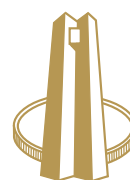


The National Payment System Framework and Strategy

Vision 2025



South African Reserve Bank

© South African Reserve Bank

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without fully acknowledging *The National Payment System Framework and Strategy: Vision 2025* of the South African Reserve Bank as the source. The contents of this publication are intended for general information only and do not serve as financial or other advice. While every precaution is taken to ensure the accuracy of information, the South African Reserve Bank shall not be liable to any person for inaccurate information and/or the opinions contained in this publication.

Comments and enquiries relating to this publication should be addressed to:

Head: National Payment System Department
South African Reserve Bank
P O Box 427
Pretoria
0001

Tel. no.: +27 12 313 3442
Email: npsdirectives@resbank.co.za
<http://www.resbank.co.za>

ISBN (print): 978-1-920556-19-8
ISBN (online): 978-1-920556-20-4



Contents

Foreword by the Governor 1

Introduction 2

Overarching vision 3

Goals and strategies: achieving *Vision 2025* 5

Key success factors: an environment conducive to progress..... 5

1. A collaborative approach among industry stakeholders 5

2. A clear and transparent regulatory and governance framework for banks and non-banks..... 6

3. A sound risk management framework for all payment systems..... 6

4. Ongoing engagement and communication within and among all structures of the national payment system..... 6

5. A market conduct authority that functions effectively 6

6. Regular monitoring and measuring of programmes and initiatives..... 6

Guiding the future of South African payment systems..... 7

1. A clear and transparent regulatory and governance framework 7

2. Transparency and public accountability 9

3. Financial stability and security..... 10

4. Promoting competition and innovation..... 12

5. Cost-effectiveness..... 14

6. Interoperability 16

7. Flexibility and adaptability 17

8. Regional integration 19

9. Financial inclusion..... 20

Overview of suggested *Vision 2025* strategies..... 22

The way forward..... 24

Annexure: *Vision 2015* scorecard: a self-assessment 26

Abbreviations 29

Stakeholders

Project leadership

National Payment System Department

Departments and committees of the South African Reserve Bank

Bank Supervision Department
Financial Markets Department
Financial Stability Department
Financial Surveillance Department
Governors' Executive Committee
Group Security Management Department
Legal Services Department
Risk Management and Compliance Department
Strategy Management Office

National payment system stakeholders

Government

National Treasury

Banks

Absa Bank Limited
African Bank Limited
Bidvest Bank Limited
Capitec Bank Limited
Citibank N.A.
Finbond Mutual Bank
FirstRand Bank Limited
Grindrod Bank Limited
JPMorgan Chase Bank, N.A.
Hongkong and Shanghai Banking Corporation Bank plc
Investec Bank Limited
Mercantile Bank Limited
Nedbank Limited
Sasfin Bank Limited
South African Post Office Limited (Postbank)
Standard Chartered Bank
State Bank of India
The Standard Bank of South Africa Limited
Ubank Limited

Other stakeholders

Association of System Operators
Banking Association South Africa
BankservAfrica Ltd
Commercial Independent Bureau Association
MasterCard Worldwide
PayGate
Payments Association of South Africa
Payment System Stakeholder Forum
South African Banking Risk Information Centre
South African Retailers' Payment Issues Forum
Strate Pty Ltd
Third Party Payers Association
Visa Inc.



Foreword by the Governor

A national payment system (NPS) is a set of arrangements and infrastructures that enables consumers, businesses and other entities to effect financial transactions, including making payments to one another and using the accounts and payment instruments issued by financial institutions.

These arrangements and infrastructures, the bulk of which is not visible to the public, also play an important role in the deeper integration of the South African economy with the rest of the world. The NPS enables the payment for goods and services between South African corporates and citizens as well as their counterparties, both locally and abroad.

A well-functioning NPS also helps our country to achieve broader societal objectives, such as improving access to financial services for all citizens.

A safe, reliable and efficient NPS can also play a big role in contributing to a stable financial system, thus containing or even preventing financial crises.

We must ensure that South Africa has an efficient, resilient, safe and cost-effective NPS given the important role that it plays as a conduit of funds within the economy and between the nation and the rest of the world.

In its regulatory, supervisory and oversight capacity, the South African Reserve Bank (SARB) plays an important role in ensuring the safety and efficiency of the NPS. The payment settlement infrastructure owned and operated by the SARB plays a key role in the day-to-day functioning of the NPS.

Payment system developments in the past decade have been rapid, overshadowing those of previous decades. As part of these developments, consumers have benefitted from innovations such as mobile device and Internet payments, which make electronic payments and remittances possible across jurisdictions. Innovation is the hallmark of a modern economy. Owing to the interconnected nature of payment systems, innovations in this area must occur within the confines of the legal and regulatory framework.

A well-founded legal and regulatory framework reduces counterparty risks by addressing payment system risks such as settlement, operational and liquidity risks. Ultimately, this framework is important for reducing potential contagion risks and thus ensuring a sound financial system.

Against this backdrop, setting a vision for the NPS infrastructure is not an easy task. The landscape in this environment changes constantly and rapidly. This *Vision 2025* publication sets out the goals and strategies intended to guide industry efforts. It also highlights some history and context which the SARB believes is important for understanding and pursuing future strategies.

The successful implementation of the stated strategies will depend on the full commitment and continued cooperation between the various NPS stakeholders. The SARB trusts that *Vision 2025* will assist all participants in the NPS in meeting the challenges that inevitably lie ahead as we attempt to propel a world-class payment system that meets both domestic and international requirements.

L E Kganyago
Governor
South African Reserve Bank

Introduction

South Africa faces many challenges. While some of these are related to external factors such as low global growth rates due to the global financial crisis of 2008–09, many of the challenges stem from long-term structural deficiencies. These include a high unemployment rate, low savings rates, and stark wealth and income inequality.

1 The National Development Plan 2030 is available at <https://www.gov.za/issues/national-development-plan-2030>.

These issues are not new; they have been highlighted in the National Development Plan 2030, which identifies the principle challenge for South Africa as ‘to roll back poverty and inequality’. Combating this challenge will require ‘a combination of increasing employment, higher incomes through productivity growth, a social wage, and good quality public services’.¹

As public services, it is vital that payment systems are capable of meeting the evolving needs of South Africans while helping to address the challenges and structural deficiencies faced by the country.

The national payment system (NPS) impacts on the lives of all South Africans and essentially exists to serve the economy and, through it, the people of South Africa. It is a crucial enabling factor for economic activity among consumers and businesses. Payment systems can, for example, enable seamless links to public transportation and allow South Africans to instantly and securely send payments anywhere in the country. New channels and access points such as mobile devices will allow people to avoid having to wait for service in long queues to pay bills. The ubiquity and interoperability of payment systems can lead to efficiencies that are passed on to end users in the form of lower fees. All of this directly impacts on the social well-being of South African inhabitants. Ensuring seamless, instant, safe and cost-effective payments requires modern payment systems that provide a foundation for economic activity for all South Africans.

Creating payment systems that are fit for purpose requires a holistic approach that is guided by an overarching vision and key goals. Industry stakeholders have to collaborate on implementing set strategies to meet these goals. The execution must be continuously monitored so that progress can be tracked and the strategic direction of South African payments is assured. The NPS should be viewed as a collective infrastructure that acts in the long-term interests of South African society, whose contributions can assist in boosting economic development and financial inclusion, thereby increasing the quality of life across all segments of society.

This publication maps out an overarching industry vision for the future of South African payment systems. A framework for achieving this vision is outlined. This framework captures nine goals that industry stakeholders should pursue collaboratively. Six success factors that will facilitate an environment conducive to meeting these goals are identified. This is followed by a detailed exploration of each of the nine goals, including 26 tangible strategies that industry stakeholders should implement to meet each goal. Many of these strategies apply to multiple goals, just as some goals can help to contribute to meeting other goals. After examining the goals and strategies that should be used to accomplish the industry vision, next steps are proposed.

Ultimately, it is expected that the payments industry will take the lead in implementing the strategies that will help to meet the goals of the payment system. This will require collaboration, transparency and trust among all stakeholders. By making *Vision 2025* a reality, the payments industry will help to contribute to building an economy and a society that serves all South Africans.

Overarching vision

Enhance the safety, efficiency and accessibility of the national payment system in a manner that promotes competition and minimises risk to the payments ecosystem by leveraging technological developments to extend the availability of digital payment services to all sectors of society while meeting domestic, regional and international requirements for the benefit of all members of South African society.

Structural changes are occurring in payment systems today. Technology developments are changing end-user expectations in a number of industries, including payments and financial services. Consumers and businesses alike expect an instant, 24/7 world of service where the borders between countries and applications are becoming less pronounced than ever before. As a key player in the economies of Southern Africa as well as an important global player, for example as a member of the Group of Twenty (G20) and the BRICS² group, it is vital that South Africa maintain its international competitiveness through improvements to domestic payment systems. Achieving this requires a holistic approach that brings all industry stakeholders together to develop products and services that will serve both ends of South Africa's dual economies. An enabling and appropriate regulatory regime is also essential to ensure that the development of innovative products and services does not affect the security and overall stability of the NPS negatively. This approach will help both banks and non-banks to prepare for new business models in payment services and enable these stakeholders to serve all South Africans.

2 Brazil, Russia, India, China and South Africa

It is our expectation that, come 2025, the NPS will continue to be safe, efficient and reliable. The provision of payment services is marked by ever-increasing competition, leading to greater efficiencies in payment systems and improved access to services for end users. An appropriate and enabling regulatory framework enables qualified participants (banks and non-banks) to provide activities and services across the payments value chain. The fair application of regulation to all participants offering similar services ensures a level playing field, which further boosts competition and innovation in the provision of payment services through the development of new products and services.

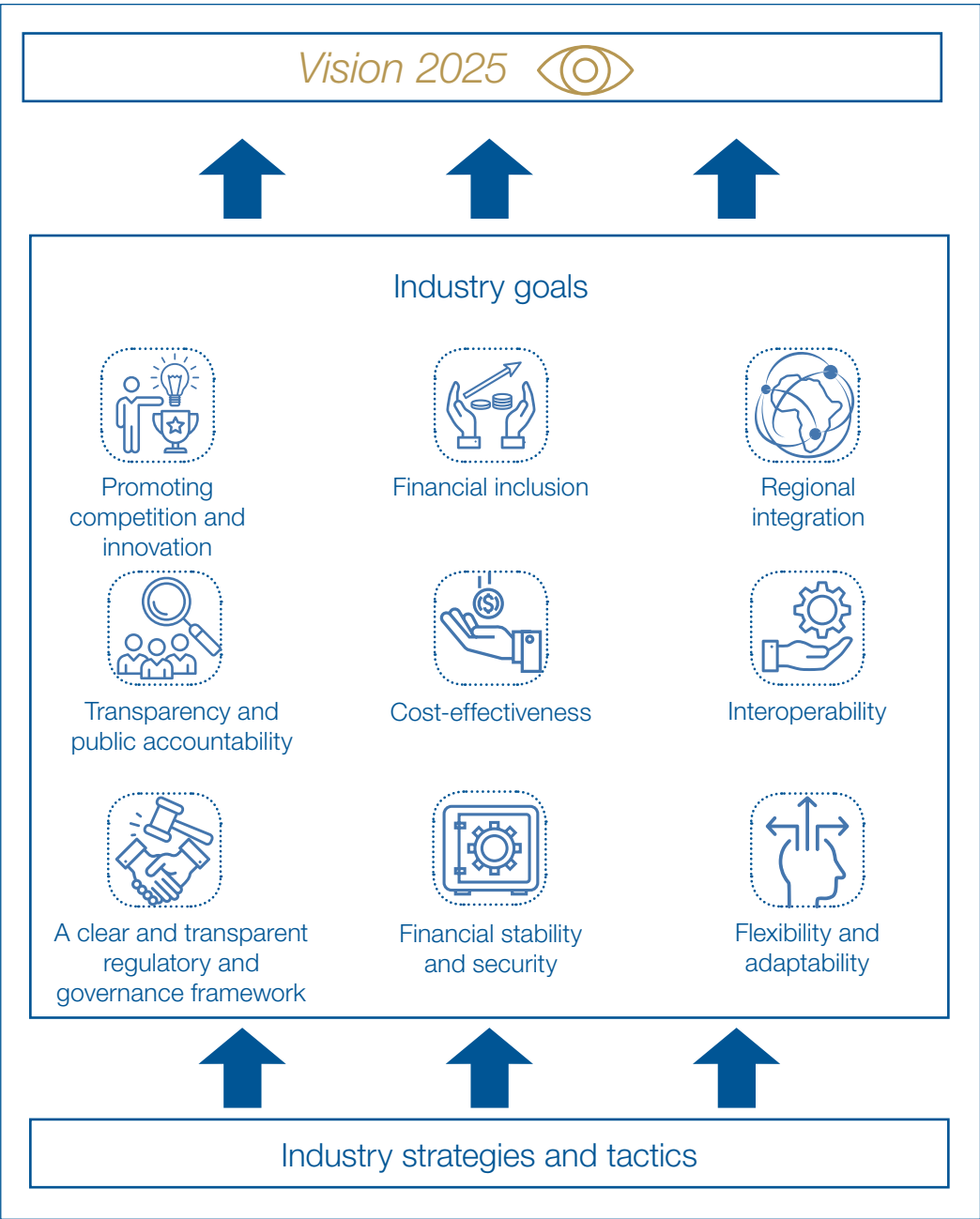
Such an environment enables fair competition across the industry through continued collaboration in infrastructure development. Collaboration helps to drive the interoperability and ubiquity of payment services. It also enables payment services to meaningfully leverage new channels (such as mobile phones), new functionality (such as instant payments), and new technologies (such as application programming interfaces (APIs) and distributed ledger technology (DLT)). These forces can help to further other important public policy objectives (such as financial inclusion) and can enable future payment use cases at a domestic and regional level. Increasing capacity in human resources will result in an accessible base of payment skills and expertise to help implement this vision.

By 2025, we expect consumers to have increased trust and familiarity with electronic payment systems. Consumers will be well informed about payment services and their rights in an open and competitive market. New means of multifactor authentication and expanded access to payment channels and networks will make payments more seamless and increase the ease of use for all segments of society. Consumers will benefit from increased speed and wider availability of electronic payments without compromising security. All of these factors will help to bolster trust and grow usage of electronic payments by South African consumers and businesses. As payment networks extend their reach to geographies and sectors that were previously

underserved, more inhabitants will be brought into the digital economy and the standard of living will improve for all South Africans.

In order to achieve this ambitious vision, industry stakeholders should collaborate on meeting the identified nine key goals (see Figure 1). These goals are aligned to the mandate of the South African Reserve Bank (SARB) of ensuring the safety and efficiency of the NPS as well as increasing financial inclusion. By working together to implement successful strategies to meet these goals, industry stakeholders would contribute to the strengthening of the economy. Achieving the goals in *Vision 2025* goes hand in hand with the economic development goals found in the South African government’s National Development Plan 2030. By improving payment systems, growing financial inclusion, and combating specific structural issues in the economy, we will contribute towards the prosperity of all South Africans and enhance the NPS to serve the economy of the future.

Figure 1: The nine goals of *Vision 2025*



Goals and strategies: achieving *Vision 2025*

All industry initiatives aimed at changing and/or improving payment systems must be guided by an overarching vision. This vision consists of key goals that represent a larger purpose or ambition towards which the payments industry should direct its attention. The complexity of the NPS and the competing interests of the various stakeholders make it necessary to focus on an industry-wide vision to ensure that efforts are guided and that progress can be measured. The goals that guide the vision tend to focus on high-level issues such as competition, innovation, transparency, preparing for future changes in the economy, and system stability.

Meeting each goal requires industry stakeholders to implement a number of strategies and tactics. These strategies serve the goals and require widespread collaboration between industry stakeholders. Some of the strategies outlined in *Vision 2025* are targeted, short-term endeavours, while others are long-term efforts. All initiatives aimed at improving payment systems rely on success factors that help to create an environment conducive to implementing the strategies. The goals outlined in this publication define what the SARB and the wider payments industry want to achieve by 2025. The strategies proposed here (which require further detailing and planning by the wider payments industry) describe how the industry can achieve payment system goals.

The strategies mentioned in this publication are not prescriptive. Rather, they are intended as focus areas for industry stakeholders and as illustrations of the interplay between goals, strategies and other success factors. In order to achieve the goals laid out by the SARB in this publication, the payments industry must work together to detail which strategies would be most effective, to develop project plans, and to explore further areas for collaboration.

Key success factors: an environment conducive to progress

In order to address the *Vision 2025* goals effectively, an environment conducive to implementing the necessary strategies needs to be established. This section outlines the key success factors that will act as the foundation for the development and maintenance of safe and efficient payment systems.

1. A collaborative approach among industry stakeholders

No effort aimed at improving and modernising payment systems can be successful without a collaborative approach among industry stakeholders. Community efforts aimed at improving payment systems and standards should be transparent and involve all payment system participants and other relevant stakeholders. Accomplishing this collaborative approach requires a clearly articulated vision and, crucially, an enabling body which drives that vision and monitors progress at regular intervals. While the SARB is recognised as the primary regulatory authority for payment systems, it collaborates with other regulators on relevant issues related to the NPS.

Developing efficient and effective payment systems should be viewed as a source of competitive advantage for South African banks and non-banks (i.e. financial technologies (FinTechs) or retailers), as the functionality offered by payment systems would be leveraged by individual participants to compete with one another through new products and services.

2. A clear and transparent regulatory and governance framework for banks and non-banks

With new providers of payment services entering the market for payment activities and services, it is essential that all system participants are governed by clear and transparent regulatory and governance frameworks. A level playing field must be maintained by ensuring that the same rules apply to similar payment activities and services, irrespective of whether the participant is a bank or a non-bank.

3. A sound risk management framework for all payment systems

The safety of payment systems is of paramount importance to both the SARB and the entire payments industry. All payment systems must have sound risk management frameworks in place, and all risk management practices should reflect the interconnected nature of the payments ecosystem, end-to-end banking and the payments value chain. These frameworks should be regularly reviewed to ensure that they remain fit for purpose in light of any changes in the economy and new technological developments.

4. Ongoing engagement and communication within and among all structures of the national payment system

Achieving many of the goals outlined in this publication requires a holistic, integrated approach. In order to obtain a full understanding of how strategies affect industry stakeholders, there must be ongoing engagement and communication within all NPS structures and among all relevant NPS stakeholders. Stakeholders should begin with a holistic view of how the NPS should be designed. This will help to ensure an agile and flexible payment system architecture even if changes are only made to a single system or payment instrument. Future needs, such as regional and global interoperability, should be taken into account, as well as how changes in one system may affect operations in another system or among system participants. Clear and regular communication between NPS structures and stakeholders is vital to achieving this enabling factor.

5. A market conduct authority that functions effectively

The implementation of a Twin Peaks regulatory model includes the introduction of a market conduct authority for financial services. The Financial Sector Conduct Authority (FSCA) will be tasked with proactively overseeing and supervising market conduct with the goal of protecting South African consumers and businesses. Its mandate will help to ensure the efficiency and integrity of the financial system, and is expected to lead to improved outcomes for end users. The SARB will actively support the FSCA by providing information on payment system pricing as needed.

6. Regular monitoring and measuring of programmes and initiatives

It is vital that all programmes and initiatives implemented to meet payment system goals are measurable and that regular and robust assessments of progress are carried out by the industry. Achieving this requires widespread industry participation in an enabling body that develops specific metrics for success, that regularly tracks progress, and that serves as an avenue to set priorities and adjust implementation plans to achieve payment system goals as needed.

Guiding the future of South African payment systems

This section explores the nine goals guiding the development of payment systems in South Africa as well as the strategies that industry stakeholders can implement to meet these goals.

All the SARB’s activities within payment systems are focused on maintaining or improving safety and efficiency.

Most of the goals outlined here generally fall under one of two main categories, namely safety and efficiency, as indicated in Table 1 below.

Table 1: Goals guiding the development of payment systems in South Africa

Goal	Safety	Efficiency	Cross-industry public policy initiative
1. A clear and transparent regulatory and governance framework	X		
2. Transparency and public accountability	X		
3. Financial stability and security	X		
4. Promoting competition and innovation		X	
5. Cost-effectiveness		X	
6. Interoperability		X	
7. Flexibility and adaptability		X	
8. Regional integration		X	
9. Financial inclusion			X

All of these goals contribute to greater financial inclusion, which is a major public policy objective for many authorities in South Africa. The effective pursuit of the goals related to safety and efficiency in payment systems will provide a solid foundation on which to improve financial inclusion and raise the living standards of all South Africans.

1. A clear and transparent regulatory and governance framework

Participants providing similar services should be subject to the same regulation that is transparent and appropriate for the risk being introduced in the payment system by each participant.

Rapid advances in technology, innovation and global interconnectedness have transformed domestic, regional and global payment systems. Today, payments are faster, they can be initiated via new channels (such as mobile devices), they are available 24/7, and they may be facilitated by both banks and non-banks. While technology and end-user expectations have changed, the need for sound regulatory and governance frameworks to underpin payment systems has not. All payment system participants should be subject to fair and transparent regulation and governance frameworks to ensure stability and safety within payment systems.

The regulatory approach should be appropriate and transparent, with regulation applied fairly to all participants (banks and non-banks). Participants providing the same services or activities should be subject to the same regulation, which should be appropriate for the risk being introduced in the payment system by the respective participant. Regulations must also be aligned with the public policy objectives of promoting the financial stability, safety, efficiency and effectiveness of the NPS as well as the soundness of payment institutions. Achieving this will help to boost confidence in the NPS as well as support objectives related to the prevention of financial crime and the promotion of competition, consumer protection and financial inclusion.

1.1 Vision

- 1.1.1 Payment system participants providing similar services are subject to the same regulation, which is appropriate for the risk being introduced into the system by such a participant.
- 1.1.2 All payment system stakeholders have a clear understanding of the regulations and governance frameworks that apply to them.
- 1.1.3 Regulators and delegated authorities have clear mandates.
- 1.1.4 All relevant stakeholders provide input into governance structures and are consulted to help coordinate, harmonise and develop regulation. Relevant stakeholders include banks, system operators, non-bank payment service providers, FinTechs, remittance providers (including retailers), regulators, and end users (consumers and businesses).

1.2 Benefits

- 1.2.1 The continued safety, stability and availability of the payment system is maintained and enhanced.
- 1.2.2 All system participants offering similar services, regardless of whether they are a bank or non-bank, are fairly regulated.
- 1.2.3 The confidence in the NPS among system participants and end-users is increased.
- 1.2.4 Other payment system goals (such as competition and consumer protection) in addition to the wider public policy goals (such as financial inclusion) are supported.

1.3 Strategies and tactics

- 1.3.1 Review the regulatory, supervisory and oversight frameworks of the payment system to ensure harmonization across payment systems.
- 1.3.2 Develop a consumer protection framework for payment services.
- 1.3.3 Develop fair, transparent and objective criteria to determine industry-level regulatory and governance issues.
- 1.3.4 Review and implement access and participation criteria for all payment service providers.

- 1.3.5 Implement key initiatives, for example the review of the National Payment System Act 78 of 1998 (NPS Act) and the review of the effectiveness of the Payment System Management Body (PSMB).
- 1.3.6 Align to global regulatory and governance principles where applicable, such as the Principles for Financial Market Infrastructures.
- 1.3.7 Explore appropriate frameworks for authorising non-banks to directly access payment systems.

2. Transparency and public accountability

All system participants should be subject to public accountability and should have access to integrated management information related to the collaborative space in order to create a level playing field for all participants and to foster trust in payment systems.

As utilities that affect the lives of all South Africans, payment systems must be transparent and system participants must be accountable to the wider public. Transparency and public accountability will help to increase trust in payment systems while also ensuring that all system participants operate on a level playing field, which fosters competition. Greater transparency can also help to identify trends in the NPS and reveal potential opportunities, risks and threats, leading to safer and more efficient payment systems for South African consumers and businesses.

A key enabler of greater industry transparency is the availability of integrated NPS management information to stakeholders in collaborative areas. Distributed access to such information may reveal inefficiencies and help to identify strategic payment system risks. This will enable a more harmonised approach to issues such as combating fraud, which today is fragmented among various industry players. It can also help to provide indicators of overall financial stability, which will assist regulators overseeing payment systems and inform efforts to enhance system operations and functionality.

Crucially, integrating management information across the industry can help to limit information asymmetry across various payment system stakeholders. Information transparency is aimed at eliminating inefficiencies and decreasing risks across the industry. Decreasing information asymmetry would provide a more level playing field for system participants, which helps to promote greater competition in payment services. Clear and transparent regulatory and governance frameworks also contribute to greater transparency and public accountability.

2.1 Vision

- 2.1.1 As the NPS is the backbone of the South African economy that impacts on the lives of all South Africans, aspects related to payments service provision, including governance-related matters, are transparent.
- 2.1.2 Integrated, holistic, timely and meaningful management information is made available to all authorised payment system stakeholders.
- 2.1.3 Management information is actively utilised to achieve policy objectives.
- 2.1.4 Trust in payment systems grows as a result of increased transparency and public accountability.

2.2 Benefits

- 2.2.1 There is increased trust in payment systems.
- 2.2.2 A more level playing field for all system participants should help to spur competition.
- 2.2.3 Trends in the NPS are identified and potential risks are revealed, leading to safer and more efficient payment systems.

2.3 Strategies and tactics

- 2.3.1 Identify gaps and/or core requirements in the current management information acquisition and dissemination process.
- 2.3.2 Align to global regulatory and governance principles where applicable, such as the Principles for Financial Market Infrastructures.
- 2.3.3 Adopt modern global standards, such as ISO³ 20022, to ensure data richness.
- 2.3.4 Foster domestic, regional and global interoperability.
- 2.3.5 Design, develop and implement integrated management information systems.
- 2.3.6 Disseminate widely available risk management information to all authorised parties in the NPS.
- 2.3.7 Assist the market conduct regulator, where required, in achieving its objectives related to payment systems, such as transparency on payment product pricing. The SARB will conclude a memorandum of understanding with the market conduct regulator to assist in this process.
- 2.3.8 Launch consumer education initiatives.

3. Financial stability and security

The continued evolution of technology and the related cyber-threats require payment system participants to understand and mitigate potential systemic risks to ensure the continued stability and security of the national payment system.

The stability and security of payment systems is of paramount importance for the SARB and all other payment system stakeholders. Systemic vulnerabilities can harm individual system stakeholders and their customers, and can potentially have negative effects on commerce, which could threaten economic development. Despite the global financial crisis of 2007–08, the systemic and contagion risks related to payment systems in South Africa have been well managed. This is due in part to the adoption of the Bank for International Settlements (BIS) Core Principles of Systemically Important Payment Systems and the continued application of the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO)'s Principles for Financial Market Infrastructures. As payment infrastructures continue to evolve, the continued focus on resilience and the mitigation of liquidity, credit, legal, operational and reputational risks will remain a vital task for all system stakeholders.

While adherence to global principles and standards will continue to be a priority, payment systems today are facing rapidly evolving risks that must be dealt with proactively. Technology is constantly altering the face of the end-to-end payments

value chain, and the infrastructures that support this transformation are becoming increasingly ubiquitous, more sophisticated and, in many cases, mobile. Ever-increasing volumes of payment transactions are processed in real time with limited human intervention. As financial institutions and infrastructure providers evolve to keep up with the pace of technological change, sophisticated cybercriminals continue to target banking and payment systems, with the potential to disrupt financial services and potentially the wider economy. It is thus essential that these risks are understood and that all payment infrastructures and system participants are secured against fraud and systemic risks.

3.1 Vision

- 3.1.1 All payment systems have sound and appropriate risk management frameworks for comprehensively managing legal, credit, liquidity, operational and other risks.
- 3.1.2 All payment systems identify the plausible sources of operational risks (internal and external) and mitigate their impact through the use of appropriate systems, policies, procedures and controls.
- 3.1.3 Business continuity management aims for the timely recovery of operations and the fulfilment of payment system obligations, including in the event of a wide-scale or major disruption.
- 3.1.4 Risk management practices reflect the interconnected nature of the payment environment and technology, such as cloud and e-commerce.
- 3.1.5 Efforts to improve cybersecurity consider the end-to-end value chain and include all payment systems and system participants.
- 3.1.6 Cybersecurity practices are agile and responsive to emerging criminal activities and methods.
- 3.1.7 Risk reduction initiatives are embedded within best practice risk management frameworks.
- 3.1.8 Regulators and other payment system stakeholders actively participate in international forums on cybersecurity.
- 3.1.9 Consumers have confidence and trust in electronic payment systems and related access mechanisms or technologies.

3.2 Benefits

- 3.2.1 Liquidity, credit, legal and reputational risks are mitigated as payment systems continue their rapid evolution.
- 3.2.2 Payment system participants have a better understanding of sophisticated cyber-threats and security against fraud.

3.3 Strategies and tactics

- 3.3.1 Align to global regulatory and governance principles where applicable, such as the Principles for Financial Market Infrastructures.
- 3.3.2 Adopt modern global standards, such as ISO 20022, to ensure data richness.

- 3.3.3 Foster domestic, regional and global interoperability.
- 3.3.4 Apply risk-based fit-for-purpose regulation to all participants engaging in similar payment activities and services.
- 3.3.5 Review and implement access and participation criteria for all payment service providers.
- 3.3.6 Undertake a holistic review of payment systems and develop an industry plan to enhance individual systems and/or introduce new functionality, such as enhancing or developing the real-time gross settlement (RTGS) system, electronic funds transfers (EFTs), real-time payments (RTPs), electronic bill presentment and payments (EBPPs), and mobile payments.
- 3.3.7 Drive industry collaboration to design and implement cybersecurity incident response teams for payment systems, where appropriate.

4. Promoting competition and innovation

The South African Reserve Bank will support efforts to increase competition in specific layers of the payment services value chain in order to foster the development of innovative services while continuing to ensure the safety and soundness of the national payment system.

Competition in payment systems is vital to ensuring high service levels to end users and for spurring innovation. Due to the nature of their business and the related regulatory environment, banks have historically been the primary providers of payment services to consumers and businesses as well as the main conduit in providing access to clearing and settlement infrastructures for non-banks. However, as innovations in technology and communications make possible the entry of non-bank payment service providers such as FinTech firms, and as regulation evolves to enable access to payment infrastructures for non-banks, competition in payment services is increasing. This has resulted in greater efficiencies, improved services, and lower costs for end users. The SARB will continue to balance the objectives of efficiency, safety and soundness with promoting increased competition and participation in the payment system. Although the SARB does not have an explicit mandate to deal with competition matters, it will support the competition authority and other regulators in their endeavour to reduce product market rigidities and promote greater competition.

It is, however, recognised that although competition is vital to increasing innovation in payment systems, it is not the only factor. Promoting innovation requires industry collaboration at an infrastructure and network level. This allows individual stakeholders to compete on products and services on a commercial basis, which ultimately results in more innovation. A key element in this regard is understanding the business impact and potential risks involved in new technological developments such as RTPs, APIs and DLT. These new technologies could enable industry players to expand the scope of their activities to include services targeting the unbanked and underbanked South Africans, particularly in rural areas. This would facilitate a response from industry stakeholders to the social, economic and technological challenges in the wider economy.

At a cooperative industry level, innovation in domestic electronic payment infrastructures has been sluggish. This hesitance to cooperate could be attributed to competitors' concern of working together as a result of the historical competition-related matters arising from a previous Competition Commission enquiry into

banking practices. However, the SARB is clear that, in network economies and two-sided markets, cooperation is necessary to address country- and industry-level NPS objectives in the best interest of the transacting public of South Africa. The development of payment networks requires a collaborative approach among all stakeholders in the value chain to deliver effective services. Collaboration at the infrastructure and network level enables payment system stakeholders to compete at the product and channel layer, resulting in greater innovation as well as improved products and services for end users.

A regulator-led model to achieving industry-level infrastructure innovation has been met with some success in the past. This does not necessarily mean that regulators mandate specific outcomes, but rather that regulators create a space for the industry to compete and achieve efficiencies by removing obstacles in the market that may prevent innovation from taking place. The regulator may step in where appropriate, but would prefer market-based solutions. Examples include the introduction of the RTGS system in 1995, authenticated early debit orders and non-authenticated early debit orders in 2006, and authenticated collections in 2017. These initiatives were induced and driven by the regulator.

Improvements to central electronic payment infrastructures may boost competition and commercial opportunities for system participants by fostering innovative new products and services on the front end. For example, having a cost-effective real-time system with uniform service levels for all participants enables banks and non-banks to develop payment services that leverage the system's speed and 24/7 availability. Likewise, the use of technologies such as APIs and the adoption of rich-data standards can enable system stakeholders to offer innovative services that utilise payment information and data analytics. A collaborative approach at the infrastructure and network level needs to be encouraged and fostered in order to spur competition and innovation, thereby allowing the South African NPS to continue serving the needs of the wider public.

4.1 Vision

- 4.1.1 Economic development and financial inclusion are supported through greater competition in the provision of payment activities and services.
- 4.1.2 Banks and non-banks (including FinTech firms) compete for the full range of payment services across the entire payments value chain under the same legal and regulatory frameworks.
- 4.1.3 Payment systems provide sufficient information to enable participants to have an accurate understanding of the risks, fees and other material costs.
- 4.1.4 Consumers benefit from increased innovation, new payment products, and fairly priced services.
- 4.1.5 Increased competition leads more consumers to choose to utilise electronic payments due to greater convenience, lower cost and ease of access.
- 4.1.6 Stakeholders in the payment system (banks and non-banks) collaborate in the planning, building and maintenance of shared infrastructure.
- 4.1.7 New channels, such as mobile devices, are leveraged and utilised for payments.
- 4.1.8 RTPs are widely utilised and cost-effective.
- 4.1.9 Consumers are aware of electronic payment alternatives. Their rights and responsibilities are visible, clearly communicated, and understood.

4.2 Benefits

- 4.2.1 Increased competition can spur innovation and ensure high service levels to consumers and businesses.
- 4.2.2 Increased efficiencies should lead to lower costs for end users.
- 4.2.3 There are improved commercial opportunities for system participants.

4.3 Strategies and tactics

- 4.3.1 Explore appropriate frameworks for authorising non-banks to directly access payment systems.
- 4.3.2 Review the appropriateness of allowing non-banks to offer transaction accounts to hold and receive funds for future payment needs.
- 4.3.3 Adopt modern global standards, such as ISO 20022, to ensure data richness.
- 4.3.4 Foster domestic, regional and global interoperability.
- 4.3.5 Undertake a holistic review of payment systems and develop an industry plan to enhance individual systems and/or introduce new functionality, such as enhancing or developing the RTGS system, EFTs, RTPs, EBPPs and mobile payments.
- 4.3.6 Assist the market conduct regulator, where required, in achieving its objectives related to payment systems, such as transparency on payment product pricing. The SARB will conclude a memorandum of understanding with the market conduct regulator to assist this process.
- 4.3.7 Assess the appropriateness of innovation hubs and sandboxes for South Africa, and implement such if necessary.
- 4.3.8 Review and assess the potential impact of new technologies such as APIs, DLT, the Internet of Things (IoT) and FinTech offerings.

5. Cost-effectiveness

Ensuring cost-effective pricing models for interbank payment systems should be an effective enabler of competition, interoperability, innovation, and improved services to consumers and businesses.

Ensuring the cost-effectiveness of payment systems is a key driver of system adoption. Cost-effectiveness is key to driving usage of electronic payment systems as well as assuring efficiency and scale for banks and other payment system participants. This applies both to the costs of developing and implementing payment systems as well as to ongoing operating costs. The development of a new payment system or the overhaul of an existing system entails costs shared by the industry. However, the biggest cost for banks is internal IT and business process rejuvenation to enable back-office systems to process and screen payments faster, being available at any time, featuring richer data, and settling quicker than before. When developing new payment systems, it is therefore vital that industry stakeholders have a clear understanding of the effects on the entire value chain as well as the internal and external changes needed to accommodate this.

System operating costs and transaction fees are another key factor that could help or hinder system participation and adoption by end users. Appropriate and transparent interbank pricing should help to promote competition and can be an

effective enabler of interoperability. As noted in the SARB's *Vision 2015* document, a transparent determination of interchange fees was one of the recommendations of the Banking Enquiry. The Banking Enquiry Report acknowledged the importance of two-sided markets and the need for a fair, neutral and transparent interchange determination mechanism to replace the bilateral arrangements previously used by banks. The SARB was proposed as the appropriate entity to facilitate the establishment of such an interchange determination mechanism due to its neutrality and objective mandate.⁴

4 See pp. 17-18 in *The National Payment System Framework and Strategy: Vision 2015*, available at [https://www.resbank.co.za/RegulationAndSupervision/NationalPaymentSystem\(NPS\)/Documents/Overview/Vision2015.pdf](https://www.resbank.co.za/RegulationAndSupervision/NationalPaymentSystem(NPS)/Documents/Overview/Vision2015.pdf).

However, interchange is not the only model for the interbank pricing of payment systems. Indeed, the SARB should consult with industry stakeholders to review the costing mechanisms in all South African payment systems to determine either appropriate interchange levels or alternative pricing models that ensure the cost-effectiveness of all electronic payments. Pricing to consumers and businesses is outside of the scope of the SARB's powers, but it is hoped that more affordable interbank pricing will be passed on in the form of lower fees to end users.

5.1 Vision

- 5.1.1 The capacity, capability and processes for interbank pricing in payment systems exists and is widely accepted by payment system participants.
- 5.1.2 All stakeholders accede to a model of serving the best interest of the NPS. The SARB sees the interests of the NPS as well aligned with commercial interests. However, where the interests of the NPS and commercial interests are not aligned, the NPS should take precedence over the more narrow commercial interests (e.g. the maximization of profit by any single entity).
- 5.1.3 The SARB is recognised as the facilitator of the interchange determination process.
- 5.1.4 The SARB decides which payment systems to include in the interchange determination process and how often reviews are conducted.
- 5.1.5 The improved cost-effectiveness in interbank pricing is passed on to end users in the form of lower fees for payment services.
- 5.1.6 Cost-effectiveness helps to drive the usage of electronic payments as well as assures efficiency and scale for banks and other payment system participants.

5.2 Benefits

- 5.2.1 Cost-effectiveness drives system adoption and boosts greater efficiencies and scale for system participants.
- 5.2.2 There is increased competition.
- 5.2.3 There is improved interoperability.
- 5.2.4 More cost-effective interbank pricing can be passed on to consumers and businesses in the form of lower end-user pricing.
- 5.2.5 Increased usage of electronic payments can help to contribute to other goals (such as financial inclusion).

5.3 Strategies and tactics

- 5.3.1 Establish organisational, human resources and infrastructural capacity to review and determine the appropriate levels of interchange in respective payment streams.
- 5.3.2 Determine the relevance of interchange pricing for South African payment systems, beyond card and automated teller machine (ATM) systems, and implement the outcome.
- 5.3.3 Explore the use of interchange models in other markets and determine their relevance for South Africa for appropriate action.
- 5.3.4 Assist the market conduct regulator, where required, in achieving its objectives related to payment systems, such as transparency on payment product pricing. The SARB will conclude a memorandum of understanding with the market conduct regulator to assist in this process.

6. Interoperability

Improved communication and interoperability between payment systems will help in preventing fragmentation and lead to a more harmonised and competitive payments ecosystem.

Interoperability continues to be an important policy objective for the South African NPS. Interoperability prevents fragmentation: multiple, disparate payment systems providing similar payment offerings, where such offerings are available only to a select set of customers. As mentioned in *Vision 2010*, interoperability refers to ‘the ease of interlinking different systems on a business as well as a technology level’.⁵ Achieving this requires collaboration between payment system participants as well as contributions from all levels of the value chain: regulators, system operators, banks, non-bank payment providers, and end users.

The application of new technologies has re-emphasised the need for the adoption of open and globally endorsed standards to enable interoperability. Adherence to global, regional and domestic standards is a key enabler of interoperability. Payment systems are constantly evolving and changing, and the need for communication and interoperability between systems is growing. End users should be able to initiate payments using the instruments and channels most convenient to them, and these payments should be able to be received via multiple channels in a cost-effective manner. Having common standards helps to lower fragmentation across payment systems, thereby leading to a more harmonised and competitive payments ecosystem.

The proliferation of closed-loop domestic remittance networks in South Africa, used by consumers (particularly the unbanked and underbanked) to send and receive payments, is one manifestation of the lack of interoperability. The current fragmented environment of closed-loop remittance systems hinders consumer choice, as they are either forced to receive funds using a remittance network chosen by the sender or have limited availability of networks in their area. Promoting interoperability would enable consumers across South Africa to send and receive funds using the most convenient and most affordable remittance method available, and would increase competition between remittance providers. Increasing interoperability between formal and informal payment systems, as well as between financial infrastructures, would increase efficiencies, lower costs, and lead to more competition and innovation in payment service provision.

⁵ See p. 7 in *The National Payment System Framework and Strategy: Vision 2010*, available at [https://www.resbank.co.za/RegulationAndSupervision/NationalPaymentSystem\(NPS\)/Documents/Overview/Vision2010.pdf](https://www.resbank.co.za/RegulationAndSupervision/NationalPaymentSystem(NPS)/Documents/Overview/Vision2010.pdf).



6.1 Vision

- 6.1.1 There is increased standardization and harmonization between payment systems and instruments to increase efficiency and lower costs.
- 6.1.2 Technical compatibility between systems, as well as commercial agreements to underpin them, is established.
- 6.1.3 Regulatory frameworks enable interoperability.

6.2 Benefits

- 6.2.1 Decreased fragmentation of payment systems can increase the availability of payment services to consumers and businesses.
- 6.2.2 Lower fragmentation can lead to a more harmonised and competitive payments ecosystem.
- 6.2.3 Improved choice for end users has the potential to boost financial inclusion.
- 6.2.4 Adoption of global standards can enable future interoperability in a cross-border environment.

6.3 Strategies and tactics

- 6.3.1 Adopt modern global standards, such as ISO 20022, to ensure data richness.
- 6.3.2 Foster domestic, regional and global interoperability.
- 6.3.3 Align to global regulatory and governance principles where applicable, such as the Principles for Financial Market Infrastructures.
- 6.3.4 Explore appropriate frameworks for authorising non-banks to directly access payment systems.
- 6.3.5 Undertake a holistic review of payment systems and develop an industry plan to enhance individual systems and/or introduce new functionality, such as enhancing or developing the RTGS system, EFTs, RTPs, EBPPs and mobile payments.

7. Flexibility and adaptability

A flexible payment system architecture should help all stakeholders to meet the ever-evolving end-user demands and allow payment systems to become platforms for innovation that are fit for the future.

The rapid pace of technological change requires payment infrastructures that are flexible enough to adapt to the ever-evolving end-user expectations and business processes, and that anticipate the likely economic and social evolutions in South Africa. Any change made to the electronic payment systems today should contribute to future-proofing the system for the next 20 years. This means designing infrastructures that can accommodate future technologies and channels while catering to both current and new use cases as system adoption grows. A flexible design can also help to combat fraud and cyber-threats while opening access to new entrants. Systems that lack the flexibility to adapt to changed circumstances require more investment in the long run in the form of full system overhauls and/or replacements.

Modern electronic payment infrastructures that offer rich core functionality alongside a flexible system architecture become platforms for innovation. These systems link participants and provide speed, availability, data and initiation channels that enable participants to develop their own products and services for the market. This increases competition and innovation while meeting end-user expectations. It also provides a foundation on which to tackle larger issues (e.g. financial inclusion and economic growth). Designing flexible payment systems requires industry collaboration on standardising technology, data standards and service level agreements as well as cooperation to combat evolving threats and systemic risks. It is vital that such systems are underpinned by an enabling risk mitigation framework.

7.1 Vision

- 7.1.1 Centralised payment infrastructures, flexible to respond to rapid changes in technology and end-user expectations, are implemented.
- 7.1.2 Payment systems feature open access to core functionality to spur the development of new products and services.
- 7.1.3 There is a flexible and modern system architecture that enables increased competition and innovation.
- 7.1.4 Industry collaborates on issues related to standards, access and regulation.
- 7.1.5 Industry collaborates on issues related to combating threats and systemic risks.

7.2 Benefits

- 7.2.1 Future-proofing payment systems can help to create platforms for innovation that, in turn, helps participants to respond to future use cases and competitive demands.
- 7.2.2 A flexible payment system assists in combating fraud and cyber-threats.
- 7.2.3 A foundation is created on which to tackle larger issues (e.g. financial inclusion).
- 7.2.4 There is lower long-term investment by avoiding the need for frequent system overhauls and/or replacements.

7.3 Strategies and tactics

- 7.3.1 Explore appropriate frameworks for authorising non-banks to directly access payment systems.
- 7.3.2 Apply risk-based fit-for-purpose regulation to all participants engaging in similar payment activities and services.
- 7.3.3 Align to global regulatory and governance principles where applicable, such as the Principles for Financial Market Infrastructures.
- 7.3.4 Adopt modern global standards, such as ISO 20022, to ensure data richness.
- 7.3.5 Foster domestic, regional and global interoperability.
- 7.3.6 Undertake a holistic review of payment systems and develop an industry plan to enhance individual systems and/or introduce new functionality, such as enhancing or developing the RTGS system, EFTs, RTPs, EBPPs and mobile payments.



- 7.3.7 Review the regulatory, supervisory and oversight frameworks of the payment system to ensure harmonization across payment systems.
- 7.3.8 Assess the appropriateness of innovation hubs and sandboxes for South Africa, and implement such if necessary.
- 7.3.9 Review and assess the potential impact of new technologies such as APIs, DLT, the IoT and FinTech offerings.

8. Regional integration

The continued integration of the Southern African Development Community (SADC) economies requires payment systems that can accommodate the safe and efficient movement of money within the regional market to support SADC's aims of trade and investment within the region.

As technology enables rapid advancement in system functionality and raises new end-user expectations, it also facilitates cross-border connectivity and commerce. South African businesses and financial institutions have benefitted from efficiencies and investment opportunities resulting from the establishment of the SADC Free Trade Area. With the SADC economies becoming more integrated, payment systems must accommodate the efficient movement of money between these markets. And while the focus of *Vision 2025* is on South African domestic payment systems, the importance of regional trade for economic development in South Africa underlines the need for greater integration among the regional payment systems.

In the long term, payment system integration will also be necessary beyond the SADC region. As economic activity continues to increase internationally, it will be important for South African payment systems to be capable of integrating with systems in the continent and elsewhere around the world. In order to ensure continued global competitiveness, South African industry stakeholders should ensure that any changes to payment systems undertaken today are open for global interoperability.

The SARB is committed to the regional integration objectives within SADC and fully supports the efforts and strategic direction articulated in the SADC Regional Indicative Strategic Development Plan. South Africa's contribution to SADC should help in achieving these regional objectives to ultimately realise the goal of safe, efficient and appropriate payment service provision across the region. The SARB will continue to support participation in the SADC Integrated Regional Electronic Settlement System (SIRESS) as well as infrastructures for retail payments and post-trade clearing and settlement, with the key objective of boosting regional trade to benefit economic development and financial inclusion. Further adoption of global standards, such as ISO 20022, will be a key enabler of regional integration, as will the ensuring of flexibility in existing infrastructures to accommodate future cross-border use cases within SADC. Markets that are more integrated will stimulate economic activity and contribute to economic development, thereby boosting the standards of living in South Africa and its SADC neighbours.

8.1 Vision

- 8.1.1 Safe, efficient and cost-effective payment systems that serve the needs of South Africans in regional trade and development are established.
- 8.1.2 There are payment systems that are flexible enough to accommodate regional use cases for consumers and businesses in South Africa.

8.1.3 There is continued collaboration among SADC partners to align payment system developments.

8.1.4 South Africa continues to participate in SADC payment infrastructures.

8.2 Benefits

8.2.1 Regional trade is boosted by facilitating cross-border connectivity and commerce.

8.2.2 There is increased economic development and financial inclusion within the SADC region.

8.3 Strategies and tactics

8.3.1 Adopt modern global standards, such as ISO 20022, to ensure data richness.

8.3.2 Foster domestic, regional and global interoperability.

8.3.3 Drive industry stakeholders to play a more active role in the harmonization of the legal, regulatory and governance frameworks within SADC as part of the Committee of Central Bank Governors in SADC.

8.3.4 Initiate interventions to actively support the harmonization of payment codes, other data elements, and technical standards within SADC as part of the Committee of Central Bank Governors in SADC.

9. Financial inclusion

Cooperation and collaboration among industry stakeholders should ensure that the national payment system contributes to deepening financial inclusion by providing access to the effective use of formal financial products for all South Africans.

Financial inclusion remains one of the SARB's priorities. It can play a vital role in achieving the goals of eliminating poverty and reducing inequality, as outlined in the National Development Plan 2030.

Financial inclusion entails access to electronic payments but also access to savings, credit and insurance services. It may also involve providing greater access to cash services (e.g. cash-in and cash-out remittance schemes) as a way to increase trust in formal financial products and provide a transition towards electronic payments for underserved communities. Achieving this requires widespread collaboration across the entire financial services industry and business community. While payment systems alone cannot guarantee greater financial inclusion, the absence of safe, efficient, interoperable and cost-effective electronic payment systems would be an impediment to the efforts aimed at improving access to formal financial products and services. Payment systems play a vital role as a foundation for deepening financial inclusion by providing access to, and the effective use of, formal financial products and services for all South Africans.

The NPS is viewed as a gateway to payment services for the financially excluded. With the cooperation and commitment of all stakeholders, the NPS can facilitate and support the efficient provision of both necessary and complimentary financial services, including savings, insurance and credit. The South African payment

systems should accommodate the realities and payment habits of the financially underserved. This includes access to cash-in and cash-out remittance services as well as greater interoperability between domestic remittance schemes. The existing regulation should be reviewed to ensure that the requirements for providers servicing the underbanked are in line with the risks that they present to payment systems. The regulatory framework should enable non-bank service providers to access payment systems to improve the reach of payment services. The role of consumer education in boosting awareness as well as trust in electronic payment systems is crucial, and the SARB will work with other authorities to actively support industry efforts aimed at educating South Africans on payment products and services in a fair and transparent manner.

Achieving financial inclusion requires willingness and commitment from both public- and private-sector stakeholders to create an enabling environment and make the NPS an effective gateway for financial inclusion in South Africa.

9.1 Vision

9.1.1 There are safe, efficient and cost-effective payment systems in place that serve all segments of the South African economy.

9.1.2 The NPS acts as a conduit that facilitates financial deepening.

9.2 Benefits

9.2.1 The living standards of the financially excluded are improved, thereby contributing to a more just and more equitable society.

9.2.2 Commercial opportunities for payment system stakeholders are increased by growing the overall base for financial services provision.

9.3 Strategies and tactics

9.3.1 Launch consumer education initiatives.

9.3.2 Implement relevant guiding principles of the Payment Aspects of Financial Inclusion (PAFI) report.

9.3.3 Explore appropriate frameworks for authorising non-banks to directly access payment systems.

9.3.4 Review the appropriateness of allowing non-banks to offer transaction accounts to hold and receive funds for future payment needs.

9.3.5 Apply risk-based fit-for-purpose regulation to all participants engaging in similar payment activities and services.

9.3.6 Undertake a holistic review of payment systems and develop an industry plan to enhance individual systems and/or introduce new functionality, such as enhancing or developing the RTGS system, EFTs, RTPs, EBPPs and mobile payments.

Overview of suggested *Vision 2025* strategies

Table 2 provides a breakdown of each strategy suggested in *Vision 2025* and the goal(s) to which these strategies can be applied.

Table 2: *Vision 2025* strategies and goals

Strategy	A clear and transparent regulatory and governance framework	Transparency and public accountability	Financial stability and security	Promoting competition and innovation	Cost-effectiveness	Interoperability	Flexibility and adaptability	Regional integration	Financial inclusion
1. Align to global regulatory and governance principles where applicable, such as the Principles for Financial Market Infrastructures.	X	X	X			X	X		
2. Adopt modern global standards, such as ISO 20022, to ensure data richness.		X	X	X		X	X	X	
3. Foster domestic, regional and global interoperability.		X	X	X		X	X	X	
4. Apply risk-based fit-for-purpose regulation to all participants engaging in similar payment activities and services.			X				X		X
5. Assess the appropriateness of innovation hubs and sandboxes for South Africa, and implement such if necessary.				X			X		
6. Assist the market conduct regulator, where required, in achieving its objectives related to payment systems, such as transparency on payment product pricing. The SARB will conclude a memorandum of understanding with the market conduct regulator to assist in this process.		X			X				
7. Design, develop and implement integrated management information systems.		X							
8. Determine the relevance of interchange pricing for South African payment systems, beyond card and ATM systems, and implement the outcome.					X				
9. Develop fair, transparent and objective criteria to determine industry-level regulatory and governance issues.	X								
10. Disseminate risk management information to all authorised parties in the NPS.		X							

Strategy	A clear and transparent regulatory and governance framework	Transparency and public accountability	Financial stability and security	Promoting competition and innovation	Cost-effectiveness	Interoperability	Flexibility and adaptability	Regional integration	Financial inclusion
11. Drive industry collaboration to design and implement cybersecurity incident response teams for payment systems, where appropriate.			X						
12. Drive industry stakeholders to play a more active role in the harmonization of the legal, regulatory and governance frameworks within SADC and as part of the Committee of Central Bank Governors in SADC.								X	
13. Ensure an appropriate consumer protection framework for payment services.	X								
14. Establish organisational, human resources and infrastructural capacity to review and determine the appropriate levels of interchange in respective payment streams.					X				
15. Explore appropriate frameworks for authorising non-banks to directly access payment systems.	X			X		X	X		X
16. Explore the use of interchange models in other markets and determine relevance for South Africa for appropriate action.					X				
17. Identify gaps and/or core requirements in the current management information acquisition and dissemination process.		X							
18. Implement key initiatives such as the NPS Act review and the PSMB effectiveness review.	X								
19. Implement relevant guiding principles of the PAFI report.									X
20. Initiate interventions to actively support the harmonization of payment codes, other data elements and technical standards within SADC and as part of the Committee of Central Bank Governors in SADC.								X	
21. Launch consumer education initiatives.		X							X

Strategy	A clear and transparent regulatory and governance framework	Transparency and public accountability	Financial stability and security	Promoting competition and innovation	Cost-effectiveness	Interoperability	Flexibility and adaptability	Regional integration	Financial inclusion
22. Review and implement access and participation criteria for all payment service providers.	X		X						
23. Review the appropriateness of allowing non-banks to offer transaction accounts to hold and receive funds for future payment needs.				X					X
24. Review the regulatory, supervisory and oversight frameworks of the payment system to ensure harmonization across payment systems.	X						X		
25. Review and assess the potential impact of new technologies such as APIs, DLT, the IoT and FinTech offerings.				X			X		
26. Undertake a holistic review of payment systems and develop an industry plan to enhance individual systems and/or introduce new functionality, such as enhancing or developing the RTGS system, EFTs, RTPs, EBPPs and mobile payments.			X	X		X	X		X

The way forward

The goals outlined in *Vision 2025* should guide the development of the South African NPS over the next decade and should support the aims of the National Development Plan 2030 to eliminate poverty and reduce inequality. The vision set out by the SARB is only a first step; it is up to the industry to take the lead in detailing project plans aligned to the strategies to meet these goals. Future payment systems will be marked by the inclusion of new players across the value chain and the wider adoption of capabilities such as real-time payment processing. Regulatory frameworks must keep pace with this rapid evolution. The uniform application of regulation to all parties providing similar services will help to maintain a level playing field, irrespective of whether the NPS participant is a bank or a non-bank. The SARB will continue to ensure system stability through robust risk management frameworks. The adoption and continued assessment of adherence to regulatory standards such as the Principles for Financial Market Infrastructures is critical to ensure the continued safe and efficient operation of the NPS. All of these factors are expected to increase competition, leading to greater efficiencies and lower costs in payment systems.

Improved access and the uptake of electronic payments will play a vital role in contributing to financial deepening across South African society. By implementing collaborative strategies to meet the SARB's vision for the NPS, industry stakeholders

can help to build a payment system for the current and the future needs of the South African economy. Improvements in payment systems should contribute to economic development and financial inclusion, thereby growing the overall market for payment services. This will enable new opportunities for banks and non-banks as they develop innovative services for South African consumers and businesses. The SARB is eager to facilitate cooperative industry efforts in this area as well as to contribute towards achieving a more just and equitable economy for all South Africans.

The next steps

The development of *Vision 2025* is only the first step in the process of enhancing the current NPS. A clearly articulated vision must be accompanied by a transparent, industry-wide process to implement the identified payment system strategies and monitor progress on their execution. Upon publication, South African payment industry stakeholders should engage in collaboration on the implementation of these strategies to achieve the goals outlined in *Vision 2025*. The next steps in this process include the following:

1. The SARB shall convene the Payments Council as soon as it is established to work closely with the recognised industry forums and any other payment stakeholder or regulatory authority to plan the implementation of the payment system strategies and develop metrics to monitor progress. The Payments Council shall be an enabling governance mechanism for payment system stakeholders to collaborate on detailing and prioritising payment system strategies.
2. The recognised industry forums and any other payment stakeholder or regulatory authority will assist the SARB to develop and monitor detailed implementation plans for industry strategies as identified by the SARB. The Payments Council will support the SARB, the recognised industry forums, and any other payment stakeholder or regulatory authority in this regard, but also monitor progress as well as coordinate and collaborate with other regulatory authorities.
3. During the first half of 2018, a strategic plan should be prepared by the SARB, in collaboration with recognised industry forums, and any other payment stakeholder or regulatory authority.
4. The Payments Council and the SARB should regularly review the progress on the implementation of strategies. The timelines to review progress should be recommended by the Payments Council and approved by the SARB, and implementation should occur no later than by 2025.

Throughout this process, the Payments Council will work closely with the SARB, the PSMB, and any other payment stakeholder or regulatory authority, such as the Financial Sector Conduct Authority, to provide support in implementing strategies and monitoring progress on enhancing the NPS.

Success will depend on open collaboration among stakeholders, regulators, the recognised industry forums, and the SARB. Industry collaboration should help to ensure an enabling environment in which payment system goals are pursued and *Vision 2025* is realised.

Annexure: Vision 2015 scorecard: a self-assessment

Strategic objectives					Comments
1. Access to the national payment system					
1.1	Continue to evaluate and improve the participation of non-bank stakeholders in the clearing system and/or formal payment system management structures.		X		Non-banks have been allowed access to the NPS with directives in both the inner and the outer cores. However, the Vision 2025 consultation process revealed that the regulation, representation and voting rights of these entities have been insufficient and lopsided.
1.2	Allow non-banks access to the NPS via directives.	X			
1.3	Enhance growth paths for participation in the NPS.		X		The Vision 2025 consultation process highlighted that there is a lot more for the SARB to do, with a wide range of stakeholders calling for additional intervention by the regulator. Consequently, non-bank participation in the NPS remains a focus area for the SARB over the next 10 years, as highlighted in goal 1 of the Vision 2025 publication, relating to a clear and transparent regulatory and governance framework.
1.4	Enhance entry criteria and other regulatory requirements or participants.		X		
1.5	Introduce different tiers of participation in the clearing environment of the NPS.		X		
1.6	Introduce designation for different levels of non-bank participation in the NPS. Different tiers of designation can be implemented by placing different criteria in the designation notice.	X			The SARB will continue to work on making access to and participation in the formal NPS more effective and efficient, with a clear emphasis on the safety and efficiency of the system as a whole.
1.7	Amend legislation to enhance formal participation, where required.			X	Additionally, enhanced access for the consumer will also be pursued, as discussed in the 'Financial Inclusion' chapter.
1.8	Conclude memorandums of understanding between the SARB's National Payment System Department and other regulators.	X			
2. Oversight of the national payment system					
2.1	Identify systemic risk(s) emanating from the NPS proactively.	X			South Africa embracing the Principles for Financial Market Infrastructures constitutes a strengthening of oversight practices and alignment to international best practices by the SARB.
2.2	Enhance the effectiveness of NPS oversight.		X		
2.3	Continue to evaluate and enhance formal overarching payment system management structures, which include bank and non-bank participants.		X		The re-emphasis of the Principles for Financial Market Infrastructures in goal 2 of Vision 2025 constitutes a signal to NPS participants and international bodies that the SARB continues to be committed to ensuring alignment with and adherence to these Principles.
2.4	Take cognisance of other regulatory developments and align the NPS, where required.		X		
2.5	Align South African oversight arrangements and practices with international best practice.	X			The SARB continues to actively participate and engage in international and regional forums of the BIS, SADC, and the Continuous Linked Settlement system cooperative oversight structure.
2.6	Continue to maintain a focus on non-bank oversight.		X		
2.7	Continue to participate in international oversight workgroups and forums, for example the BIS CPMI and the Continuous Linked Settlement system cooperative oversight structure.	X			

Annexure: Vision 2015 scorecard: a self-assessment (continued)

Strategic objectives		Achieved	Partially achieved	Not achieved	Comments
3. Communication on the national payment system					
3.1	Ensure that sufficient payment system information is available to all stakeholders.		X		Management information in the NPS for both the regulator and the participants constitutes an area for improvement, with many stakeholders indicating dissatisfaction with the amount and level of information requested and provided by the regulator.
3.2	Utilise payment system management structures for effective communication.		X		
3.3	Utilise conferences, summits and communication programmes.	X			Management information and communication are therefore explicitly and separately addressed in <i>Vision 2025</i> , with the intention of drastically improving the efficiency and effectiveness of both elements.
3.4	Establish bank and non-bank strategy workgroups.	X			
4. Human resources capacity enhancement in the national payment system					
4.1	Involve key stakeholders in payment system capacity building.	X			Several strides have been made in the area of human resources capacity enhancement with the introduction of the Payments Association of South Africa foundational course. However, human resources capacity remains a priority for the SARB and is featured in <i>Vision 2025</i> too as more can be done to ensure that adequate and skilled human resources continue to exist, and that these initiatives are aligned to the demographics of South Africa.
4.2	Establish NPS 'business school' training and education programmes.	X			
4.3	Utilise conferences, summits and other capacity-building initiatives.	X			<i>Vision 2025</i> broadens this theme to include consumer education as an additional focus area, with the intention of improving the general population's payments-related acumen.
5. Infrastructural developments for the national payment system					
5.1	Support payment system infrastructure initiatives that enable access to payment services.		X		Technological advancements have resulted in unprecedented channel-level payments innovations. And while platforms have remained relatively stable and fit for purpose, innovation at an industry-wide level has slackened.
5.2	Ensure that the capability of the payment infrastructure owned by the central bank is maintained.	X			The <i>Vision 2025</i> consultation process revealed that NPS participants tend to innovate in isolation, resulting in several separate pockets of similar (often identical) products and services accessible only to the product/service provider's customer base.
5.3	Ensure that the payment, clearing and settlement infrastructure is robust and in line with domestic, international and regional requirements and standards.	X			Interoperability remains a fundamental principle of the NPS. In an attempt to keep the South African payments industry relevant and at the international forefront, the SARB will take the lead in ensuring that industry- and platform-level innovation and development advances in a manner that benefits the system as a whole and its end users. Goal 4 of <i>Vision 2025</i> captures the SARB's vision for platform-level innovation and development.
5.4	Continually review and update the payment, clearing and settlement infrastructure to ensure that the safety and efficiency objectives are achieved.	X			
5.5	Simplify and rationalise the South African payment settlement infrastructure.		X		
5.6	Continue to ensure effective business continuity planning and disaster recovery processes in the payment system.	X			
5.7	Ensure that the capability of the privately owned payment infrastructure is maintained.	X			
5.8	Identify and rectify potential operational risks on a proactive basis, including the elimination of single points of failure in the payment system.	X			
5.9	Ensure that payment system participants implement applicable standards.	X			
5.10	Promote the principle of authentication for all payment instructions.	X			

Annexure: Vision 2015 scorecard: a self-assessment (continued)

Strategic objectives		Achieved	Partially achieved	Not achieved	Comments
6.	Regional infrastructural integration of the national payment system				
6.1	Facilitate and act as a catalyst in the regional infrastructure integration processes.	X			SIRESS launched in July 2013, allowing gross real-time settlement of regional transactions among the banks within SADC. The SARB remains committed to the regional integration efforts within SADC and fully supports the efforts and strategic direction articulated in the SADC Regional Indicative Strategic Development Plan. The continued commitment and participation of South African participants remains crucial in the execution of this SADC initiative.
6.2	Follow a phased approach in the SADC regional infrastructure integration processes embarking on the initial integration of CMA payment, clearing and settlement systems as a model for the wider SADC process.		X		
6.3	Participate in the SADC payment, clearing and settlement systems initiatives.	X			
6.4	Participate in, and align to, the SADC regional oversight arrangements and practices.	X			
6.5	Align to the SADC regional payment system standards and practices.	X			
6.6	Participate in arrangements to provide a sound legal framework for the regional payment system.		X		
6.7	Implement adequate business continuity plan and disaster recovery arrangements in the region.	X			
6.8	Stay abreast of international and other payment system developments on the African continent.	X			
7.	Interchange determination in the national payment system				
7.1	Appoint an independent facilitator.		X		Initiated in 2011, Phase 1 of the Interchange Determination Project (IDP) concluded that interchange is a necessary component of the incentives to roll out and maintain infrastructure required in the provision of payment services as it creates interoperability and efficiency in relevant payment streams. In the execution of Phase 2 of the project, the SARB contracted a service provider who, under the oversight and with active involvement of the SARB, engaged in the gathering, evaluation and determination of the relevant costs associated with the provision of a payment service, based on which an appropriate interchange rate was determined. The identified priority payment streams of ATMs and cards were addressed first in this process. An 'independent, objective and transparent' process, recommended by the Banking Enquiry, produced cost-based interchange rates for ATM transactions, including balance enquires, cash withdrawals and declined transactions which were implemented in 2014. Credit and debit cards as well as cash-back at point-of-sale transactions were implemented in 2015. Phase 3 of the IDP focused on the secure integration and automation of data submissions by participants as well as the embedding of the IDP into a business-as-usual process within the SARB.
7.2	Appoint an independent expert entity for interchange determination.	X			
7.3	Ensure the opportunity for adequate consultation with specific stakeholders.	X			
7.4	Monitor the progress made with the interchange determination process.	X			
7.5	Implement appropriate levels of interchange in the relevant payment streams.		X		
7.6	Establish domestic organisational, human resources and infrastructural capacity to review and determine appropriate levels of interchange in the respective payment streams in the future.			X	

Abbreviations

API	application programming interface
ATM	automated teller machine
BIS	Bank for International Settlements
BRICS	Brazil, Russia, India, China and South Africa
CMA	Competition and Markets Authority
CPMI	Committee on Payments and Market Infrastructures
DLT	distributed ledger technology
EBPP	electronic bill presentment and payment
EFT	electronic funds transfer
FinTech	financial technology
FSCA	Financial Sector Conduct Authority
G20	Group of Twenty
IDP	Interchange Determination Project
IoT	Internet of Things
ISO	International Organization for Standardization
IT	information technology
NPS	national payment system
NPS Act	National Payment System Act 78 of 1998
PSMB	Payment System Management Body
RTGS	real-time gross settlement
RTP	real-time payment
SADC	Southern African Development Community
SARB	South African Reserve Bank
SIRESS	SADC Integrated Regional Electronic Settlement System