



UNDERSTANDING THE Namibian National Payment System

Newsletter - January 2019

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Foreword

Since its establishment in 2002, Namibia’s National Payment System (NPS) has evolved significantly. The Namibia Inter-bank Settlement System (NISS) – a Real-Time Gross Settlement System (RTGS) – was introduced; the Payment System Management Act, 2003 (No. 18 of 2003) (PSM Act) was promulgated, and several payment system reforms were implemented, as outlined later herein under the heading “The evolution of payments in Namibia”.

Today, the NPS remains on this trajectory of steady modernisation. Various payment system regulations have been introduced and the PSM Act has been amended. In addition, the Bank of Namibia continues to address the gaps in its NPS regulatory framework in order to maximise the effectiveness of its function and to ensure the NPS operates safely, securely, efficiently and cost-effectively.

Furthermore, since one of the values stated in the NPS’s Vision 2020 is transparency, the Bank of Namibia continuously endeavours to educate the public about some of the Bank of Namibia’s functions and objectives. This publication aims to serve this end.



I trust that the information provided herein will go a long way towards fostering an understanding of the NPS. I also encourage the public to engage the Bank of Namibia in matters that relate to the NPS.

Barbara Dreyer
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Bank of Namibia: Overseer of the national payment system and provider of settlement services



What is a National Payment System?

A national payment system includes all payment-related activities, arrangements, processes, mechanisms, infrastructure, institutions, laws and regulations in a country, as well as those who use such a system. These all come into play the moment one person initiates a payment for the benefit of another, up until that beneficiary receives the money.

Table 1: Offers some examples to illustrate the various components that make up a national payment system

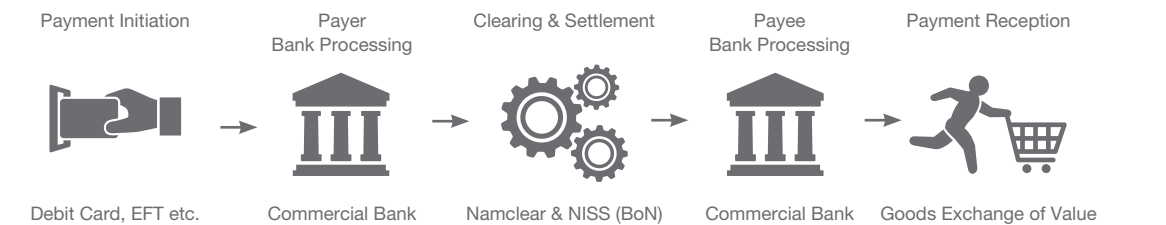
Component	Example
Payment-related activity	<ul style="list-style-type: none">• Purchasing shoes online• Paying for groceries with a debit or credit card at a retailer such as Shoprite or Checkers
Processes	<ul style="list-style-type: none">• Electronic Payment files being sent to a data processing centre (clearing)• Payment of obligations among banks or participants (Settlement)
Mechanism/ Channels	<ul style="list-style-type: none">• ATM• Internet• Cell-phone

Infrastructures	<ul style="list-style-type: none">• Hardware server on which card transactions are switched• Software for processing electronic fund transfer (EFT) transactions• Core banking systems
Institutions	<ul style="list-style-type: none">• Commercial banks, e.g. FNB, Bank BIC• Non-bank issuers of e-money such as Namibia Post Limited• Clearing houses such as Namclear• Payment service providers such as RealPay• The Bank of Namibia
Laws (legislation)	<ul style="list-style-type: none">• The Payment System Management Act, 2003 (No. 18 of 2003)• The Banking Institutions Act, 1998 (No. 2 of 1998)
Regulations	<ul style="list-style-type: none">• Determination on Issuing of a Payment Instrument• Determination on Issuing of Electronic Money in Namibia

Figure 1 provides a graphical overview of how payment transactions are processed in a national payment system. The process begins when a trade is agreed on between a customer (payer) and supplier (payee), and it ends when the value (money) reaches the supplier for the goods and services provided. A

typical card payment transaction at a retailer such as a supermarket is usually very quick: it takes less than a few minutes from the time a customer swipes his/ her card to authorise payment to be made from his/ her bank account, and for that payment to reach the supermarket's bank account.

Figure 1: Graphical Overview of the NPS



Why does the Bank of Namibia oversee the NPS?

One of the functions of a country's central bank is to oversee its national payment system. In executing this function, the Bank of Namibia – promotes the broad objectives of **safety, security** and **efficiency** of the system. The three objectives are put into effect through specific activities, which are in turn guided by laws, policies and procedures. The central bank then monitors existing and planned systems and payment arrangements, assessing them against the three broad objectives, and recommending change where necessary.

The payment environment is very dynamic, which means that there are constantly new technologies, new participants and new payment innovations coming onto the scene. Bank of Namibia continuously assesses the need to update its laws, policies and procedures to ensure that it can appropriately address any potential new risks to the country's national payment system. Bank of Namibia takes a risk-based

approach to its oversight role. This helps to direct its attention and resources to where the level of risk is greatest.

The following analogy between the national payment system, and the transport system will help one better understand the importance of the national payment system. Both systems are important for the proper functioning of an economy: the transport system provides the service of transferring people and goods, while the national payment system provides the service of transferring money between payers and payees.

There has to be a demand to cross a river for a bridge to be built, as such, public authorities have to ensure that they create an enabling environment for the demand to cross a river to be met. Much like the transport system, the demand for secure and efficient payment and settlement systems exists, and therefore the Bank of Namibia has to ensure that it creates an enabling environment to meet the aforesaid demand.

The Bank of Namibia as a Provider of Settlement Services

In addition to its role as overseer of the national payment system, the Bank of Namibia also operates a real-time gross settlement system. This is known as the Namibia Inter-bank Settlement System (NISS). The settlement system facilitates and settles transactions between its participants. Such participants can be banks or authorized non-bank financial institutions (Mobipay as an e-money issuer was previously authorized as a non-bank financial institution for clearing and settlement). All transactions processed by this system are settled in terms of the principles of finality and irrevocability. This means that, once a transaction has been processed during the settlement system's normal working hours, it cannot be unwound (undone) in the participants' accounting books or in the central bank's settlement system. The working hours for NISS are 08:00–16:30 on weekdays, and 09:30–13:00 on Saturdays. The NISS does not operate on Sundays or public holidays.

Members of the public can also use the settlement system's services to make time-critical payments at a commercial bank. Note that commercial banks (e.g. FNB, Standard Bank etc.) referred to as participants

of NISS may charge a fee for such services, and when they do, it is usually at their own discretion.

The NISS is used for wholesale and retail transactions, as follows:

- Wholesale (single) large value transactions: These are individual time-critical transactions that are processed by a settlement system in real time for its participants that have settlement accounts on the system. For example, a N\$20-million transaction between corporate clients at two different participants is a wholesale (single) large-value transaction that would be processed in real time.
- Retail (batched) transactions: Transactions that originate from payment instruments such as EFTs, or cards are collected in batches by a clearing house over a certain period and then submitted to a settlement system. A clearing house is a central processing mechanism or location through which participants agree to exchange payment instructions or other financial obligations for a clearing system. Namclear is an authorised clearing house in Namibia.

The evolution of Namibia's National Payment System



Before Namibia's independence in 1990 and for at least a decade after that, all clearing and settlement of Namibia's inter-bank transactions were performed as part of South Africa's national payment system. Nonetheless, the Bank of Namibia had meanwhile resolved to manage its own domestic exposure and risks, by extracting its domestic inter-bank transactions from the South African national payment system, and clear and settle domestic transactions locally. Consequently, in 2001, Namibia launched a project to establish its own National Payment System (NPS), and Namibia's own settlement system – the NISS – was implemented a year later, in 2002. This was followed by the promulgation of the Payment System Management Act in 2003, which enabled the Bank of Namibia to oversee the NPS with the objective of ensuring its safety, efficiency and cost-effectiveness.

In 2003, Namclear, the only clearing house currently in the country was established. Namclear's first duty, effected in 2004, was to establish the EFT system to clear all domestic EFT transactions. The implementation of the cheque processing system followed in 2005.

Shortly after that, in 2006, the Bank of Namibia set up the Payment Association of Namibia (PAN) whose role is to govern and manage certain aspects of the NPS.

By April 2008, Namswitch (the Namibian Card processing system) enabled all inter-bank card transactions that emanate from automated teller machines (ATMs) to be cleared and processed locally, while card transactions at point-of-sale (POS) terminals could be cleared and processed locally as from November that same year.

The retail payment system

National payment systems play a vital role in any economy's financial infrastructure. This is particularly true for the retail payment system, which forms part of a national payment system. In Namibia, the retail

payment system drives the broader financial services sector and the economy in general. Thus, if a retail payment system is not stable, it can disrupt the normal flow of payments for goods and services.

So what exactly are retail payments?

Retail payments are everyday payments between private persons, companies, government agencies, etc. Such payments are relatively low in value and are typically not time-critical. For instance, retail payments are made by consumers to retailers (e.g. to buy shoes at Shoe City) or to utility providers (e.g. to buy water

or electricity). Salary payments, tax payments and social service contributions made by businesses also belong to the retail payments category. This type of payment may involve the use of various retail payment instruments such as EFTs, cards and e-money.



The evolution of retail payment services

Once Namibia’s NPS had been reformed, it also meant domestic retail transactions became easier, they could be cleared and settled locally, and the Bank of Namibia could effectively oversee such payments.

The retail payment industry has continued to develop over recent years as a result of changes in technology and in what consumers want. These developments have allowed for large numbers of users to change from paper-based payment instruments such as cheques, to electronic ones such as cards and direct debits.

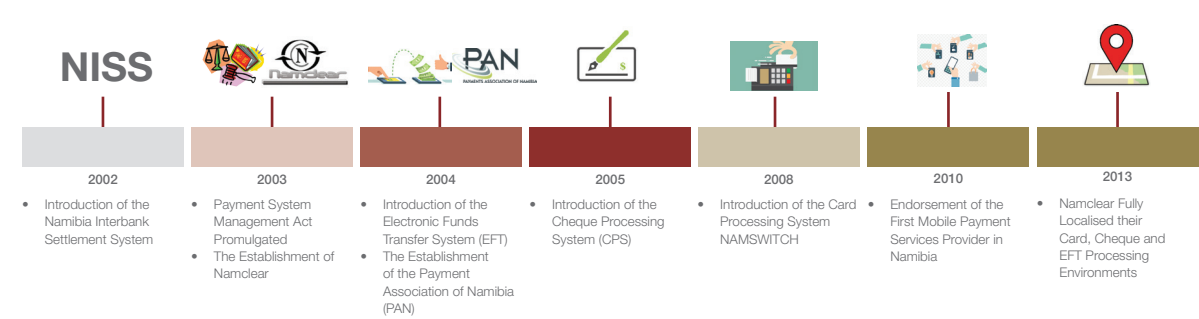
In fact, the retail payment sector leads innovation in payments technology. For example, Namibia’s commercial banks introduced various retail payment channels such as cell-phone banking and Internet banking, which allow customers to do their banking from anywhere. Another major advance was made in

2010, when the Bank of Namibia endorsed the first e-money issuer, which allows a customer to make instant person to person payments.

In 2012, the Bank of Namibia issued a regulation to promote the safe issuing of e-money. This regulation offered financial service providers an enabling environment to make payments easier with a wider reach. Today, e-money services in Namibia are offered by several banks as well as non-bank financial institutions. Driven by consumer demands for quicker, more convenient and safer ways to pay for goods and services, the retail payments industry has also seen more providers offering payment services such as e-commerce platforms, value added services, third-party ATMs and payments through Applications (Apps) – all of which enhance the customer experience.

Figure 2 offers a timeline of technological advances in Namibia in this field.

Figure 2: Timeline Evolution of Payment Systems in Namibia



The payments industry is currently involved in a major modernisation project to enhance the EFT system. One of the key objectives of this project is to ensure an

efficient system that can facilitate faster EFT payments through near real-time clearing and settlement.

The National Payment Systems Regulatory Framework



Amongst other things, the Payment System Management Act mandates (empowers) the Bank of Namibia (the Bank) to oversee the NPS, develop payment policies, and supervise clearing and settlement services in Namibia. The purpose of this mandate is to ensure that Namibia has a secure, robust, efficient and cost-effective NPS that benefits all its stakeholders, that is, banks, non-banks, payment service providers and consumers alike.

As part of the payments regulatory function, the Bank of Namibia develops certain regulations that are known as Payment System Determinations. According to the Oxford Dictionary, a regulation is defined as “a rule or directive made and maintained by an authority”.

Thus, each Payment System Determination is made and maintained by the Bank of Namibia to oversee a specific aspect of the NPS.

Finally, to quote Ms Christine Lagarde, currently the Managing Director of the International Monetary Fund, in this regard, –

regulation is necessary, particularly in a sector like the banking sector, which exposes countries and people to a risk.

[“Facing down worldwide recession”. Interview with Lara Logan, mobile-feeds.cbsnews.com. 21 November 2011]

It is from this premise that regulators operate.

Scope of Regulation

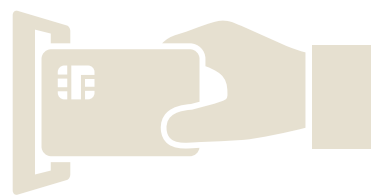
The safeguarding of the NPS needs regulation that not only addresses existing issues, but also has the foresight to address issues in the future – regardless

of technological changes and innovation. There are currently eight Payment System Determinations (see Table 2):

Table 2: Bank of Namibia’s Payment System Determinations

No.	Name of Determination	Summation of Determination
(PSD-1)	Determination on Issuing of a Payment Instrument	PSD-1 was published on 29 June 2007. However, it only took effect on 28 September that year. PSD-1 applies to persons who intend to issue a payment instrument in Namibia. It defines the assessment process and minimum requirements to issue such instruments. Thus, PSD-1 serves as the first point of contact to operate within the NPS.
PSD-2	Determination on the Reduction of the Item limit for Domestic Cheque Payments within the Namibian National Payment System	PSD-2 was published and took effect on 6 December 2017. It applies to all banking institutions and Namclear, as well as to businesses and individuals who issue, accept and/or process cheque payments within the NPS. PSD-2 also forbids these institutions, businesses and individuals from issuing, accepting or processing domestic cheque payments over N\$100,000. (Note: Cheques are in the process of being phased out in Namibia)
PSD-3	Determination on Issuing of Electronic Money in Namibia	PSD-3 was published and took effect on 16 November 2018. This current PSD-3 revoked the previous PSD-3 that was published and took effect on 1 March 2012. It applies to everyone who intends to issue e-money services in Namibia. When it is applied, PSD-3 is read together with PSD-1 and the Guidelines for Issuers of Electronic Money and other Payment Instruments (see later herein).
PSD-4	Determination on the Conduct of Card Transactions within the National Payment System	PSD-4 was published on 30 September 2012 and came into effect on 30 June 2013. It applies to all persons in Namibia engaged in processing card transactions or acquiring card transaction merchants. PSD-4 also offers guidance on how domestic, regional and international card transactions should be routed, and defines specific preventive provisions on the acquisition and treatment of domestic e-commerce and brick-and-mortar POS merchants. Thus, PSD-4 seeks to protect and promote the treatment of card transactions in the country. (See later herein for more on cards as payment instruments and how to conduct card transactions safely.)
PSD-5	Determination on the Standards for a Basic Bank Account and Cash Deposit Fees within the National Payment System	PSD-5 was published and came into effect on 31 March 2015. It applies to all banking institutions. PSD-5 is the Bank of Namibia’s regulatory tool for ensuring as many people in Namibia as possible have access to affordable financial services. Thus, according to this Determination, all banking institutions are compelled to offer at least one basic bank account for anyone earning N\$2,000 or less per month. PSD-5 also forbids banking institutions from charging a cash deposit fee on any individual account; equally any business that has a turnover of N\$1,000,000 or less per year should not be charged cash deposit fees.
PSD-6	Determination on the Criteria for Authorisation of Participants in the Clearing and Settlement Systems	PSD-6 was published on 6 February 2013 and became effective on 31 August 2013. It provides guidance to persons who want to participate in clearing and settlement systems. PSD-6 is to be read together with the Starter Pack for Participation in the Clearing and Settlement Systems. This Starter Pack provides prospective participants with guidelines and a checklist by means of which to operate.
PSD-7	Determination on the Efficiency of the National Payment System	PSD-7 was published and took effect on 31 December 2014. It provides guiding principles for assessing the efficiency of the NPS. PSD-7 applies to all system participants, payment instrument issuers and service providers within the NPS who deal with immediate settlements, EFTs, card payments, cheque payments, e-money payments, or any other payment instrument recognised by the Bank of Namibia.
PSD-8	Determination on the Imposition of Administrative Penalties in the National Payment System	PSD-8 was published and was effected on 25 April 2017. It provides guiding principles and criteria to assess cases where authorised NPS participants delay their compliance with any NPS regulation or law. PSD-8 also defines the procedure and process for the Bank of Namibia to determine and calculate an appropriate administrative penalty amount where participants do not comply with NPS regulations and law.

Electronic money payments in Namibia



Electronic money (e-money) refers to monetary value which is stored electronically and can be redeemed on demand for cash. E-money can be issued through various devices. These devices include card products (e.g. prepaid cards) and electronic products (e.g. via the Internet, a mobile phone or any other electronic device).

E-money has grown steadily and become increasingly popular in Namibia over the years. Today there are eight authorised e-money issuers in Namibia. They comprise three banks and five non-banks, and they all operate what are known as closed-loop e-money

schemes. This means that such schemes, unlike other payment instruments such as cards or EFTs, are not yet interoperable (where one authorised e-money scheme cannot ‘speak to’ another authorised e-money scheme, so their customers cannot send e-money to – or receive it from – each other). The Bank of Namibia is continuing to engage and encourage industry to ensure that e-money becomes interoperable too.

The total volumes and values of e-money as at 1 September 2018 were, respectively, 10,540,002 and N\$6,044,971,520. Table 3 illustrates the channels through which the existing e-money schemes can be accessed.

Table 3: E-money issuers in the NPS

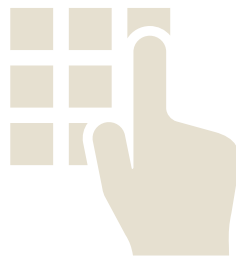
No.	Name of E-money Issuer	Access Channel
1.	Bank Windhoek	Mobile application, USSD*
2.	First National Bank of Namibia	Mobile application, USSD
3.	Standard Bank Namibia	Mobile application, USSD
4.	Mobicash Payment Solutions (MobiPay)	Mobile application, USSD
5.	Namibia Post Limited	Card
6.	Nam-mic Payment Solutions	Card
7.	Virtual Technology Services	USSD
8.	Vivo Energy Namibia	Card

** Unstructured supplementary service data*

Those who use e-money services are encouraged to familiarise themselves with what each e-money issuer offers. Consumers are also encouraged to make use

of the e-money issuer’s complaints procedures before lodging any complaints with the Bank of Namibia.

Payment instruments and the security of card payments



National payment systems represent a critical part of a country's financial structure because, they act as facilitators of economic activity and growth. In addition, they are an economic support mechanism that makes it possible for individuals, firms and other institutions to transfer funds. Such transfers are mostly done by using payment instruments (e.g. cards, cheques, EFTs, e-money).

In Namibia, the Bank of Namibia can authorise individuals or institutions who meet certain criteria

to issue payment instruments to their customers to buy goods and services. The Bank of Namibia then requires such authorised persons or institutions to comply with all relevant laws and regulations, and to identify, minimise and manage risks to the NPS. The Bank of Namibia currently recognises EFTs, cheques, cards and e-money as payment instruments. It should be noted that cheques are currently being phased out in Namibia because they are considered inefficient and susceptible to fraud.

But what exactly are payment instruments?

Namibia's Payment System Management Act defines a payment instrument as "an instrument or process enabling a payer to issue a payment instruction". In other words, they can be used instead of cash.

Payment instruments can be physical mechanisms like cards or virtual ones like EFTs that are used as a channel to initiate an instruction to pay money from one person or entity to another. As mentioned earlier, cards, EFTs and e-money are all examples of payment instruments that allow a buyer and a seller to transfer funds between their accounts or electronic wallets (e-wallets) at banks or non-bank financial institutions.

People will have confidence in a payment instrument if it is safe and efficient to use. Safety and efficiency are also important for any national payment system to operate smoothly. It is usually the duty of a central bank to oversee payment instruments from these two perspectives.

In Namibia, cards are divided into the following subcategories:

- Debit cards are used for withdrawing cash and for paying for goods and services. The amount in question is debited directly from the cardholder's bank account.
- Credit cards are used by cardholders who are authorised to buy goods and services on credit or withdraw cash up to a certain approved credit limit.
- Hybrid cards combine the features of a debit card and a credit card. Thus, the cardholder can use the card to access a credit limit for, say, reserving the substantial deposit to rent a car, and can use the card to withdraw cash or pay for goods and services directly from his/her bank account.

Of all the types of payment instruments, EFTs are the most prevalent in Namibia in terms of value, but card transactions are the highest in terms of volume (see Table 4).

Table 4: The usage of the recognised payment instruments statistics for the year 2018

Payment Instrument / Scheme	Volume		Value	
EFT	(17.5%)	19,395,108	(84.1%)	N\$279,698,056,831.75
Cheque	(0.3%)	292,335	(0.9%)	N\$3,057,841,217.24
Card	(60.7%)	67,464,335	(10.7%)	N\$35,687,995,926.42
E-money	(21.5%)	23,916,199	(4.3%)	N\$14,038,768,519.59

As the use of the various payment instruments grows, so do concerns about their security features. Let's take

a look at card security in particular, since this is what most people use for making payments.

Card security

Cards are considered more convenient for consumers in comparison with other payment instruments. Cards are also widely accepted by merchants and are more efficient than paper forms of payments such as cheques. Because cards are the primary payment instrument used for retail transactions in Namibia today, there is an increased awareness of identity theft and other safety concerns associated with this payment instrument in particular.

The Namibian banking industry has therefore implemented what is known as the EMV Standard, which was originally set up by Europay, MasterCard and Visa for cards based on chips and a personal identification number (PIN), as well as the Payment Card Industry Data Security Standard (PCI DSS). However, while these standards were initiated by the institutions that issue cards in order to enhance the security of the card payment instrument, consumers also need to be more aware of how to protect themselves from fraudulent use of their cards. The following tips are intended to help prevent theft, fraud and other card-related crime.



1. Keep your card safe

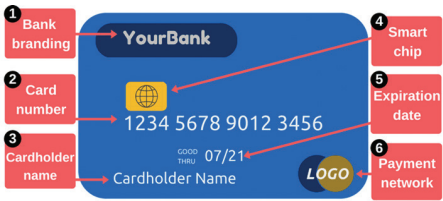
One of the simplest ways to avoid card fraud is to prevent your card from falling into a thief's hands. Put your cards in a purse or wallet close to your body where it can't easily be snatched away. Thieves can

take pictures of your card with a camera, so don't leave your card number exposed for a minute longer than necessary. After you make a purchase, put your card away immediately. Make sure a shop or restaurant processes your card transaction in your presence, and be sure to take your card back before you leave the venue.



2. Shred anything with your card number on it

Don't throw your card statement in the bin: it typically has your full card number printed on it. Rather shred the statement so that people who go through your trash won't find anything with your card number on it.



3. Avoid giving out your card information

If someone calls you and asks for your card number, don't give it to them. Card thieves have been known to pose as card issuers and other businesses to trick you into giving out your card number.

SCAM ALERT

4. Be safe with your card online

Don't click on e-mail links from anyone that looks like your bank, card company or other business who uses your personal information – even if the e-mail looks legitimate. These links are often phishing scams and the scammers want to trick you into entering your log-in details on their fake website so that they can clean out your account. Rather always go to your bank or card company's website, or directly to the website of the business with whom you are doing business, and log into your account directly from those sites.

Always be cautious when you're using your card online. Only enter your card number on secure websites that you can be 100% sure are legitimate. To be sure a website is secure, look for "https://" in the address bar and the symbol of a closed lock on the page or near the address bar.



REPORT IT !!!!

5. Report lost or stolen cards immediately

The sooner you report a missing card, the sooner your card issuer can cancel your card and prevent someone from making fraudulent purchases on your account. Reporting this quickly also decreases the likelihood that you'll have to pay for those fraudulent purchases. Write down your card companies' customer service numbers to call if your cards ever go missing.



6. Review your billing statements each month

An unauthorised payment from your card account is the first sign of card fraud. If you notice a purchase you didn't make, no matter how small, report the issue to

your card issuer or bank immediately. Your card issuer will tell you whether you should close your account and get a new account number to avoid further card fraud.



7. Make strong passwords and keep them safe

Your card number may be stored in several places online. For example, you may save your card number on Amazon so that you can make one-click purchases in the future. In all cases, make sure you use strong passwords, that is, they combine capital letters with small letters, numbers and characters like exclamation marks or spaces. Also always avoid writing down or sharing your password.



8. Check ATMs and POS devices for card skimmers

Card thieves sometimes insert card-skimming devices into the card readers at ATMs or POS devices. These skimmers can capture and store your card information. The criminals come back to the ATM or POS later to retrieve the card-skimmer – along with your card information. If you see anything that looks suspicious about the place where you're using your card, go somewhere else instead.



OUR VISION

To be a centre of excellence; a professional and credible institution; working in the public interest and supporting the achievement of the national economic development goals.

OUR MISSION

To support economic growth and development in Namibia, we act as fiscal advisor and banker to Government; promote price stability; manage reserves and currency; ensure sound financial systems and conduct economic research.

In pursuit of our mission, we are responsible for the following:



Foreign reserves management



Safeguarding and enhancing financial stability



Providing banking services to Government and commercial banks



Ensuring low and stable inflation (Price Stability) through sound enactment of the Monetary Policy



Issuing of the currency (Namibia dollar)



Overseeing the National Payment and Settlement Systems



Administration of Exchange Control

OUR VALUES

- 💎 We value high performance impact in the context of teamwork.
- 💎 We uphold open communication, diversity and integrity.
- 💎 We care for each other's well-being, and we value excellence.

You can download the Bank of Namibia app for your device at the following stores:



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