation of the appropriate NPS infrastructure and technologies

11.2. Actions and Priorities – (from the perspective of the author)

Based on the evaluation and risk identified the following represents, at a high-level, the actions and/or priorities to be taken by the Central Bank of Swaziland's NPS Department; the Payments Association of Swaziland and the Banks would be enumerated below.

Actions and Priorities

- i. Finalisation and promulgation of the NCSS Act.
- ii. Drafting of a "modus-operandi" MOU between the NPS department and the Banking Supervision Department to facilitate internal communication and strategies within CBS.



- iii. Defining a drafting of a NPS Regulatory Oversight model to include the oversight by CBS of NBFI participating in the payments system, (a Collective NPS forum).
- iv. Agreeing the correct structure, banking license or sponsorship, of the Swazi Building Society in order to bring them into the formal banking regulatory oversight model. Requirements under the building societies act, banking supervision.
- v. Ensure RTGS backup and disaster recovery is safe; secure and efficient, by doing extensive testing and ensuring the DRP location conforms to international best practice (security; distance from primary site; process & procedures; etc).
- vi. Review current square-off time, as these are currently very tight and leaves little room for contingencies and placing of excess funding.
- vii. Bring high-value government payments into the RTGS to reduce risks inherent in using cheques
- viii. Establishing a joint CBS / Commercial Bank Treasury Forum, with the purpose of analysing the current settlement models in Swaziland and defining; documenting and implementing the correct settlement and settlement assurance models for all payment streams in Swaziland.
- ix. Analysis of the current ATM and POS clearing; switching and settlement models, with specific reference to:
 - a. Who issues the card to the customer (the bank in Swaziland or the parent bank in South Africa)?
 - b. Are the cards listed on a separate "Swaziland BIN" for identification; clearing and settlement purposes?
 - c. What would be required (systems and costs) to move the settlement to Swaziland?
 - d. Would it be feasible (systems and costs) to implement a switch in Swaziland for ATM & POS transactions? If not what are the alternatives?
- x. Commission the defining and drafting of a "NPS Infrastructure and Integration Document" that will define the system; infrastructure and technology requirements of the Swaziland NPS from 2009 to 2016 and which will be relevant



for the participation of Swaziland in the regional and/or global clearing and settlement initiatives.

- xi. Following the finalisation of the “NPS Infrastructure and Integration Document”, define and document the role; duties; responsibility and structure of SAECH. This document should include the use of in-country and out-of-country clearing; switching and settlement calculation facilities. Given the relatively small number of transactions processed across all streams in Swaziland it does not seem feasible for Swaziland to deploy a fully-fledged Automated Clearing House but rather leverage of the technologies that support the clearing and settlement infrastructures within the CMA region (i.e. utilise the systems deployed in ZA). Protect the investment already made.
- xii. Define and develop a comprehensive three year strategic plan for the correct implementation of the Payments Association of Swaziland (PASWA). This document should include the regulatory framework and related structures (as depicted in the figure below) that will ensure that PASWA is in a position to assist the CBS in the management of the NPS.
- xiii. Finalise and obtain sign-off, from all relevant stakeholders, for the Swaziland NPS Vision 2016 document and commence implementation of the key strategic objectives.
- xiv. Conduct an assessment regarding the activities of Co-operatives in the NPS and establish whether any regulatory oversight mechanisms are required to manage this participation.



12. Glossary of Terms

Term/Acronym	Description / Definition
Agent	A person (natural or juristic) who has authority to act on behalf of and legally bind his principal contractually with third parties. When an agent receives money on behalf of his principal, he acts as a conduit, and money paid to an agent is treated as having been paid to the principal. The person paying the money has no right to claim it back from the agent, but must look to the principal, even if, in fact, the money is still in the hands of the agent.
Bank	A public company retested as a bank or a mutual bank in terms of the provision of the Financial Institutions Act.
Bilateral Clearing	A clearing arrangement between two banks (transacting parties).
Bilateral Exposure Limits	The agreed exposure between two banks.
Bilateral Netting Arrangement	An agreement between two banks to settle off their payment obligations (exposures) against each other for settlement purposes.
BIS	Bank of International Settlements
Bulk clearing Process	A process whereby high-volume payment instructions are aggregated and interbank settlement obligations are determined.
Caps	Limits agreed between participating banks on exposure they are willing to accept from one another in the payments and clearing process. These caps can apply to debit or credit exposure and to either net or gross positions.
CBS	Central Bank of Swaziland
Central Bank Money	Cash (notes and coins) and credit balances held by banks at the central bank.
Central Bank Settlement System	A central bank system whereby irrevocable interbank settlement is achieved in central bank money.



Clearing	Exchange of payments and the calculation of payment obligations between system participants
Clearing	The exchange of payment instructions between the payer's bank and the payee's bank (or their agent.)
Clearing Bank	A bank that participates in the clearing of payment instruction between banks.
Clearing House (Payment Clearing House)	Any formal arrangement between banks whereby participants exchange payment instructions.
Collateral	Acceptable securities provided by banks to the central bank for liquidity purposes.
Credit Push	A practice whereby the payer initiates the transfer of funds to the payee. Both the payment instruction and the fund described therein move from the bank of the prayer/originator to the bank of the beneficiary or via several other banks as intermediaries and /or more than one credit transfer system.
Credit Risk	The risk that a bank bears in the event of a counterparty not settling an obligation for the full value, either when due or any time thereafter
Cross-border Transaction	A transaction where at least on of the parties is located outside the home countries.
Customer Payment-Service Provider	A facility or institution that utilises its own systems to provide payment-related services to its customers. These services include accepting payment instructions and delivering them into the payment system. When a CPSP is not a bank, it acts as a conduit to deliver the payment instruction to a bank.
Debit Pull	Payment instruction that require a recipient (or its bank) to collect the funds from the remitter, effectively causing the collecting bank to 'pull' the funds through the payments system.
Delivery-verses-Payment System	A mechanism in exchange-for-value settlement system that ensures that the final transfer of the asset occurs if and only if the final transfer of the payment occurs simultaneously.
Entry Criteria	Criteria for participation in a certain payment stream, laid down by PASWA, in conjunction with CBS.
Fate	The outcome of the verification and validation of data or information contained in payment and settlement instruction.
Finality of Payment	When a bank has given a customer confirmation, implicitly, or explicitly, that the payment is irreversible and irrevocable.
Finality of Settlement	When the central bank has given confirmation that a settlement is irreversible and irrevocable.



Financial Sponsorship	The acceptance of the settlement obligation of a bank by another bank.
Gross Settlement	Settlement of interbank payment on a settlement-instruction by settlement-instruction basis.
Information Linked to Payment	The electronic relay of remittance information, in parallel with a payment instruction, from the originating party to the beneficiary.
Interbank Settlement	Final irrevocable settlement of interbank obligations over bank's accounts head at the central bank.
Interday Accommodation	Accommodation to banks bridging two settlement cycles (overnight).
Intraday Accommodation	Accommodation for or during a settlement cycle (not exceeding one day value).
Intraday Settlement	Settlements that take place within one settlement day cycle (within one value day).
Lender of Last Resort	A discretionary function performed by the central bank in providing credit facilities to a bank that cannot obtain funds any other way.
Liquidity Risk	The risk that a bank will not have sufficient liquidity to meet its settlement obligations (temporary need for fund).
Magnetic Cheque Ink Character Recognition (MICR)	A technique, using special machine-readable characters, by which a document, such as cheques, credit transfers and direct debits, are read by machines for electronic processing.
Multilateral Netting	An arrangement between three or more parties to off-set their obligations for settlement purposes.
NCSS	National Clearing and Settlement System Act
Net Settlement	The settlement of netted interbank obligations on a multilateral or bilateral basis.
Netting	An agreed off-setting of payment obligations.
NPS	National Payment System
NPS Operators	An organisation licensed to provide NPS infrastructure components.
On-us Transactions	Payment instruction that remains within a single bank (i.e. where the payer and beneficiary, bank at the same institution).
PASWA	Payments Association of Swaziland
Paying Bank	The bank that has to meet a payment instruction that has been directed to it from a collecting bank.
Payment	Transfer of value and the related information



Payment Association of Swaziland	The governing body, as recognised by the Central Bank of Swaziland, for all Payment Stream Association (PAS)'s.
Payment Instruction	An order or message instructing the transfer of funds to the order of the payee.
Payment Instrument	Every instrument that provides a method of exchanging value for money, i.e. notes and coins, paper and electronic instructions.
Payment Stream	Payment instructions that are homogeneous in terms of their nature, risk and processing requirements and that having the same legal basis, i.e. cheques, credit cards and Electronic payments.
Payment-versus-Payment Systems	A mechanism in a currency-exchange system that ensures the final value transfer of one currency that occurs only in the final value transfer of another currency occurs simultaneously.
Prefunding	The provision of all funds in the settlement account of a certain bank that would be sufficient to cover the transferring funds required to satisfy an incoming settlement instruction.
Principal	A person that legally acts in his own capacity and obtains the right and incurs the responsibility of such an act. A principal also refers to a person that mandates an agent to act legally on his behalf, but where the principal obtains the right or incurs the responsibilities as a result of the mandated acts of such an agent.
PSA	Payment Stream Agreement
Real-time Gross Settlement	A settlement practice whereby settlement of interbank obligations takes place in real time.
SAECH	Swaziland Automatic Electronic Clearing House
Settlement	Discharge of payment obligations between system participants
Settlement	Settlement refers to the final and irrevocable discharge of an obligation of one bank in favour of another bank, in central bank money.
Settlement Bank	A bank that has an account for settlement purposes with the central bank.
Settlement Instruction	The instruction to the central bank issued by a bank and/or an authorised (payment) clearing house to effect settlement of payment obligations.
Settlement Risk	The risk that a settlement in a transfer system will not take place as expected. This risk may comprise both credit and liquidity risk.
Sponsored Bank	A bank that makes use of a financial sponsorship agreement with another bank for settlement purposes.



Sponsoring Bank	A bank that accepts the settlement obligations on behalf of a sponsored bank.
Switching	An electronic system employed to transfer payment instructions, initiated by customers, between participating banks within an NPS.
Systemic Risk	The risk that the failure of one participant to meet its contractual obligations could deprive other participants of funds owed to them, resulting in a chain reaction whereby a large number or all of the participants in a settlement system are unable to meet their respective obligations.

Source: *BIS Core Principles for Systemically Important Payment Systems; ZA NPS Framework and Strategy Document (Blue Book 1995)*

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