

SOUTH AFRICAN RESERVE BANK

National Payment System Department

Consultation paper on the feasibility of
establishing a domestic card scheme
in South Africa

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1. Introduction and background

- 1.1 In terms of section 10(1)(c)(i) of the South African Reserve Bank Act 90 of 1989, as amended (SARB Act), the South African Reserve Bank (SARB) is required to 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. Furthermore, the National Payment System Act 78 of 1998 (NPS Act) provides for the management, administration, operation, regulation and supervision of payment, clearing and settlement systems in the Republic of South Africa, and to provide for connected matters. The power to perform the functions as provided in the SARB Act and the NPS Act are performed by the National Payment System Department (NPSD) within the SARB.
- 1.2 The national payment system (NPS) encompasses the entire payment process, from payer to beneficiary, and includes settlement between banks. The process includes all the tools, systems, mechanisms, institutions, agreements, procedures, rules or laws applied or utilised to effect payment. The NPS enables the circulation of money, that is, it enables transacting parties to exchange value. The NPS further contributes to the economy and financial stability in South Africa.
- 1.3 A card scheme allows for the efficient and secure exchange of funds through the operation of networks and common standards and rules governing point-of-sale (POS), e-commerce and automated teller machine (ATM) card transactions. In South Africa, Visa and MasterCard have dominated the card scheme market. In 2019, approximately 48.8 million cards were in circulation in South Africa, and 5.6 billion transactions to the value of R2.1 trillion were processed. This is an increase in volume of 16.2% and in value of 15.6% compared to 2018. A card scheme is therefore a key component of the NPS.

- 1.4 Over the years, jurisdictions¹ have come to realise the critical role played by card schemes, including the processing of transactions (authorisation and clearing) in the card payment ecosystem. As a result, some have established domestic card schemes to better serve their communities and manage risks in their payment systems. Specifically, domestic card schemes could be leveraged to better serve the unbanked market and increase competition within the payments landscape.
- 1.5 The 2008 Banking Enquiry - Report to the Competition Commissioner by the Enquiry Panel noted that “most South Africans have no immediate need of a card that can be used overseas. This raises the question regarding the scope for developing white label or locally branded cards as cheaper alternatives to the brands of the major card schemes – especially for consumers who do not enter into global internet transactions or use cards beyond the borders of South Africa or beyond the Southern African Development Community (SADC). Expansion of such cards on a national basis has intuitive appeal, especially given the successful national white label schemes developed in the past in countries such as Norway”.
- 1.6 The ‘Consultation paper on the processing of payments in South Africa’,² published by the SARB in November 2018, addressed concerns related to the offshore processing of domestic transactions by card schemes. The recommendations included the establishment of a domestic scheme or white label card. In order to adequately protect domestic issuing capabilities, it is crucial to holistically address the significance and contribution of card schemes to NPS objectives and strategies.
- 1.7 Accordingly, the SARB is facilitating the assessment of the feasibility of establishing a domestic card scheme. The success of a sustainable domestic card scheme would depend on the collective effort and support of card issuers

¹ For example, India, Russia, Turkey, Italy and Nigeria.

²<https://www.resbank.co.za/content/dam/sarb/what-we-do/payments-and-settlements/regulation-oversight-and-supervision/document-for-comments/Domestic%20Processing%20-%2014%20Nov%202018%20-publication.pdf>

(issuers), card acquirers (acquirers), retailers, consumers, regulators, policymakers, government departments, government agencies, financial technology companies (fintechs) and other interested parties.

2. Purpose

2.1 The purpose of this consultation paper is to obtain opinions, views and suggestions on the feasibility of establishing a domestic card scheme and to request stakeholders to complete a questionnaire in this regard.

3. Scope and objective

3.1 The scope of the paper focuses on the feasibility of establishing a domestic card scheme in South Africa.

3.2 The broader objective is primarily to enhance the safety and efficiency of the NPS and to achieve the goals of the *National Payment System Framework and Strategy - Vision 2025*³ relating to financial stability and safety, competition, interoperability, financial inclusion and cost-effectiveness.

4. What is a card scheme?

4.1 A card scheme entails a card payment network, to which an eligible institution may become a licensed member.⁴ It provides brand management; establishes legal and procedural rules as well as technical and security standards; and performs regular audits for issuers and acquirers in relation to its entire card payment system network. It also licenses issuers and acquirers to use its network. The issuer contracts and provides the cardholder with a card payment instrument bearing the logo of the relevant card scheme to make payments. The acquirer contracts and enables the merchant to accept card payments from

³ See the *National Payment System Framework and Strategy – Vision 2025*, available at <https://www.resbank.co.za/content/dam/sarb/what-we-do/payments-and-settlements/Vision%202025.pdf>

⁴ Interbank rules for card debit payment instructions and card credit payment instructions in South Africa.

the cardholder. In addition, some merchants may display the card scheme logo outside their stores, indicating to cardholders that cards associated with the relevant card scheme are accepted in the store.

4.2 Furthermore, the card scheme ensures that its rules and standards comply with the regulations of the country in which it operates.

4.3 There are two main models:

4.3.1 **Four-party scheme:** This is also known as an open scheme. A four-party card scheme has no direct relationship with the merchant or cardholder. It enables multiple issuers and acquirers to connect to the same card network. The issuer has a contractual relationship with the cardholder while the acquirer contracts with the merchant. For example, Visa and MasterCard are the dominant card schemes accepted by all South African merchants that accept card payments. This is attributable to the rules of the Payments Association of South Africa (PASA), which require that acquirers must be licensed with all card schemes and have a service agreement with all payment clearing house system operators (PSOs).

4.3.2 **Three-party scheme:** This is also known as a closed scheme. The card scheme is both the issuer and the acquirer and contracts with both the cardholder and the merchant. Examples include Diners Club and American Express.

5. Overview of the card scheme landscape in South Africa

5.1 South Africa currently has no domestic card scheme. The following international card schemes operate in South Africa:

5.1.1 **Visa and MasterCard:** These are four-party schemes. Both Visa and MasterCard are companies based in the United States (US). They respectively own, manage and license international retail product brands as well as an international telecommunications network and several processing centres.

MasterCard and Visa clients are primarily institutions that issue cards (i.e. credit, debit and prepaid) and/or act as acquirers for merchants that accept MasterCard and/or Visa cards. Both MasterCard and Visa grant licences to issuers and acquirers, in accordance with their respective card scheme rules and standards, to use their brands and access their networks. Issuers independently set and charge fees and interest, decide on credit and spending limits, and choose which benefits should be offered to cardholders.⁵ MasterCard and Visa revenue is derived primarily from fees paid by issuers and acquirers based on payments volume and services provided (such as fraud management). At a business level the card schemes manage the brand.⁶ They establish and maintain rules and regulations as well as manage issues such as membership, governance, technical specifications and dispute resolution. At an operational level, they provide the processing of payments (authorisation and clearing), value-added services (e.g. fraud detection), and calculate what issuers and acquirers owe each other. Issuers and acquirers receive a daily reconciliation with their final settlement position. MasterCard and Visa independently send files to the South African Multiple Option Settlement (SAMOS) system for final settlement of transactions among issuers and acquirers.

5.1.2 Diners Club: This is a three-party scheme. Diners Club is a US-based company. In South Africa, Diners Club operates as a wholly owned subsidiary of The Standard Bank of South Africa Limited (Standard Bank) under a franchise agreement with Diners Club International Limited. Diners Club issues and acquires Diners Club branded cards. Transactions initiated through the use of a Diners Club card may either be ‘on-us’ payment instructions, as part of a closed-loop business model, or cleared and settled in the payment

⁵ Bank for International Settlements, *Payment, clearing and settlement systems in the CPSS countries*, Volume 2, November 2012.

⁶ Reserve Bank of Australia and Australian Competition and Consumer Commission, *Debit and credit card schemes in Australia: a study of interchange fees and access*, October 2000.

system by Standard Bank on behalf of Diners Club. Therefore, Diners Club is designated as a clearing system participant in accordance with the NPS Act.⁷

5.1.3 **American Express:** This is a three-party scheme. American Express is a US-based company. It generally acts as both a card issuer and acquirer, operating its own network and processing transactions. However, in South Africa, American Express® is a registered trademark of American Express. It operates under the Nedbank Limited (Nedbank) licence.⁸ Nedbank is the exclusive issuer and acquirer of American Express cards within South Africa. American Express signs up merchants to accept its cards. The merchants are not charged annual or monthly fees but are only charged per American Express transaction.⁹ American Express offers credit cards and membership rewards to its cardholders (individuals and business).¹⁰

6. Card payment transaction flow in a three-party scheme and associated fees

The following figure depicts the charges and stakeholders involved in a three-party scheme:

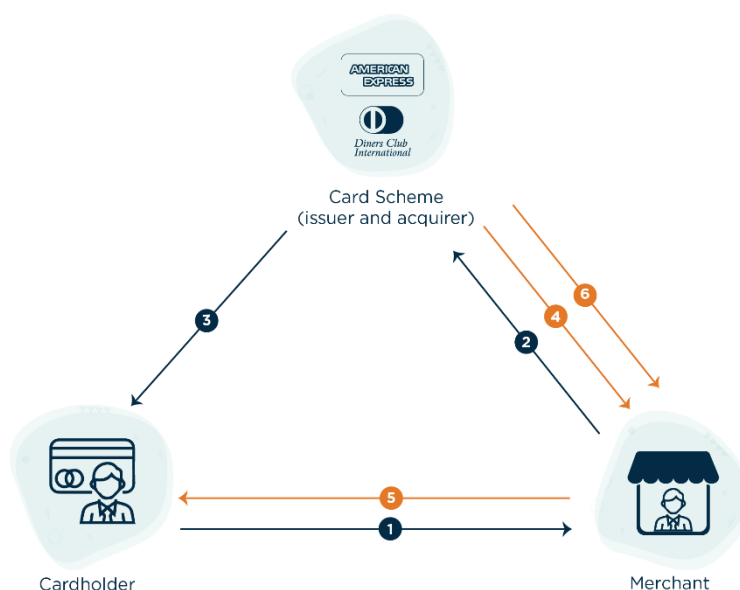
⁷https://www.resbank.co.za/content/dam/sarb/what-we-do/payments-and-settlements/designations/879of2013_DinersClub.pdf

⁸https://www.nedbank.co.za/content/dam/nedbank/site-assets/Business/Card1/Brochures/Amex_Corp%20Fees-6pp_2018_V5.pdf

⁹ <https://www.americanexpress.com/en-za/network/business/merchant/>

¹⁰<https://www.nedbank.co.za/content/nedbank/desktop/gt/en/news/press-room-media-centre/Pressroom/2020/amex-membership-rewards-card.html>

Figure 1: A card transaction flow in a three-party scheme



6.1 Transaction flow

1. The cardholder buys goods or services from the merchant and pays using his/her card.
2. The merchant requests authorisation from the card scheme.
3. The card scheme either approves or declines the transaction after checking whether the cardholder has sufficient funds. The card scheme also debits the cardholder's account.
4. The card scheme sends a response to the merchant.
5. The merchant completes the transaction and releases the goods.
6. The card scheme credits the merchant's account in its books.

6.2 Fees charged in a three-party scheme

- 6.2.1 **Cardholder:** The cardholder may be charged a transaction fee by the card scheme. In addition, the card scheme may charge monthly bank charges, annual fees and interest on credit card payments. In addition, the merchant may indirectly recover merchant service fees (fees charged for processing the

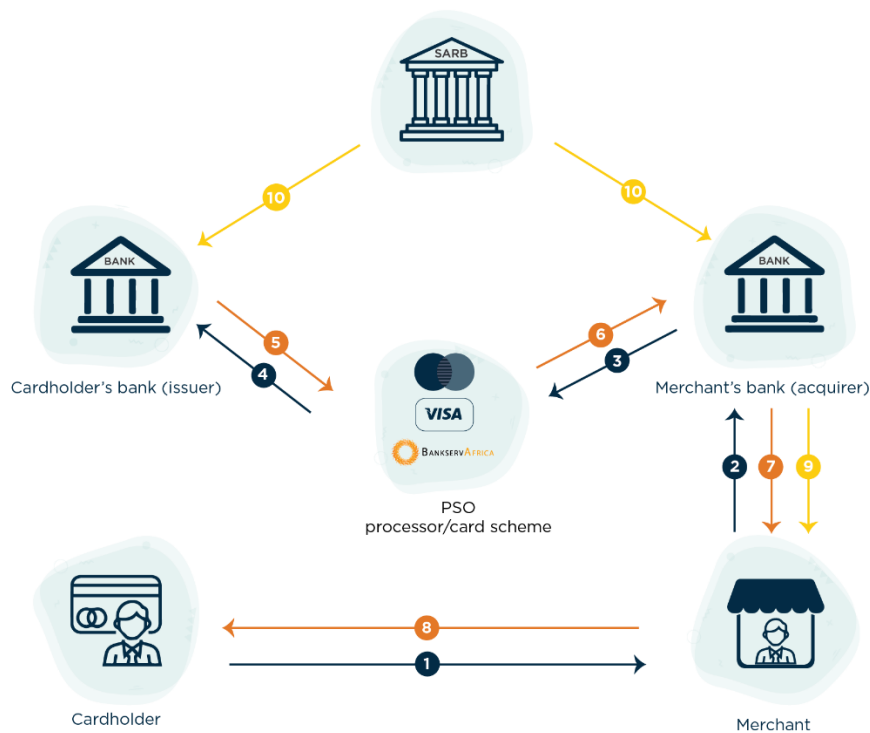
transaction by the card scheme) from the pricing of consumer goods and/or services.

6.2.2 **Merchant:** The fees could include a processing cost per transaction.

7. Card payment transaction flow in a four-party scheme and associated fees

The following figure depicts the charges and stakeholders involved in a four-party scheme:

Figure 2: A card transaction flow in a four-party scheme



7.1 Transaction flow

1. The cardholder buys goods or services from the merchant and pays using his/her card.
2. The merchant requests authorisation from the merchant's bank.

3. The merchant's bank submits the authorisation request to a PSO (processor/card scheme).
4. The PSO sends the authorisation request to the issuer (cardholder's bank).
5. The issuer either approves or declines the transaction after checking whether the cardholder has sufficient funds. The issuer also debits the cardholder.
6. The PSO forwards the issuer's authorisation response to the merchant's bank.
7. The merchant's bank sends a response to the merchant.
8. The merchant completes the transaction and releases the goods.
9. The merchant's bank credits the merchant's account in its books.
10. The cardholder's bank settles the transaction with the merchant's bank (through the SAMOS system, operated by the SARB).

7.2 Fees charged in a four-party scheme

7.2.1 **Cardholder:** The cardholder may be charged a transaction fee by the issuer. In addition, the issuer may charge monthly bank charges, annual fees and interest on credit card payments. In addition, the merchant may indirectly recover merchant service fees (fees charged by the acquirer) from the pricing of consumer goods and/or services.

7.2.2 **Merchant:** The acquirer may charge the merchant the following fees (merchant service fees)¹¹ which could consist of the following:

- a. Interchange fee: This fee is determined by the SARB and is paid by the acquirer to the issuer for cardholder purchases.
- b. Assessment and network fee: This is a fee that is due to the card scheme and is paid by the acquirer.
- c. Acquiring fee or margin fee: This is a fee that is paid to the acquirer. It may include rent for POS terminals (where the POS terminal belongs to the merchant – this typically occurs for small- or medium-sized merchants) or

¹¹ <https://ikajo.com/glossary/merchant-service-charge-msc>

a connectivity fee (where the POS terminal does not belong to the acquirer – this typically occurs with large retailers that have their own POS terminals). The fees include processing costs. The merchant fees are dependent on the sector and size of the merchant.

7.2.3 **Issuer:** The issuer pays membership and scheme fees to the card scheme. In addition, the issuer pays processing fees to a PSO.

7.2.4 **Acquirer:** The acquirer pays membership and scheme fees to the card scheme. The acquirer also pays processing fees to PSOs.

7.2.5 **PSO:** The processing of the transaction could occur either through an independent processor or the card scheme. In South Africa, the issuer decides where a card transaction is processed. The PSO will charge the issuer and acquirer processing fees.

8. Role of issuer, acquirer and card scheme

Card scheme	Card issuer	Card acquirer
<p>Role of the card scheme: <i>Provides rules and standards for the entire card scheme network</i></p>	<p>Role of the card issuer: <i>Provides the card to the cardholder</i></p>	<p>Role of the card acquirer: <i>Requests authorisation of a card transaction on behalf of the merchant</i></p>
<ol style="list-style-type: none"> Card scheme membership: Provides the issuer and the acquirer with membership, rules and standards of the card scheme. Products and services: Decides on the type of product (e.g. debit card), functionality (e.g. EMV (Europay, MasterCard and Visa) standards and technical specifications of cards. Pricing model: Sets the type and amount of fees its members will be charged. Systems and technical requirements: Establishes infrastructure and operates support systems for its branded cards (e.g. EMV 	<ol style="list-style-type: none"> Card scheme membership: Becomes a member of the scheme; complies with scheme rules and standards; issues scheme-branded cards. Client acquisition: Makes cards issued under the card scheme attractive to the cardholder in order to increase acceptance. Cardholder information: Responsible for the secure personalisation and management of the cardholders' personal information. Channels: Ensures access and maintenance of channels (e.g. banking applications) for 	<ol style="list-style-type: none"> Card scheme membership: Becomes a member of the scheme; complies with scheme rules and standards; accepts merchant's transactions in relation to the scheme's branded cards. Client acquisition: Attracts merchants to accept cards issued under the card scheme. Terminal and card-not-present compliance: Ensures terminal compliance with card scheme technical standards such as EMV standards, and compliance with card-not-present protocols

Card scheme	Card issuer	Card acquirer
<p>standards); ensures the appropriate degree of safety and operational reliability as well as business continuity.</p> <p>5. Regulatory requirements: Ensures that the card scheme network operates under the country’s regulations and includes contractual agreements with issuers and acquirers.</p> <p>6. Business rules: Defines operational rules and the management of financial risks such a dispute resolution.</p> <p>7. Managing the card payment ecosystem: Defines how issuers, acquirers and merchants interact.</p> <p>8. Commercial agreements: Ensures appropriate commercial arrangements between the issuer and acquirer.</p> <p>9. Marketing: Provides marketing strategies and materials for its brand.</p>	<p>cardholders to acquire and use cards as a payment instrument.</p> <p>5. Card management system: Invests in a card management system to charge cardholders based on the card product.</p> <p>6. Loyalty programme: Introduces reward programmes to incentivise and encourage specific cardholder behaviour.</p> <p>7. Customer support: Offers cardholders ongoing customer care support.</p> <p>8. Authorisation and authentication: Ensures that authorisation and authentication occurs quickly as prescribed by the card scheme.</p> <p>9. Reconciliation: Provides reconciliation and consolidation of payments (e.g. for interchange purposes).</p>	<p>such as 3D Secure for digital transactions and digital merchants.</p> <p>4. Terminal provision: Provides POS devices, integration and associated maintenance, and the payment gateways to support digital transactions.</p> <p>5. Authorisation: Provides a platform for the merchant to connect and request authorisation through the acquirer.</p> <p>6. Merchant account: Provides and settles the merchant’s account.</p> <p>7. Guarantee: Guarantees payment to the merchant, provided that all security aspects have been adhered to (i.e. a personal identification number (PIN) was used, or the transaction was</p>

Card scheme	Card issuer	Card acquirer
<p>10. Card issuance and acceptance specifications: Defines security specifications (e.g. EMV standards), certification (including testing) processes, interoperability of cards in relation to terminals and the management of encrypted data.</p>	<p>10. Compliance: Complies with card scheme rules and regulatory requirements (e.g. NPS legislation, Financial Intelligence Centre legislation, Protection of Personal Information Act, Financial Sector Conduct Authority legislation).</p> <p>11. Risk management: Ensures risk mitigation mechanisms, including the issuance of Payment Card Industry Data Security Standard (PCI DSS) compliance and fraud management.</p>	<p>secured with a signature).</p>

9. Questions to stakeholders

The views of all stakeholders are important to determine what value propositions exist for a domestic card scheme. This should include issuers, acquirers, retailers, consumers, regulators, policymakers, government departments, government agencies, fintechs and other interested parties. The SARB hereby requests your responses to the following questions:

No.	Question
	<i>Establishment</i>
1.	What should be the motivation for and/or against the establishment of a domestic card scheme in South Africa (SA)?
2.	What should the policy objectives be for establishing a domestic card scheme?
3.	How may a domestic card scheme be established?
4.	In your opinion, who is best placed to establish a domestic card scheme?
5.	What type of domestic scheme (i.e. four-party or three-party scheme) should be established in SA, and why?
6.	What business model should a domestic card scheme adopt?
7.	Should only one domestic card scheme be established or should more than one be established, and why?
8.	In your opinion, how can a domestic card scheme be established in a cost-effective manner?
	<i>Scope</i>
9.	What type of payments (e.g. ATM, POS, e-commerce) should be enabled under the domestic card scheme?
10.	What type of cards (e.g. debit card, credit card) should be issued under the domestic card scheme?
11.	Should the domestic card scheme enable cross-border payments?
	<i>Functions</i>
12.	What should be the main functions of a domestic card scheme (e.g. scheme services only or including transaction processing (authorisation and clearing), or value-added services)?
	<i>Benefits</i>
13.	What benefits will the establishment of a domestic card scheme yield for SA?
14.	What factors/elements need to be considered for the establishment of a domestic card scheme in SA?
	<i>Risks/challenges</i>
15.	What potential risks could a domestic card scheme pose to SA?

16.	What are the challenges that would impede the successful establishment and sustainability of a domestic card scheme?
	<i>Issuance</i>
17.	What would motivate an issuer to issue a locally branded 'domestic use only' card?
18.	In your opinion, what is required to ensure the success and sustainability of a domestic card scheme?
19.	Would mandating issuer participation ensure the adoption and sustainability of a domestic card scheme?
	<i>Pricing and fee structures</i>
20.	What feasible and sustainable fees and pricing structures can a domestic card scheme adopt?
21.	In your opinion, are merchant service fees unreasonably high in SA?
22.	In your opinion, would lower merchant discount fees result in lower prices for consumer goods and services?
	<i>Government and regulatory support</i>
23.	What role can government play in ensuring the success of a domestic card scheme?
24.	What role can regulators play in ensuring the establishment, adoption and success of a domestic card scheme?
25.	What role can issuers, acquirers, merchants and consumers play in ensuring the success of a domestic card scheme?
	<i>Ownership and governance</i>
26.	What should the optimal ownership and governance structure of a domestic card scheme be?
27.	Should a domestic card scheme be for profit or for public good?
28.	How should a domestic card scheme be funded?
	<i>Cooperation and competition</i>
29.	Should a domestic card scheme be a stand-alone entity or enter into a partnership with existing incumbents?
30.	Should a domestic card scheme compete with existing schemes?

31.	Can a domestic card scheme be sustainable if it does not offer processing services?
32.	How do you envisage a successful operation of both a domestic card scheme and an international card scheme in SA?
33.	How can a domestic card scheme interoperate with existing acquiring systems?
34.	Would co-branding with an international card scheme assist with the adoption of a domestic card scheme?
	<i>Security and standards</i>
35.	What security features should be a minimum standard to a domestic card scheme (including card-not-present transactions)?
36.	How can a domestic card scheme protect its data?
37.	What standards should be applicable to a domestic card scheme?

10. Comments and contact details

- 10.1 Stakeholders are invited to share their comments on this feasibility paper and respond to questions under paragraph 9 by **31 March 2021**. Comments and responses to questions should be sent to the following email address: npsdirectives@resbank.co.za

Glossary

Below is a short glossary of some key terms relating to a domestic card scheme as they are used in this feasibility paper.

Card acquirer means a clearing system participant and a member of a card scheme that enters into a contractual relationship with a merchant and the card issuer for the purpose of accepting and processing card transactions.

Cardholder means the person or entity that enters into an agreement with a card issuer in order to obtain a card. Through this agreement, the cardholder is authorised to use the card to effect a payment, withdraw cash or transfer funds.

Card issuer means a clearing system participant and a member of a card scheme that has entered into a contractual relationship with a cardholder, in terms of which a card is issued to effect a payment, withdraw cash or transfer funds.

Card network or assessment fees, also known as card brand fees or card association fees, are what the card schemes charge for their services every time a card is used.¹²

Interchange, as applicable to payment systems, refers to the process whereby banks, through their devices, systems and procedures, facilitate the acceptance, collection, exchange, clearance and settlement of payment instruments utilised by their customers within the NPS.

Merchant means a retailer or any other entity, firm or corporation that enters into an agreement with a card acquirer to accept card payments, when properly presented, as payment for goods and services (including cash withdrawals), which will result in a transfer of funds in its favour.

Processing of retail payment means the authorisation and clearing of transactions. Authorisation means the approval or consent given by a participant (or third-party acting on behalf of that participant) in order to conduct a transaction, for example, funds transfer. Clearing means the exchange of payment instructions as defined by the NPS Act.

¹² <https://www.merchantmaverick.com/card-brand-fees-merchant-accounts/>

Abbreviations

ATM	automated teller machine
EMV	Europay, MasterCard and Visa
NPS	national payment system
NPS Act	National Payment System Act 78 of 1998
NPSD	National Payment System Department
POS	point of sale
PSO	payment system operator
SA	South Africa
SAMOS	South African Multiple Options Settlement [system]
SARB	South African Reserve Bank
SARB Act	South African Reserve Bank Act 90 of 1989, as amended
US	United States