



TSA TUELANO is a quarterly newsletter, which aims at disseminating information to the public and major stakeholders¹ in the National Payments System (NPS) reform project. The need to have a publication of this nature has been motivated by the importance that the Bank of Botswana attaches to the dissemination of information about the payments system reform initiative. This comes in the wake of Botswana having positioned itself strategically to compete successfully in the global economy, an objective that requires an efficient and reliable financial system to support the growth of the economy.

Published quarterly by the Bank of Botswana NPS Team, **TSA TUELANO** will capture general NPS issues and related views. Contributions of articles from major stakeholders in the NPS reform project will also form part of the content of this publication. The newsletter will provide an ongoing narrative of NPS events as they happen. **TSA TUELANO** is also intended to enhance public education on payment systems issues such as those discussed below.

In this edition we provide an overview of the NPS in Botswana, and the need to have an efficient payments system in place in order that major participants can play an active and informed role. We also discuss the structures driving the NPS reform and modernisation initiative. The publication also gives a brief outline of the “strategic

framework” that will facilitate the successful implementation and realisation of the NPS

vision. Also featuring in this edition is the introduction of standards for cheques and debit vouchers. The reader will also be made aware of the introduction of electronic clearing (that is, the automation of the cheque clearing processes), NPS legislation and other achievements of the payments system reform initiative.

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Welcome to TSA TUELANO

Contributions of articles are welcome. Inquiries should be directed to:

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Enjoy your reading!
The Editor

¹ That is to say, "... parties whose interests are affected by the operations of the (payments) systems." - No. 43 Core Principle for Systemically Important Payment Systems, English, ISBN 92-9131-610-5.





Perspective of the current NPS

The Botswana NPS is currently characterised by relatively sophisticated structures with a range of payment options in the urban areas, and a less developed cash-based system in the rural areas. In the urban and peri-urban areas, including most cities, towns and some major villages, cheques, Automated Teller Machines (ATMs) and credit as well as debit cards at electronic points of sale, are prevalent.

However, only a small proportion of the population is served by such non-cash payment services. The majority of the population relies mainly on cash for payments of goods and services. This is particularly the case in rural areas, from where people still have to travel to urban areas or major villages in order to encash their cheques. In some cases, shopkeepers and other business concerns in the rural areas encash

cheques for people, but the fees that are paid for this service are generally higher.

While the current payments system framework is functional, it is inadequate to support the demands that will be placed upon it in future, which need to be addressed and rectified as part of the NPS reform process. For example, current practices inhibit the ability of both the central bank and clearing banks to accurately

What is a payments system?

“A payments system comprises a defined group of institutions and a set of instruments as well as agreed procedures used to effect payments transactions in the process of ensuring the circulation of money within a geographic area, usually a country²”

In essence the term “payments system” refers to the set of arrangements that allow economic agents, such as consumers, businesses, government and other organisations, to transfer funds, especially those held in accounts at financial institutions, between one another. These payments may stem from the purchase of goods and services, but can also result from capital trans-

actions such as borrowing, the settlement of debts, and the transfer of financial securities.

The payments process involves the initiation of a payment transaction, and the processing of that transaction through to the point where it is settled and finality is achieved, i.e., where value is received by the recipient and the transaction cannot be

undone. A payments system includes both the *payment instruments* used in these transactions, such as cash, cheques, plastic cards and electronic transfers, and the *institutions and arrangements* that ensure that funds flow from accounts at one financial institution to another.

The payments system is central to Botswana’s economic activity and supports transactions in both the real economy and financial markets. In any economy that does not solely rely upon cash transactions, the banking system plays a pivotal role in the provision of payments services that result from deals agreed as a result of economic or financial activities. At the heart of the payments system is the process of clearing and settlement of transactions and the associated transfer of funds between banks.

² European Committee of Central Banks



monitor payment exposures in order to avoid systemic risk; the existing legislation and regulations are insufficient for the support of the future NPS; the current regulatory arrangements do not provide a sufficiently secure basis for central bank intervention in the payment system and they do not provide adequate guidance to payment system stakeholders in their conduct of payments business, to mention but a few. Much of the payments system is based on manual processes which can be slow and inaccurate, and much higher level of automated technology is required.

These weaknesses can be regarded as indicators of the minimum requirements that the new NPS must address. As such there will be a need to effect major changes and improvements in specific areas to ensure that the reformed NPS has the ability to be effective and successful in achieving the planned goals.

Against this background, the contribution of commercial banks in the payment systems reform and modernisation initiative has been considerable, particularly in fostering and facilitating the use of electronic/non-cash or paper-based payments. In this regard, the emergence of Automated Teller Machines (ATMs) has added to the range of products that banks have been able to offer to a broader spectrum of their clientele. The ongoing negotiations among the commercial banks to facilitate the use of their ATMs by customers from other banks will further enhance payment processes.

Overview of the NPS reform initiative

The basis for Botswana's commitment to the reform and modernisation of the NPS derives from a commitment made by member countries of the Southern African Development Community (SADC) to modernise their payment systems. This involves modernising both individual countries' payment systems and the relationships between them, thus promoting ease of regional trade and investment by reducing the costs of carrying out transactions between countries.

An efficient payments system environment will contribute to the success of the International Financial Services Centre (IFSC) established in Botswana. One of the primary sources of attraction for leading players in international trade and financial markets is the efficiency of a country's payment systems environment. Certainly, an inefficient payments system would make it very difficult to attract international participants into the financial system.

A considerable amount of effort has been expended towards achieving the payments system reform and modernisation objectives. A draft bill on the NPS has been prepared, in support of the reform process and will soon be presented to Parliament. More generally, the support of Government and other key stakeholders, including providers of utilities such as telecommunications and electricity is crucial.

Strategies developed by the banking sector for modernising pay-

ment systems are dependent upon all the structures of Government being aware of such initiatives and lending their support to the developments. At a policy level, Government has demonstrated its full support and commitment to improving Botswana's banking and financial markets, as indicated by the following extract from the National Development Plan VIII:

"The key issues for the financial sector during NDP VIII will include increased financial openness and greater integration of the domestic financial sector with those of regional and international economies"

These signals from Government, along with the positive efforts made by the private sector in the financial markets, serve as a very important basis for successful reform and development of the NPS. This will lead the country to achieve a fully reformed and modernised payments system by the year 2005.



Rationale and scope of NPS

Payments systems play a crucial role in all modern economies by providing the transmission mechanisms through which the settlement of transactions between buyers and sellers of goods and services can take place. An efficient and smoothly operating payments system is a necessary precondition for business development and economic growth. Accordingly, safety, integrity and reliability of domestic and international payments are prerequisites for the safety and stability of financial institutions and the financial markets within which they operate.

From a regional perspective, the Bank of Botswana has a keen interest in the SADC Payments System Project, especially with regard to the approach to payments system reform.

A holistic, strategic approach is deemed appropriate for the Botswana's NPS reform initiative. Such an approach entails:

- (a) drawing up and agreeing upon a set of principles on which a future payments system should be based;
- (b) drawing up strategies that will address the issues and adhere to the principles by the year 2006;
- (c) determining priorities and which components of the strategies will be implemented in the long, medium and short-term;
- (d) determining the responsibilities for funding

and implementing the components.

The primary focus area of the NPS project is on the function of cheque clearing and settlement of both low-value payments in the retail market and high-value transfers in the inter-bank market. The latter will include foreign exchange payments. The project aims to identify and implement strategies and solutions for achieving efficiencies in bulk payment processes and procedures, and for the reduction of payment risks. A second phase of the project will involve the examination of payment and settlement mechanisms in the money and securities markets as well as the isolation of payment risks in these markets, leading to the design of appropriate risk-containment strategies. Thirdly, the project will establish a comprehensive, in-

tegrated national payments facility through which all payment system transactions carried out by the banks and other participants in the NPS, will be cleared and settled. During the course of the project, continuous assessment will be undertaken to establish opportunities for the introduction of modern payment mechanisms for handling transfer payments such as pensions.

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The Bank to the NPS

Objectives of t

The NPS project has multifaceted objectives. However, is to develop a comprehensive, comprehensive payments system. This will provide a base that the NPS architecture adequately reflects. The project also aims to sensitise all stakeholders on the issues at both operational and policy level. The project also aims to foster broad stakeholder appreciation of the country's payments system and to secure the project also aims to gather information existing in all segments of the payments

In more specific terms, the principal NPS objectives include:

- (i) To minimise risks in the payment and settlement processes by improving system reliability and settlement certainty;
- (ii) To improve statistical information gathering relating to the stock

(iii)

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The role of the Bank of Botswana

Bank of Botswana has several key roles to perform under the NPS and these operate at several levels. At the most general level, the Bank's role is defined in Section 4 of the Bank of Botswana Act, which specifies the primary objectives of the Bank. One of these objectives is stated as being to "create and maintain monetary stability, an efficient payments mechanism and the liquidity, stability and proper functioning of a soundly operating monetary, credit and financial system in Botswana".

The Bank's role is central to the NPS Project, and indeed in some ways it is the "owner" of the project, providing overall policy guidance and co-ordination. Beyond these general responsibilities, however, the Bank has a number of more specific roles to play in the operation of the NPS. It is the de-facto operator and regulator of the payments system, and also provides settlement services to participants given that settlement takes place through the transfer of funds between accounts at the Bank. It also has an important role to play through the provision of liquidity - within established parameters - to the commercial banks in order to ensure that their settlement obligations can be met without causing disruptions or shocks to the overall payments system.

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the NPS Project

Objectives. The most important objective, however, is to develop a consensus-driven future model for Botswana's payments system for stakeholder support, while ensuring that the system reflects the country's unique characteristics. Another important objective of the project is to ensure that stakeholders on important payments system levels, as a prelude to the development of a modern, automated payments system. Another important objective of the project is to ensure that stakeholders on important payments system levels, as a prelude to the development of a modern, automated payments system. Another important objective of the project is to ensure that stakeholders on important payments system levels, as a prelude to the development of a modern, automated payments system.

flow of funds in the payments system oversight and achievement of macroeconomic management objectives of Bank of Botswana; to develop a payments system which will be efficient and effective, and one that

will provide a high quality service to present and future generations of Botswana;

(iv) To ensure that the future payments system will be all-encompassing and truly national in character; and in particular, that it embraces all seg-

- (v) Ensuring that the future payments system comprehensively addresses all payments related issues;
- (vi) To address issues of timeliness, such that the system introduced will facilitate prompt clearance and settlement of transactions;
- (vii) To ensure that all components of the payment systems have a well-founded legal basis under all relevant jurisdictions;
- (viii) To ensure the achievement of finality and irrevocability

in the settlement of all payment instructions in accordance with international standards and practices.

The successful attainment of the forgoing objectives will transform Botswana's payment systems from current, mostly manual processing cycles, to modern, automated processes that are commensurate with conventional practices and allow for seamless participation in international financial markets. The country's success in this pursuit depends on the continued support and active contribution of all the NPS stakeholders, not just the commercial banks, as primary participants in the NPS.

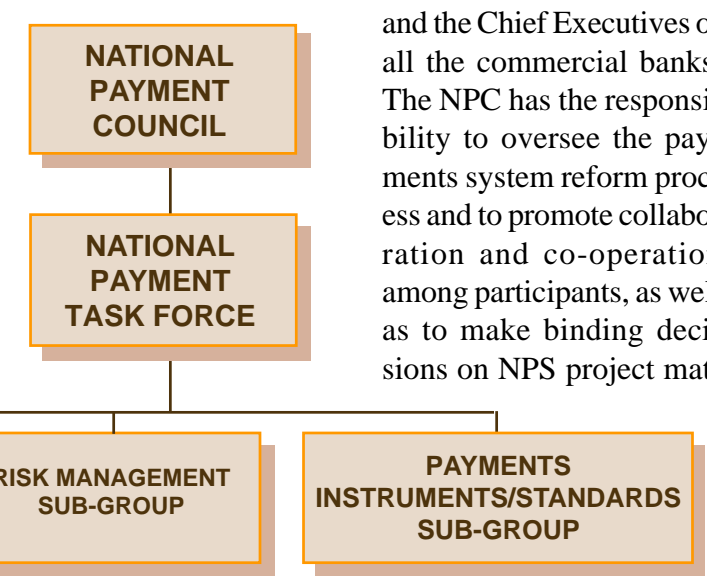


National Payments Systems Structures

To make progress with the NPS project, the Bank of Botswana has established structures to manage and drive the NPS modernisation programme. Internally, the Bank has a Payment Systems Unit (PSU) within the Banking Department. The main purpose of the PSU is to organise, manage and control day-to-day payments systems related matters. It is also responsible for the implementation and co-ordination of payments systems related decisions and policies.

There are also other structures, which have been established to facilitate the co-operative development of the project. They serve as consultative and consensus-building platforms through which the central bank engenders collaboration and co-operation with

other payments system participants and stakeholders, as well as other major players for the long-term benefit of the banking industry. At the apex of these



and the Chief Executives of all the commercial banks. The NPC has the responsibility to oversee the payments system reform process and to promote collaboration and co-operation among participants, as well as to make binding decisions on NPS project mat-

structures is the National Payments Council [NPC].

The NPC comprises the Governor of the Bank of Botswana as chairman,

ters.

More to the point, as an overseer of the payments system, it leads the reform and modernisation process. Among other responsibilities, its role includes providing strategic guidance to the reform process. Other major activities of the NPC include the monitoring of the NPS project milestones and achievements.

Under the NPC is the National Payments Task Force [NPTF]. The NPTF comprises Bank of Botswana senior officers and appointed representatives of the commercial banks, other financial institutions and representatives of service corporations such as the Botswana Postal Services and Botswana Telecommunications Corporation. Government, is also represented on this task force, through the office of the

Standard Chartered Bank Views on NPS

Standard Chartered Bank Botswana supports the National Payments System initiative in Botswana, which aims to achieve a modern, integrated payments, clearing and settlement system that is reliable and secure, serves the needs of all stakeholders and meets the requirements of the growing economy.

In the same vein, Standard Chartered Bank Botswana is striving to improve its services to customers by introducing innovative technologies and services to customers.

For example, the bank recently automated the cheque deposits and cheque clearing process (inward and outward clearing) for all its branches in Gaborone using MICR (Magnetic Ink Character Recognition) technology, in line

with the Bank of Botswana Standards for Cheques and Debit vouchers.

The new system is centralized at the bank's Customer Service Centre and reads and processes all cheques and MICR encoded cheque deposit forms submitted by customers at teller windows in all six Gaborone Branches. The system is expected to make the cheque deposits and clearing processes faster, safer, more efficient and more accurate.

At present the system is processing about 5,000 vouchers per day. The full capacity of the two machines is over 8,000 per day. The bank has a third backup machine in case of equipment failure and as a disaster recovery site.

The system is fully compatible with the new ECH (Electronic Clearing House) Code Line clearing, which has just commenced operation.



Accountant General. The personnel serving on this body are senior and knowledgeable staff capable of interpreting the NPS vision and strategy. The Deputy Governor responsible for the payments system modernisation programme chairs the NPTF.

The NPTF has several specialist committees dealing with specific aspects of the payments system. They comprise personnel selected because of their expert knowledge and capacity to address issues such as:

- (a) payment instrument/standards matters;
- (b) legal and regulatory matters;
- (c) risk management matters;
- (d) general and several other operational issues.

Framework and Strategy

A Botswana NPS Framework and Strategy document has been finalised and it is being used as a guide for developing the future payments system. This document is the product of co-operative and collaborative effort between stakeholders in the payments system, including the Government of Botswana. The focus of this joint effort is the achievement of the common objective of developing a modern payments system for Botswana. The document synthesises discussions and collective decisions on characteristic features of the future NPS.

It also provides an overview of the NPS Vision for Botswana to be completed in 2005, as agreed by all stakeholders. It outlines the strategic framework that will lead to the successful implementation and realisation of the vision and defines the strategies that will be adopted to achieve the vision. The

document describes the conceptual framework as well as the necessary structures and support mechanisms aimed at supporting the payments system.

The development of the strategy document has been driven by the existing circumstances covering macro-economic, de-

mographic and infrastructural realities that were apparent during the stocktaking and situational analysis phase. The document also records the historical realities of the Botswana payment system and the expected future developments and requirements of the market in order to familiarise the reader with the unique circumstances that have influenced the framework and strategy. The practices and experiences of other countries have also served as a useful input as they have been adopted, where applicable, and strategically customised to fit in with the unique circumstances of Botswana.

The Envisaged National Payment System

The NPS is to be developed and implemented in the best interest of all members of Botswana society to encourage the use of existing and future payment instruments and services. The need to make available additional payment access points, particularly in the rural areas, is considered a primary objective.

In the event, the progression of Botswana's NPS requires the development of a number of payments system services that must be integrated

into a homogeneous entity and serve the projected payments system needs of the country. It is envisaged that by the year 2005, Botswana will have in place

an NPS that will facilitate the speedy and secure transmission of all types of payments. The system will minimise the need for businesses and individuals to hold large amounts of cash for the purpose of making payments. It will reduce float in the banking system and specifically increase efficiency of transmission of large value payment instructions. By these measures, it is ex-

pected that the future NPS will minimise risk opportunities in the payment systems to manageable levels and create the desired framework for a secure and reliable payment, clearing and settlement environment. Botswana's future NPS will serve as an integrated payment vehicle through which major payment service providers will be able to clear and settle.



Achievements of the NPS to date

At the inception of the NPS Project, the Bank, in consultation with the stakeholders, took the view that the implementation of certain components of the project should be expedited. Such components included the introduction of Code Line Clearing (CLC), implementation of an Electronic Clearing House (ECH) and the development of Payment System Legislation. Considerable progress has been achieved in each of these areas, as hereunder:

(a) Cheque Standards

As part of the payments system reform initiative, the Bank of Botswana and all licensed commercial banks embarked on an exercise to review cheque standards. The new Standards for Cheques and Debit Vouchers have now been introduced. These standards lay down the requirements and specifications for the design of all cheques and all other debit vouchers for use in Botswana.

Subsequently, the Bank of Botswana and all licensed commercial banks proceeded to introduce new cheque forms that conform to the newly adopted standards. The new cheques are printed with Magnetic Ink Character Recognition [MICR] numbering format. The use of these cheques will enhance the operational efficiency of processing cheques and, thereby improve service to customers.

(b) Electronic Clearing House [ECH] And Code Line Clearing [CLC]

The introduction of MICR printed payment instruments is part of the strategy to automate the processing of paper instruments in the Clearing and Settlement System. This in turn entails the full automation of the Clearing House, to replace the old manual processes. Both the hardware and the software for the ECH, located at the Bank of Botswana in Gaborone, have been installed. All clearing banks have acquired the necessary equipment to enable the automated processing of cheques and communication with the ECH. CLC is the conversion of vital payment data on the face of cheques to electronic format and its transmission to the ECH for netting and payment. On March 1, 2002, the CLC Project was implemented on a live basis, running parallel to manual clearing activities. This enabled rigorous stress testing of all elements of the system across all clearing banks. With the success of the testing phase, manual clearing activities were discontin-

ued on May 31, 2002. With effect from June 1, 2002 the legal basis for settlement shifted from the manual cycle to the electronic cycle. Work on the introduction of Electronic Funds Transfer (EFT) as part of the CLC Project commenced on July 1, 2002, with the expected live take-on date set for October 1, 2002. The EFT module will facilitate the electronic transfer of pre-fated credit payments. It is expected that this will provide scope for the Bank of Botswana to eventually reduce the settlement cycle for credit payments to the shortest possible period, as well as cutting the need to 'hoard' credits created by the delays in manual processing. Further details of the establishment and operation of the automated cheque processing system and the Electronic Clearing House will be given in the next issue of TSA TUELANO.

(c) Payment Systems Legislation

The Bank, in its payments system reform and modernisation process, is guided by the requirements of the Bank for International Settlements, (BIS) Core Principles for Systemically Important Payment Systems. Among others, the BIS requires that the payments system in a country should have a clear and sound legal basis. Existing legislation and regulations are insufficient for the support of the future NPS. The future payments system will require the support of robust legislation, as it is the primary basis used by businesses and investors for determining the safety and security of payments in any country. To meet this requirement, the Bank has prepared draft legislation, which will serve as a basis for payments system oversight. The National Clearance and Settlement System (NCSS) Bill passed the second reading during the July Parliament and should be enacted in the foreseeable future. Work on the development of NCSS Regulations is ongoing within the Bank. A draft of the Regulations has been submitted to the Attorney General's Chambers, through the Ministry of Finance and Development Planning, while at the same time the Bank is conducting consultations with key stakeholders in the process. In addition, the Bank is developing payments system oversight procedures which will be consistent with the newly enacted legislation. A review of all legislations affecting the National Payments System will be initiated following the enactment of the National Clearance and Settlement Systems Act.

³ No. 43 Core Principle for Systemically Important Payment Systems, English, ISBN 92-9131-610-5.