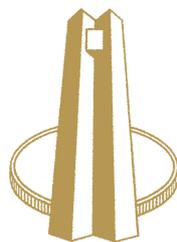


# **The National Payment System Framework and Strategy**

**Vision 2010**



**South African Reserve Bank**

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## Foreword

Since the publication of the South African National Payment System Framework and Strategy document in 1995, major payment system milestones have been achieved and all the major domestic risk-reduction objectives have been met. There have been many highlights along the way, including, among other things, the introduction of the South African Multiple Option Settlement (SAMOS) system in March 1998; the implementation of numerous additional risk-reduction measures from 1999 onwards to reduce risks in the retail payment environment; and the promulgation of the NPS Act in October 1998 and a revised NPS Act in October 2004. At an international level, a major milestone was achieved as the rand was officially accepted as a Continuous Linked Settlement (CLS) currency in December 2004. The achievement of these milestones and objectives is largely due to effective co-operation within the South African banking industry.

The framework and strategy document contained a ten-year vision up to 2004, and with the envisaged strategies having been successfully implemented, the time has arrived to develop new visions, strategies and objectives for the future of the payment system.

Vision 2010 is the product of inter-organisational brainstorming, debate and consultation between the South African Reserve Bank, the banking industry and other relevant stakeholders. As new and complex challenges are facing the national payment system stakeholders, the purpose of this document is to provide high-level strategic guidance for the payment system up to 2010. This document contains a high-level vision and strategies to maintain a world-class payment system and also meet domestic and regional payment system requirements.

The successful implementation of the stated strategies will once again depend on intensive debate and co-operation between the relevant payment system stakeholders.



**T T MBOWENI**  
**GOVERNOR**  
**SOUTH AFRICAN RESERVE BANK**  
**PRETORIA**



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## Executive summary

In 1995 the South African National Payment System Framework and Strategy document (the Blue Book) was published. Since the publication of the Blue Book, all major strategies and risk-reduction measures envisaged in the publication have been achieved. However, the payment system is dynamic and new demands and opportunities have arisen as a result of market requirements and technological developments. 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 2010. New objectives and strategies have been developed and some of the original Blue Book objectives and strategies have been reconsidered resulting in a refocus and/or redefinition for Vision 2010.

### Major challenges for the years up to 2010 are to:

1. increase the accessibility of the payment system by, *inter alia*, providing for new types of participants, but at the same time maintaining the safety and efficiency of the payment system by adhering to sound internationally accepted payment system risk principles. It is critical to the safety and efficiency of the payment system to identify and address potential payment system risks (settlement risk, liquidity risk, operational risk, legal risk, credit risk and reputational risk) on a pro-active basis. Increased accessibility by new participants will also facilitate wider usage of the payment system by the public. One of the objectives would be to address further the payment needs of the unbanked community;
2. participate in the Southern African Development Community (SADC) payment, clearing and settlement systems initiatives including a cross-border settlement model for the region. These developments will enhance regional financial stability and promote regional economic development. An oversight grouping for the SADC region will provide the basis for SADC payment system risk management. These developments could provide the basis for further payment system initiatives on the African continent;
3. enhance the structures for consultation and transparency in the payment system. Consultation with all relevant payment system stakeholders is paramount to maintaining a neutral, safe and efficient payment system;
4. enhance general security and operational resilience in the payment system. Enhanced operational resilience and security standards will increase trust, integrity and confidence in the payment system;
5. increase general awareness of the features of the payment system through education, information provision and research. Increased payment system stakeholder awareness is critical in deploying payment system strategies; and
6. research international payment system developments and participate in international payment system forums/initiatives. It is critical for South Africa to stay abreast of international payment system developments, including emerging payment system technologies and standards.

This document contains the vision for 2010, the strategic objectives, strategies, fundamental principles, critical success factors, and roles and responsibilities to address these challenges.



## 1 Introduction

1.1 The mandate of the South African Reserve Bank's (Bank) National Payment System Department (NPSD) to oversee the payment system is entrenched in law. According to section 10(c) of the Reserve Bank Act No 90 of 1989 "the Reserve Bank may, perform such functions, implement such rules and procedures and, in general take such steps as may be necessary to establish, conduct, monitor, regulate and supervise payment, clearing or settlement systems".

1.2 In 1995, the first South African National Payment System Framework and Strategy<sup>1</sup> document was published. This document was the product of intensive research and debate between the Bank, the banking industry and other payment system stakeholders, wherein the vision, major objectives, strategies, fundamental principles and critical success factors for payment system reform for a period of ten years were expounded. The document is commonly referred to as the Blue Book and also at times as Vision 2004.

1.3 All the major milestones and major risk-reduction objectives described in the Blue Book have since been achieved, and encompassed, *inter alia*, the following:

1.3.1 In March 1998 the South African Multiple Option Settlement (SAMOS) system was introduced. This real-time gross inter-bank settlement system provides the banks with multiple settlement options, including liquidity-optimising<sup>2</sup> functions. The SAMOS system caters for the settlement of individual high-value transactions, batched retail obligations, as well as financial-market obligations emanating from the bond and equity markets thus enabling delivery versus payment (DvP)<sup>3</sup>.

1.3.2 The National Payment System (NPS) Act (the Act) was promulgated in October 1998. The Act enhanced the regulatory and supervisory powers of the Bank to manage and control payment system risks.

1.3.3 From 1999 onwards many risk-reduction measures were introduced, mainly to reduce risks in the retail payment environment. These included the introduction of Payment Clearing House (PCH) agreements, item limits<sup>4</sup>, the intra-day monitoring of liquidity usage and the introduction of same-day settlement and same-day square-off<sup>5</sup>. 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.

1.3.4 At an international level a major milestone was achieved when the rand was officially accepted as a Continuous Linked Settlement (CLS)<sup>6</sup> currency in December 2004. The objective of CLS is to reduce foreign exchange settlement risk. This is achieved through the synchronisation of the settlement of the two legs (payment versus payment (PvP)) of a foreign exchange transaction in a single time zone within CLS Bank in Central European Time (CET). CLS results in liquidity and efficiency benefits for the country. An additional benefit is the status of the rand as one of the fifteen currencies, including the major currencies, which are accepted for settlement in CLS.

1.3.5 The Act was amended in 2004, and these amendments were promulgated during October 2004. The objectives of the amendments to the Act were to enhance the regulatory and supervisory powers of the Bank and to address the inclusion of the rand as a settlement currency in CLS.

1. It is recommended that this document is read beforehand. It contains all the basic definitions and concepts discussed in the Vision 2010.

2. Gross settlement is effected with net funding.

3. Delivery versus payment is defined by the Bank for International Settlements (BIS) as a link between a security transfer system and a funds transfer system that ensures that delivery occurs if, and only if, payment occurs.

4. Participants in the retail PCH batches have agreed in principle to remove high values from these payment streams in order to reduce the settlement risk. See NPS Position Paper 01/2000.

5. Same-day square-off of SAMOS is the alignment of the opening and closing of the SAMOS settlement cycle date with the start/close of a calendar day. See NPS Position Paper 01/2004.

6. CLS is a means of settling foreign exchange transactions finally and irrevocably. CLS eliminates settlement risk, improves liquidity management, reduces operational banking costs and improves operational efficiency and effectiveness.

1.4 With the completion of the major milestones and objectives envisaged in the Blue Book, it is prudent to embark on new strategies and objectives for the future.

1.5 The **purpose** of this framework is to provide strategic direction for payment system development for the next period up to 2010. Firstly, new objectives and strategies have been developed and, secondly, an analysis has been performed to evaluate the extent to which the Blue Book strategies and objectives were successful and whether any objectives and strategies need to be realigned or redefined for Vision 2010.

1.6 The **methodology** of the Vision 2010 approach is to:

1.6.1 establish an overall **vision** for 2010;

1.6.2 state the **strategic objectives** for 2010;

1.6.3 address the **main themes** that emerged from discussions and work groups, and the Blue Book gap analysis;

1.6.4 state the **visions, strategies, fundamental principles and critical success factors** for the main themes; and

1.6.5 determine the **roles and responsibilities** in terms of the strategies.

1.7 The main themes addressed are:

1.7.1 access to the payment system;

1.7.2 oversight of the payment system;

1.7.3 standards in the payment system;

1.7.4 information and communications technology (ICT) developments;

1.7.5 awareness, education and research; and

1.7.6 cross-border developments.

## **Vision 2010**

To maintain a world-class payment system that meets domestic, regional and international requirements.



## Main strategic objectives

1. Enhance and maintain the safety and efficiency of the payment system.
  2. Create a level playing field for participants<sup>7</sup> while simultaneously adhering to sound payment system risk principles<sup>8</sup>.
  3. Facilitate wider usage by the public and broaden the provision of payment services in the NPS<sup>9</sup>.
  4. Participate in SADC payment, clearing and settlement systems initiatives.
  5. Enhance and maintain the interoperability<sup>10</sup> and operational effectiveness of the payment system.
  6. Increase general awareness of the features of the payment system.
  7. Enhance the structures for consultation and transparency in the payment system.
- 7. Payment system participants are treated on an equal and non-preferential basis.*
- 8. Refer to BIS Core Principles and other acceptable principles.*
- 9. The provision of payment services includes addressing the payment needs of the unbanked community.*
- 10. Interoperability refers to the ease of interlinking different systems on a business as well as a technology level.*



## 2 Access to the national payment system

2.1 Generally access to the payment system refers to access to payment system services for the public (they are the users of services) and access for participants providing these services.

2.2 The public (which includes the corporate sector) has access to approved payment system services through many payment instruments (for example debit cards and cheques) as well as the appropriate infrastructure.

2.3 The services that participants provide in the payment system include the issuance of payment instruments, collection of payment instructions and the provision of payment services to third persons, clearing and settlement. These services comprise a business element and the payment system infrastructure. The business element ensures that payment products are effective in supporting the circulation of funds in the economy. The payment system infrastructure refers to ICT products, services and components (also see section 5).

### 2.4 Vision

#### 2.4.1 Payment system participants

2.4.1.1 Participants in the payment system include registered banks in terms of South African legislation as well as non-bank participants. These non-bank participants include third-person service providers<sup>11</sup> as well as system operators<sup>12</sup>.

11. When a person is making a payment on behalf of another person to a third person to discharge a financial obligation. See section 7 of the NPS Act No 78 of 1998.

#### 2.4.2 Banks

12. A system operator provides services to any two or more persons in respect of payment instructions.

2.4.2.1 Accessibility for participants to the issuance of payment instruments, collection of payment instructions, the provision of payment services to third persons, clearing and settlement is balanced with the reduction of risks in the payment system.

2.4.2.2 Different tiers<sup>13</sup> of banks function within the payment system. 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. The level of liquidity, operational, credit, settlement, legal, systemic and reputational risks determines the entry criteria for banks in the payment system. These criteria are aligned with international best practice.

13. Including dedicated and co-operative banks.

2.4.2.3 Only registered banks (including dedicated and co-operative banks), qualifying in terms of the Bank payment system criteria<sup>14</sup>, are eligible to clear and settle in their own name in the books of the Bank.

14. Currently, criteria exist for some categories of participation in the payment system. Where appropriate, new criteria will be developed as part of the strategies of Vision 2010.

2.4.2.4 Only clearing and settlement banks 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).

2.4.2.5 Banks may, however, use sponsorship arrangements through other qualifying banks for clearing and settlement purposes. Sponsoring<sup>15</sup> banks, subject to criteria for sponsorship, are required to ensure that obligations arising from clearing of sponsored banks are settled.

15. Sponsorship refers to the practice where one bank settles the payment obligations of another bank (financial sponsorship) and/or provides infrastructure sponsorship (technical sponsorship). With financial sponsorship the sponsoring bank accepts the settlement risk.

#### 2.4.3 Non-banks

2.4.3.1 Non-banks are allowed to issue payment instruments which are linked to a credit line whereby they provide credit to the public. Non-banks may also provide payment services to third persons.

2.4.3.2 Criteria exist for third-person payment providers and agency agreements are in place between these providers and their principals.

16. *Mentorship refers to the practice where the sponsoring banks provide guidance in respect of clearing and settlement.*

2.4.3.3 Development paths exist for non-banks to become clearing and settlement banks in the payment system, for example non-banks could become dedicated banks and could then be sponsored and/or mentored<sup>16</sup> into the clearing and settlement system.

2.4.3.4 Non-bank institutions excluded or exempted from the relevant legislation (or criteria) do not qualify to hold settlement accounts with the Bank. Different tiers of banks within the payment system reduce the requirement for exclusion or exemption.

17. *Two kinds of operators can be distinguished, PCH system operators and system operators. PCH system operators and system operators are licensed by the Payments Association of South Africa (PASA). A PCH operator is a legal person that clears on behalf of any two or more Bank settlement system participants (banks). A system operator provides services to any two or more persons in respect of payment instructions.*

## 2.4.4 Operators<sup>17</sup>

2.4.4.1 Clearing of payment instructions between banks takes place within the framework of PCH agreements. Infrastructure to enable the exchange of payment instructions for clearing, the calculation of concomitant obligations, and delivery of instructions for settlement to the SAMOS system are facilitated by PCH system operators.

2.4.4.2 The level of operational, legal, systemic and reputation risks that may be introduced by PCH system operators and system operators determines their qualifying criteria.

## 2.5 Fundamental principles

2.5.1 Liquidity, operational, credit, settlement, legal, systemic and reputation risks determine the entry criteria for participants into the payment system.

2.5.2 Access criteria for participants within the payment system should be fair and transparent.

2.5.3 Access criteria for participants are aligned with international best practice.

2.5.4 Wider access to payment system services is available for the public.

## 2.6 Strategies

18. *See 2.4.3 and 2.4.4.*

2.6.1 Enable wider access to the payment system for participants by providing for different categories of participation<sup>18</sup>.

19. *Including sponsorship and mentorship.*

2.6.2 Establish growth paths for participants in the payment system<sup>19</sup>.

2.6.3 Publish information for new participants in the payment system.

2.6.4 Disclose entry criteria and other regulatory requirements for participants.

2.6.5 Facilitate payment industry solutions for the provision of services and access for participants in respect of the payment system.

## 2.7 Critical success factors

2.7.1 Accessibility for the public and payment system participants.

2.7.2 Risk-based entry criteria for payment system participants.

### 3 Oversight of the national payment system

3.1 The management of payment risks by central banks generally refers to oversight of payment systems.

3.2 According to the Bank for International Settlements (BIS), oversight is principally intended to promote the smooth functioning of the payment system and to protect the financial system from possible “domino effects” which may occur when one or more participants in the payment system incur credit or liquidity problems. Payment system oversight aims at a given system rather than individual participants.

3.3 More recently, the BIS defined oversight as a function whereby the objectives of safety and efficiency are promoted by monitoring existing and planned systems, assessing them against these objectives and, where necessary, inducing change.

#### 3.4 Vision

3.4.1 The oversight domain of the NPS entails the entire process of making payment. In other words, it entails the process (including but not limited to) that enables the payer to make a payment (that is issuance of payment instruments), the payer to issue a payment instruction via a payment instrument or other infrastructure, the institution to receive the payment instruction via clearing or otherwise, the process of clearing and settlement (where applicable), the beneficiary to accept the payment instruction, the beneficiary to deliver the payment instruction to an institution for collection, the institution to receive and deliver the payment instruction for collection into clearing and settlement, and the beneficiary to receive the benefit of the payment. Within the described process, banks, third-person payment providers, system operators, PCH system operators and agents of payers and/or beneficiaries are included<sup>20</sup>.

*20. See Directives issued under the Act.*

3.4.2 On-us payments fall under the payment system oversight domain. On-us payments refer to payment obligations that arise within the same bank and do not lead to inter-bank settlement.

3.4.3 The BIS has introduced a concept of Systemically Important Payment Systems (SIPS). A payment system is systemically important where if the system were insufficiently protected against risk, disruption within it could trigger or transmit further disruptions among participants or systemic disruptions in the financial area<sup>21</sup>.

*21. BIS Glossary of terms used in payment and settlement systems, March 2003.*

3.4.4 The South African oversight domain includes SIPS as well as non-SIPS, because non-SIPS may cause a systemic problem<sup>22</sup>. Oversight of the payment system also includes retail payment systems.

*22. For example, an infrastructure problem (in non-SIPS) might have a reputation knock-on effect which could undermine the confidence in the whole NPS.*

3.4.5 The oversight domain spans the payment system infrastructure. This infrastructure includes instruments, systems, applications, networks, payment, clearing and settlement systems from an operational perspective (also see section 5).

3.4.6 Oversight of the payment system at times may involve individual bank oversight and, on a more practical level, could entail surveillance, monitoring, analysis, and the implementation of risk-reduction measures.

3.4.7 In the oversight of the payment system, cognisance is taken of other legislation that may affect the payment system (for example anti-money laundering legislation).

3.4.8 Some payment system developments fall outside the South African NPS oversight domain but cognisance needs to be taken of international best practice for oversight in these areas. For example, areas to be included in regional oversight arrangements are SADC and Common Monetary Area (CMA) developments.

3.4.9 The regional settlement developments are aligned with the domestic NPS arrangements and could provide the foundation for regional integration.

3.4.10 Cognisance is taken of international oversight developments that could impact on the domestic payment system.

3.4.11 Securities settlement systems (where transfer of ownership of securities is effected), are regulated by the Financial Services Board (FSB) and do not fall within the payment system oversight domain. The NPS oversight domain, however, does include the settlement of funds for such securities in the SAMOS settlement system to achieve DvP.

3.4.12 Specific areas that fall outside the oversight domain are payment system competitive aspects, such as pricing and costing to the public. The stated objective of wider access to the payment system for participants provides the basis for more competition (see strategies under 2.6). The competitive environment for payment systems and their members is a matter for the Competition Commission. It is, however, important that fair pricing is reflected in the payment system.

3.4.13 No explicit consumer protection is embedded in payment system oversight. However, risk reduction in the payment system protects the payment system, which benefits the public at large.

### 3.5 Roles and responsibilities

3.5.1 The Bank (and more specifically the NPSD) oversees the safety and soundness of the payment system in terms of the Act.

3.5.2 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 the payment system overseer to address such issues.

3.5.3 Position papers are issued by the payment system overseer. These papers are guidelines that address practices which need to be aligned with sound payment system arrangements and practices. The overseer may act as facilitator or catalyst in these areas.

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

3.5.5 The payment system management body (the Payments Association of South Africa (PASA)) manages the conduct of its members<sup>23</sup> in relation to all matters affecting payment instructions. In this context PASA:

23. Only the Bank, a bank, mutual bank or branch of a foreign institution (or any other class of bank) may be members of PASA.

- 3.5.5.1 provides a forum to its members for consideration of policy matters;
- 3.5.5.2 acts as communicator on behalf of its members;
- 3.5.5.3 fosters co-operation among its members;
- 3.5.5.4 recommends criteria<sup>24</sup> for approval to the Bank in respect of clearing, PCH system operators and system operators;
- 3.5.5.5 recommends criteria for participation of members and limited members in PASA; and
- 3.5.5.6 supports the Bank in its role as overseer of the payment system by ensuring compliance and imposing penalties against and sanctions for its members.

24. Criteria are available.

3.5.6 The South African National Payment System Forum (SANPAY) is a well-established forum consisting of relevant government departments and other payment system stakeholder associations/bodies that represent persons actively involved in the payment system in one form or another<sup>25</sup>. SANPAY was established by the Bank to provide a forum for discussion and information sharing in relation to relevant payment system developments and policies.

25. See SANPAY Deed of Establishment at [www.reservebank.co.za/Payment & settlement systems](http://www.reservebank.co.za/Payment%20&%20settlement%20systems).

3.5.7 International PCH system operators (for example VISA and MasterCard) operating in South Africa abide by the legislative framework of the domestic payment system.

### 3.6 Fundamental principles

3.6.1 The intensity of oversight is proportionate to the systemic (sources could be liquidity, operational, credit, settlement and/or legal risks) or system-wide risks posed by a payment system.

3.6.2 Oversight is primarily aimed at the promotion of a safe and efficient NPS and not individual participants.

3.6.3 Domestic oversight practices are aligned with international oversight developments.

3.6.4 Regulation will follow innovation, where appropriate.

### 3.7 Strategies

3.7.1 Enhance the effectiveness of NPS oversight.

3.7.2 Ensure clarity on roles and responsibilities of the various (regulatory) stakeholders in the payment system.

3.7.3 Establish an overarching payment system management structure.

3.7.4 Develop principles for the issuance of payment products and instruments.

3.7.5 Promote the principle of credit push<sup>26</sup> as a payment methodology.

26. The payer initiates (push) the transfer of funds from an account. The payer can only do this if the payer has funds available in an account. With a cheque (a debit-pull methodology), a payer can write a cheque without having the funds available. The credit-push methodology reduces risk in the payment system.

3.7.6 Facilitate and act as catalyst to provide payment system solutions.

3.7.7 Recognise other regulatory and relevant financial system developments and align the payment system where required (for example Basel II and anti-money laundering legislation).

**3.8 Critical success factors**

3.8.1 An effective oversight model.

3.8.2 Payment risks are under control.

3.8.3 An efficient and safe settlement system.

3.8.4 An efficient and safe clearing system.

3.8.5 Compliance with BIS core principles and other accepted practices.

## 4 Standards in the national payment system

4.1 Standards are defined as minimum requirements regarding infrastructure and design (for example technology, security and payment products<sup>27</sup>), as well as business aspects (for example practices and arrangements) in the payment system industry. Standards ensure a common understanding of requirements.

27. For example, the Internet.

4.2 A major objective of implementing standards is to enhance security and enable interoperability<sup>28</sup> within the payment system. These standards focus on the prevention of fraud, increasing trust, integrity, and confidence in the payment system.

28. See main strategic objectives, strategy 5, on page 7.

### 4.3 Vision

4.3.1 Preference is given to generally accepted, international best standards as opposed to proprietary standards.

4.3.2 A stakeholder work group exists for the development of standards that are acceptable to the wider payment system community.

4.3.3 Payment products and payment systems conform to uniform standards and rules that have been established by the industry. Uniform standards lay the foundation for interoperability between payment products and systems.

4.3.4 When evaluating emergent payment products and systems, the Bank takes cognisance of potential future developments and the flexibility of these products and systems.

4.3.5 Security standards pertaining to payment products and payment systems, in traditional or electronic format, comply with international best practice and standards that reflect the payment system risk involved. A balance between security, cost and risk is sought.

4.3.6 Standards are transparent and widely available to all interested/relevant stakeholders.

### 4.4 Fundamental principles

4.4.1 Common standards are implemented.

4.4.2 Common standards are geared towards enhancing security and interoperability within payment systems.

### 4.5 Strategies

4.5.1 Establish a stakeholder work group for the development of standards.

4.5.2 Facilitate the establishment of an authority for certification of standards.

4.5.3 Ensure transparency of standards to all relevant stakeholders.

4.5.4 Ensure that payment system participants implement applicable standards.

29. *Authenticated transactions are preferred to unauthenticated transactions. Forms of authentication include personal identification number (PIN), biometric (for example fingerprint) and electronic signature. Authentication should be in an electronic format, and preferably based on international standards acceptable by the industry participants.*

4.5.5 Participate internationally in payment system standards initiatives/forums.

4.5.6 Promote the principle of authentication<sup>29</sup> for all payment instructions.

#### **4.6 Critical success factors**

4.6.1 Common standards for security and interoperability.

4.6.2 Communication and transparency in respect of relevant standards.

4.6.3 An authority for certification of relevant payment system standards.

4.6.4 Co-operation between payment system stakeholders.

## 5 Information and communication technology developments

5.1 ICT refers to, *inter alia*, computer systems, computer networks, computer processing capacity and an integrated financial network (a communications network or mechanism facilitating financial transactions and information transfer).

5.2 One of the main sources of settlement risk in the payment system is operational risk. Operational effectiveness ensures the circulation of funds in the financial system and efficient liquidity management by participants. Operational risk emanating from payment system technology is therefore minimised.

### 5.3 Vision

5.3.1 Co-operation on technology infrastructure in the payment system exists and competition is based on product and service.

5.3.2 Appropriate levels of security apply to different categories of transactions/messages.

5.3.3 Acceptable Business Continuity Planning (BCP) and Disaster Recovery Planning (DRP) systems are in place.

5.3.4 Real-time payment and settlement information is available. Information is shared with all relevant stakeholders and used, where appropriate, further to enhance information delivery in the NPS.

5.3.5 Emerging payment system technologies are monitored, researched and evaluated on a regular basis. Adequate technology standards for security, interoperability and integration exist<sup>30</sup>.

*30. Also see section 4.*

5.3.6 Payment system technology employed supports safety and efficiency.

5.3.7 An appropriate balance between private-sector and public-sector payment system infrastructure provision exists.

### 5.4 Fundamental principles

5.4.1 Business needs drive technology developments and the extent of technology employed.

5.4.2 The central bank owns the settlement system and is responsible for its operation.

5.4.3 Infrastructure provision by the central bank (SAMOS technology) is based on a full cost-recovery principle.

5.4.4 Banks are responsible for the operational risk they introduce into the payment system (for example, in respect of the outsourcing of infrastructure and other functionalities<sup>31</sup>).

*31. Functionalities include human resource capacity.*

## 5.5 Strategies

5.5.1 Ensure that the capability of payment infrastructure owned by the central bank is maintained.

5.5.2 Ensure that the capability of privately-owned payment infrastructure is maintained.

5.5.3 Identify and rectify potential operational risks on a pro-active basis, including the elimination of single points<sup>32</sup> of failure in the payment system.

*32. Refer to "weak links" and/or single components which harbour an element of concentration, that, should a failure occur, could result in a systemic knock-on effect in the payment system.*

## 5.6 Critical success factors

5.6.1 Sufficient industry co-operation regarding ICT developments.

5.6.2 Adequate technology standards for security, interoperability and integration, and availability.

5.6.3 Capable and sufficient human resource capacity.

5.6.4 Trusted and resilient payment system technology.

5.6.5 Effective BCP and DRP systems are in place.

## 6 Awareness, education and research

6.1 General awareness of payment system developments enhances the understanding of the public and stakeholders of the underlying issues in the payments industry.

6.2 It is important that the role and objectives of the central bank, the payment system management body<sup>33</sup> and the relevant payment system stakeholders are transparent in the payment system.

*33. Refers to PASA.*

6.3 The availability of payment system information and research enhances the evaluation of, and comparative alignment with international payment system developments and practices.

### 6.4 Vision

6.4.1 The roles and objectives of the Bank and the payment system management body are transparent and information regarding this is readily available.

6.4.2 Issues affecting participants in the NPS are discussed and consulted with the relevant stakeholders. Interaction and communication with stakeholders take place on a regular basis.

6.4.3 All aspects relating to local and international payment systems are researched regularly and best practice is adopted.

6.4.4 Cognisance is taken of developments in fields other than the payment system. Where necessary, changes are incorporated into the payment system and stakeholders are informed.

6.4.5 Payment system information and research is transparent and widely available.

6.4.6 Payment system education is well developed and provided to stakeholders and tertiary institutions.

### 6.5 Fundamental principles

6.5.1 Entry criteria, procedures and other relevant information to enter the payment, clearing and settlement systems are transparent and available.

6.5.2 Entry criteria, procedures and other relevant information to enter the payment, clearing and settlement systems are kept up to date with changes and developments in the payment environment.

6.5.3 Payment, clearing and settlement information is widely available within legal requirements.

### 6.6 Strategies

6.6.1 Research national and international payment system developments and practices.

6.6.2 Ensure that sufficient payment system publications, education and training are available to all stakeholders.

6.6.3 Develop statistical information databases to cater for national and international requirements.

6.6.4 Involve key stakeholders in payment system developments on a pro-active basis.

**6.7 Critical success factors**

6.7.1 Payment system awareness and knowledge by the relevant stakeholders.

6.7.2 Industry co-operation on payment system information.

## 7 Cross-border developments

7.1 At an international level, the rand was officially accepted as a CLS currency and implemented in December 2004. The objective of CLS is to reduce foreign exchange settlement risk and is achieved by the synchronisation of the settlement of the two legs of a foreign exchange transaction in a single time-zone (PvP) within CLS Bank in CET.

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

### 7.3 Vision

7.3.1 An appropriate cross-border settlement model for the region, based on the specific requirements of the region, is in place.

7.3.2 A sound legal framework in all jurisdictions underpins the payment, clearing and settlement developments in the region.

7.3.3 Standards exist for SADC payment, clearing and settlement arrangements, which are aligned with international best practice.

7.3.4 Risk-reduction measures are determined by the SADC Oversight Group and implemented on a regional basis (see Oversight, section 3).

7.3.5 The Bank remains abreast of cross-border developments and best practice to reduce foreign exchange settlement risk.

7.3.6 The Bank participates in international work groups to discuss cross-border developments pertaining to payment, clearing and settlement.

7.3.7 The Bank interacts and communicates with central banks and regulators, locally and internationally, on cross-border payment, clearing and settlement developments.

### 7.4 Fundamental principles

7.4.1 The credit-push payment principle is the preferred payment method.

7.4.2 PvP is the preferred method for cross-border settlement.

### 7.5 Strategies

7.5.1 Participate in CLS oversight and operational developments.

7.5.2 Participate in SADC payment, clearing and settlement systems initiatives.

7.5.3 Participate and align SADC regional oversight arrangements and practice.

7.5.4 Align SADC regional payment system standards and practices.

7.5.5 Participate in providing a sound regional payment system legal framework.

7.5.6 Stay abreast of international and other payment system developments on the African continent.

**7.6 Critical success factors**

7.6.1 Harmonised payment, clearing and settlement standards in SADC.

7.6.2 SADC central bank interaction and co-operation.

7.6.3 Harmonised payment system legal frameworks.

## 8 Roles and responsibilities

Strategies	Roles and responsibilities
<b>2</b>	<b>Access to the national payment system</b>
2.1	Enable wider access to the payment system for participants by providing for different categories of participation ..... NPSD, PASA, NT, BSD
2.2	Establish growth paths for participants in the payment system..... NPSD, PASA
2.3	Publish information for new participants in the payment system ..... NPSD, PASA
2.4	Disclose entry criteria and other regulatory requirements for participants..... NPSD, PASA
2.5	Facilitate payment industry solutions for the provision of services and access for participants iro the payment system ..... NPSD
<b>3</b>	<b>Oversight of the national payment system</b>
3.1	Enhance the effectiveness of NPS oversight ..... NPSD
3.2	Ensure clarity on roles and responsibilities of the various (regulatory) stakeholders in the payment system ..... NPSD
3.3	Establish an overarching payment system management structure..... NPSD
3.4	Develop principles for the issuance for payment products and instruments ..... NPSD
3.5	Promote the principle of credit push as a payment methodology ..... NPSD, PASA
3.6	Facilitate and act as catalyst to provide payment system solutions..... NPSD
3.7	Recognise other regulatory and relevant financial system developments and align the payment system where required..... NPSD, PASA
<b>4</b>	<b>Standards in the national payment system</b>
4.1	Establish a stakeholder work group for the development of standards ..... NPSD, PASA
4.2	Facilitate the establishment of an authority for certification of standards ..... NPSD
4.3	Ensure transparency of standards to all relevant stakeholders..... NPSD, PASA
4.4	Ensure that the payment system participants implement applicable standards ..... NPSD, PASA
4.5	Participate internationally in payment system standards initiatives/forums..... NPSD, BSTD, PASA
4.6	Promote the principle of authentication for all payment instructions ..... NPSD, PASA
<b>5</b>	<b>Information and communication technology developments</b>
5.1	Ensure that the capability of payment infrastructure owned by the central bank is maintained ..... NPSD, BSTD, PASA
5.2	Ensure that the capability of privately-owned payment infrastructure is maintained ..... NPSD, BSTD, PASA
5.3	Identify and rectify potential operational risks on a pro-active basis, including the elimination of single points of failure in the payment system..... NPSD, BSTD, PASA
<b>6</b>	<b>Awareness, education and research</b>
6.1	Research national and international payment system developments and practices ..... NPSD, PASA
6.2	Ensure that sufficient payment system publications, education and training are available to all stakeholders ..... NPSD, PASA
6.3	Develop statistical information databases to cater for national and international requirements..... NPSD, PASA
6.4	Involve key stakeholders in payment system developments on a pro-active basis..... NPSD, PASA

<b>7</b>	<b>Cross-border developments</b>	
7.1	Participate in CLS oversight and operational developments .....	NPSD
7.2	Participate in SADC payment, clearing and settlement systems initiatives.....	NPSD, PASA
7.3	Participate and align SADC regional oversight arrangements and practice .....	NPSD
7.4	Align SADC regional payment system standards and practices....	NPSD
7.5	Participate in providing a sound regional payment system legal framework .....	NPSD, LSD
7.6	Stay abreast of international and other payment system developments on the African continent.....	NPSD

**Key**

BSD	Bank Supervision Department
BSTD	Business Systems and Technology Department
LSD	Legal Services Department
NPSD	National Payment System Department
NT	National Treasury
PASA	Payments Association of South Africa