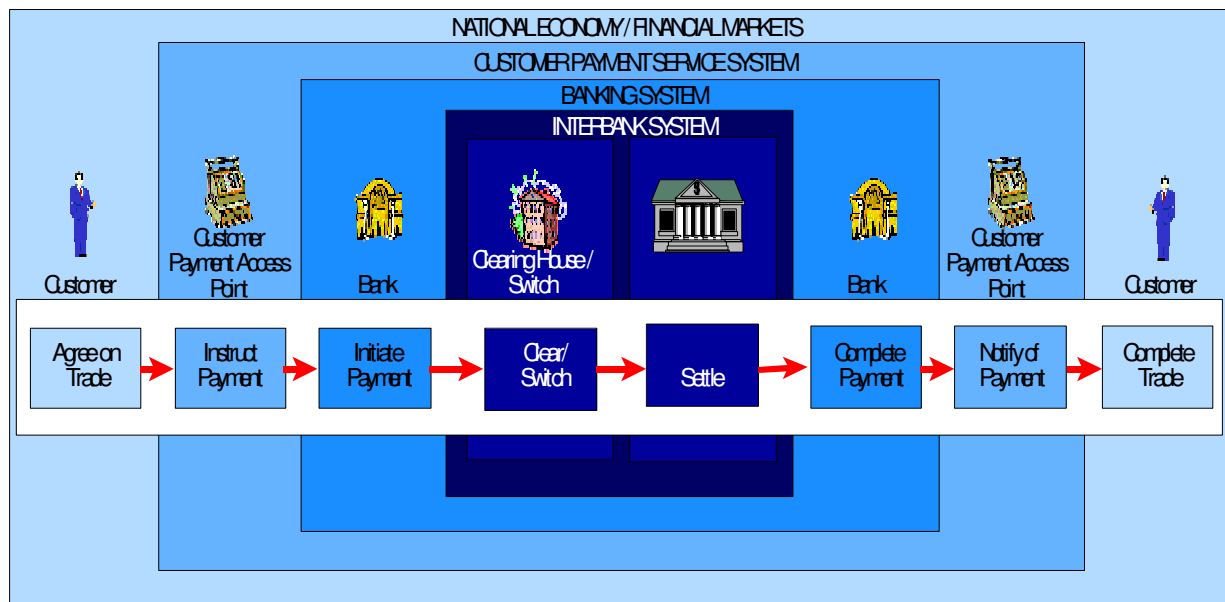


Understanding the National Payment System

1. What is a National Payment System?

The Payment System Management Act, 2003 (Act No. 18 of 2003) defines the National Payment System (NPS) as the payment system as a whole, and includes any payment system, settlement system, clearing system and payment system arrangement used in the process of effecting payment between payers and beneficiaries. This definition has four key terms that need to be defined. A payment system (for example debit card) means a system that enables payments to be effected between a payer and a beneficiary. Settlement system (for example Namibia Inter-bank Settlement System) means a system established and operated by the Bank of Namibia to facilitate the transfer of funds for the discharge of payment and settlement obligations between system participants. Clearing system means a system whereby system participants can exchange data, documents and payment instructions and instructions relating to funds or securities transfers to other system participants. Payment system arrangement means procedures and services for the processing of payment transactions.

A national payment system can be represented by the following diagram. The diagram traces a payment process which starts in the national economy when trade is agreed upon between the customer and supplier. The customer's payment instruction passes through the banking system, clearing system, and then settled across the settlement account of a banking institution at Bank of Namibia. Trade is completed when the value reaches the supplier of goods and services.



In Namibia, stakeholders in the NPS include Bank of Namibia, banking industry, payment service providers, payment system infrastructure providers, government, end-users, regulatory bodies, regional monetary authorities and arrangements, international monetary authorities, International financial community.

2. What are the key payment instruments in Namibia?

There are different payment instruments in Namibia. They include cash, cheques, cards and electronic fund transfer (EFT). Bank of Namibia has the sole responsibility under the Bank of Namibia Act to issue **cash** (bank notes and coins). Cash payments are usually associated with face-to-face transactions of low value between individuals or between an individual and a retail firm. Cash is highly used in Namibia because ATMs are widely available, cards and their terminals are widely distributed, and a high proportion of the population is un-banked or under-banked. Money supply to Gross Domestic Product (GDP) ratio stood at 37 percent in 2001, which explains the significant use of the payment instrument. Cash has the advantage of convenience and immediate final transfer of value. The emergence or adoption of non-cash payment instruments is likely to reduce the use of cash in Namibia in the medium to long-term.

Banking institutions issue **cheques** to customers that include private individuals and other legal entities. A cheque essentially instructs the payer's banking institution to debit the payer's account for a specified amount of money and either to transfer that value to the payee's financial institution for credit to the payee's account or to pay out cash. Cheques may be used for remote or face-to-face payments, single transactions and recurring payments, as well as for any sizes of payments. The acceptance of a cheque in a face-to-face transaction usually depends on valid identification and evidence of the payer's creditworthiness. The payee may also require some form of payment guarantee from a reputable third party, especially in a non-recurring face-to-face transaction. The use of cheques is highly probable to fall when more efficient electronic alternatives have become widely used.

EFT can take the form of direct funds transfer and payment cards. **Direct funds transfers** include both credit and debit transfers, both of which are used for remote payments. Credit transfers are initiated by the payer to their banking institution to make payments directly to the account of named payees. They may be in the form of a schedule of payments submitted directly by the payer to their banking institution or set up as automatic payments involving a regular payment of fixed amounts from one account to another. They are used for private and public payroll payments, government benefit payments and recurring payments to utility firms and insurance and other regular suppliers of services. Direct debit transfers are initiated by the payee, usually through a preauthorized agreement with the payer, and are generally processed in electronic form. They are used for processing payments from large number of payers to one payee and for regular bills, including those where the amounts may vary.

Payment cards include both debit and credit cards. Credit cards are used for a variety of payments, domestic and foreign, and for large and small value. Common credit cards are Visa and MasterCard. Debit/Electronic Fund Transfer Point of Sale (Debit/EFTPOS) cards are widely used in Namibia for retail payments and automatic teller machine (ATM) withdrawals. ATM cards are used for cash withdrawals (against the cardholders' bank account) and other services at ATMs, and EFTPOS cards for EFT point of sale transactions (where funds are transferred to the merchant and the cardholder's account at banking institution is debited).

3. What is the Role of Bank of Namibia in the National Payment System?

The Bank of Namibia has a key role to play in ensuring safety, efficiency and cost-effectiveness of the National Payment System. This role has an implication on the

development of Namibia's financial markets and the wider economy. The following are some of the key functions of the Bank of Namibia with respect to the NPS:

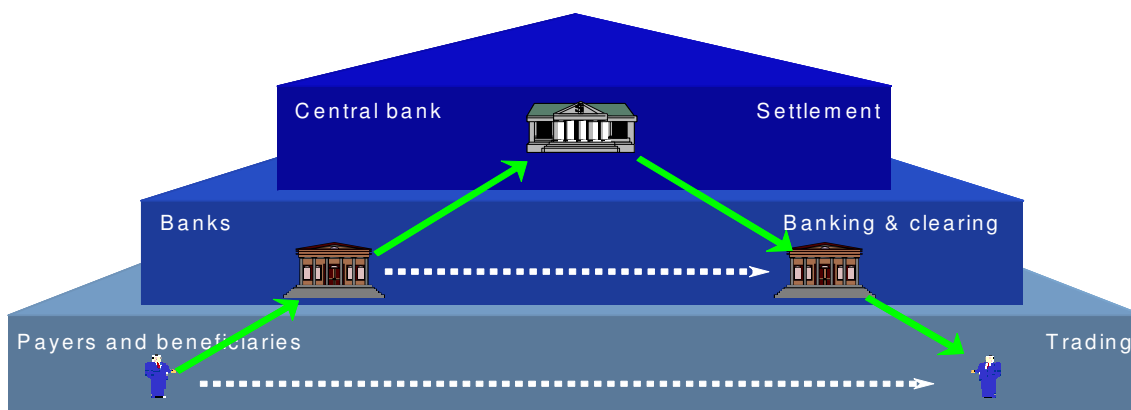
- Oversee the NPS. Bank of Namibia oversees the National Payment System with the objective of ensuring safety, systemic risk containment and efficiency of the National Payment System, through monitoring, assessment and inducing change.
- Provision of payment and settlement services. In this respect, Bank of Namibia provides and operates Namibia Inter-bank Settlement System (NISS), which allows for the transfer of settlement assets to meet the payment obligations of banking institutions. NISS is a real time gross settlement system (RGSS) and settles payment arising from different payment streams. In NISS, once payments are settled, they are final and irrevocable. Bank of Namibia also makes and receives payments on behalf of government departments and other central banks.
- Promotion of payment system reform. This is not only related to the development of enabling infrastructure, oversight of the national payment system and to authorize a Payment System Management Body (PSMB) to manage the national system, but also involves keeping abreast with international developments in the payment system arena.

4. What is the Vision of the National Payment System in Namibia?

The National Payment System (NPS) is central to supporting Namibia's economic growth and development. It is against the foregoing that there is a need to ensure safety and efficiency as well as modernization in the National Payment System in order to match the level of development in the domestic economy. Modernizing Namibia's Payment System will lead to compliance to best practices in terms of payment instruments and standards in SADC and around the world with the objective of facilitating not only domestic payments, but also international payment transfers or transactions.

5. How is the National Payment System related to the macro-economy?

There exist a relationship between a country's national payment system and the general economy. This can be understood with the help of the following pyramid, which consists of three layers. The trading layer is at the bottom and is the broadest one. This layer represents the product (goods, financial and services markets, etc) market where the buying and selling of goods and services takes place. The foregoing layer is supported by the middle layer called the banking and clearing system. This layer provides payment services as well as inter-bank fund-transfer systems through which payment transactions are processed. The top layer represents the central bank. The final settlement of payment transfers takes place across the accounts that the banks hold with the central bank, whose function is important for smooth functioning of the macro-economy.



6. What are the key risks in the National Payment System?

There are various risks that affect any payment system including our own national payment system. These payment system risks should be identified, measured, monitored and contained to ensure the smooth running of the national payment system. Key risks in the national payment system include:

- Credit risk: Refers to the risk that a counterparty (or participant in a settlement system) will not settle an obligation for full value, either when due or at any time thereafter.
- Liquidity risk: This is the risk that a counterparty (or participant in a settlement system) will not settle an obligation for full value when due. Liquidity risk does not imply that a counterparty or participant is insolvent since it may be able to settle the required debit obligations at some unspecified time thereafter.
- Systemic risk: This is a risk that the failure of one participant to meet obligations when due may cause other participants to fail to meet their obligations leading to broader effects on economic activity.
- Operational risk: Refers to the risk that prevents electronic settlement from taking place due to an operational or technical problem either in the settlement or clearing system at the premises of payment system participants. Examples are computer malfunction, power failure, human error, etc.
- Legal risk: Is the type of risk whereby unexpected interpretation of the law leaves a payment system participant with unforeseen financial exposures and possible losses.

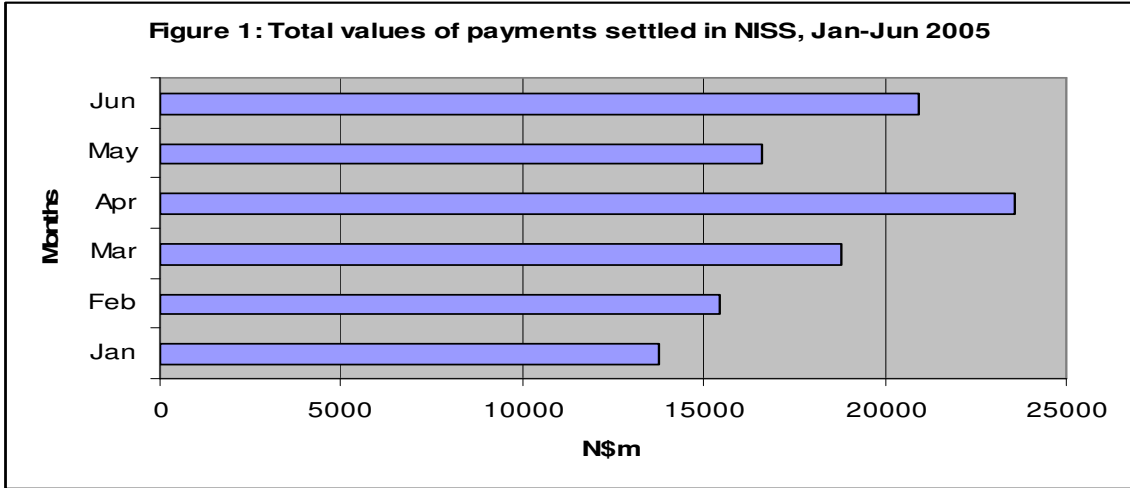
7. What is Namibia Inter-bank Settlement System?

Namibia Inter-bank Settlement System (NISS) is a Real Time Gross Settlement System (RTGS), which processes and settles transaction in real time, transaction by transactions basis (gross basis). It settles high value and time-sensitive payment transactions under the principles of finality and irrevocability. In other countries like Namibia, RTGS also settles low value (bulk payment transactions) payments arising from electronic fund transfer (EFT) and cheque payment streams. Payments through RTGS completely suspend systemic risk because payments are made if a payer bank has available funds in its accounts.

The implementation of NISS on 10 June 2002 by Bank of Namibia introduced a new paradigm shift in inter-bank market and customer payment services. NISS presented Namibia with a unique opportunity to design and implement a modern clearing environment that capitalizes on the investment made in NISS and the opportunities provided by the new settlement environment.

8. How did NISS perform between January and June 2005?

NISS performed impressively since inception. Both volumes and values have been increasing over time. The following figures illustrate the situation for the last six (6) months.



As figure 1 reveals, total values settled in NISS increased over time from N\$13700 million in January 2005 to N\$20900 million in June 2005. In figure 2, although volumes settled in NISS remained constant in the same period, they increased from 3091 in February 2005 to 3557 in June 2005. These trends signify the commitment of the banking industry in utilizing NISS.

