

ZIMBABWE
NATIONAL PAYMENT SYSTEMS

FRAMEWORK AND STRATEGY

First Edition
January 2000

SAMPLE

Document prepared by the Reserve bank of Zimbabwe,
with the assistance of representatives of the commercial
banks and other financial institutions.

HARARE, JANUARY 2000

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The numerous drafts of this document have been typed and retyped by many fingers but the bulk of the work was done by the two ladies in the Project Office and Payment Systems Department. We would like to thank these ladies for putting up with our handwriting.

Lastly we would like to thank the Reserve Bank of Zimbabwe Library team for lightening the task of searching through various secondary information.

Editorial Team

**ACCEPTANCE OF THE
DOMESTIC FRAMEWORK AND STRATEGY
FOR IMPLEMENTATION OF THE
NATIONAL PAYMENT SYSTEM**

IT IS HEREBY STATED THAT:

This document is the product of the cooperative and collaborative efforts by the Reserve Bank of Zimbabwe and the Banking Industry.

The document outlines the vision, objectives, strategies, principles and general framework for a sound domestic national payment system in Zimbabwe.

The Reserve Bank of Zimbabwe will continue to collaborate with the banking industry in implementing the projects that may arise from the overall design of the payment systems.

The Reserve Bank of Zimbabwe will also continue to give guidance and support to stakeholders throughout the reform process.

SIGNED AT HARARE ON THIS

.....DAY OF.....2000

.....
Dr. L. L. Tumba
Governor
Reserve Bank of Zimbabwe

.....
Mr. S. Gwasira
Director
Supervision & Surveillance
Reserve Bank of Zimbabwe

FOREWORD

In recent years, speedy execution of payments has become a critical operation for banks as they endeavour to deal with pressures brought about by increased market activity. The latter, however, comes with related risks, in particular, systemic risk which has to be properly managed to achieve efficiency in the payment system and avoid failures detrimental to the economy.

Zimbabwe's current manual system which combines both high and low value items, settling on a deferred net settlement (DNS) basis, cannot sustain pressures brought about by changes highlighted by demands for speedy payments execution.

In conformity with worldwide trends, therefore, and the need to ensure coordination of market developments, the Reserve Bank of Zimbabwe has, in cooperation with banks, decided to reform the country's payments system, in order to deal with the aforementioned problem.

This document is the collaborative work undertaken by the Reserve Bank, the banking industry, government and other stakeholders. The document provides a basic framework from which further reforms may be initiated.

I am confident that this document will also serve as a useful reference as we strive to bring about a safe, sound and efficient payment system to service our economy.

**GOVERNOR
RESERVE BANK OF ZIMBABWE**

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EXECUTIVE SUMMARY

INTRODUCTION

Like most countries all over the world, Zimbabwe has embarked on a reform program to optimise operational efficiency and reduce risks in the domestic payment system.

The current clearing and settlement system is manual and paper-based. In the absence of an electronic system for handling inter-bank transactions, clearing banks meet at the Reserve Bank Clearing House to exchange paper instruments and establish their net settlement positions. Settlement is then effected on a deferred basis.

The only electronic system for inter-bank transactions is the Automated Teller Machine (ATM) and Point of Sale (POS) switching system owned by a partnership of some clearing banks and building societies. Settlement for this system is also done on a deferred basis because cheques are used to effect settlement.

The National Payment System (NPS) reform is expected to review and revamp in a holistic manner, all aspects of the payment process such as, infrastructures, instruments, standards, procedures, legal framework, users and service providers.

AN OVERVIEW OF THE NPS

The economy of a country revolves around the payment system through which payments and settlements are effected. A payment system should therefore serve the needs and interests of all stakeholders in the economy.

While individuals, businesses and public offices generally require reliable payment services, commercial and central banks are mainly interested in optimum operational efficiency and minimum financial risks.

The envisaged NPS will have a number of new and enhanced features in the form of automation, payment mechanisms, legal statutes and management roles and responsibilities as highlighted below.

Risk Management

Every clearing bank in the NPS will be responsible for the containment and management of risks it introduces into the payment system. The Central bank has generally been the lender of last resort for clearing banks due to the delayed net settlement system and lack of on-line information on banks' payments, exposures and settlement positions. In order to enable the banks to manage their risks, a number of tools and procedures will be put in place.

The introduction of electronic payment mechanisms, an on-line settlement network, and settlement options will facilitate immediate settlement, access to necessary management information and effective management of payment exposures.

Liquidity and Collateral Management

The demand for adequate liquidity as a prerequisite for settlement will require each bank's funding mechanisms to have a direct link to the settlement system. In addition, the establishment of a central electronic securities system for all money and capital market instruments will enable immediate access to collateral needed for intraday liquidity. The securities system will therefore be designed with the flexibility to utilise and release collateral as instructed by each paying bank.

These developments to ensure immediate provision of liquidity will enable the achievement of payment finality and settlement irrevocability in real-time.

Clearing Cycles

The clearing cycle for cheques is generally five (5) days long and may vary depending on the clearing area. As a result, float increases, the circulation of funds is delayed and the execution of monetary policy by the Central Bank becomes complicated. These long cycles and delayed settlement are generally attributed to the manual paper-based systems used for processing cheques.

The establishment of electronic data interchange systems, shared payment networks and same day settlement will shorten clearing cycles, reduce float and assist the Central Bank in executing monetary policy effectively.

NPS Legal Framework

The NPS needs to be supported by a sound legal system, with clearly defined procedures and regulations for all participants. A new NPS Act will be introduced to ensure legal certainty on NPS transactions and a sound legal foundation for the payment system as a whole.

Roles and Responsibilities

The management functions of the Reserve Bank of Zimbabwe and the participating institutions need to be clearly defined and understood by all parties. The Central Bank will lead in the change process and ensure that a sound and efficient payment system prevails.

Clearing banks are the gateway to the NPS clearing and settlement systems providing payment services to customers and infrastructures for processing payment instruments.

Any other financial institutions can function as Customer Payment Service Providers (CPSP) providing the payment interface between customers and clearing banks.

Non-financial institutions which provide payment infrastructures and services will be expected to maintain the agreed service levels and enforce prescribed security and control measures.

Every institution or management body participating in the NPS will be expected to take responsibility for the management and control of the risks they introduce into the system.

CONCLUSION

It is envisaged that the new NPS will be a secure, reliable and efficient payment system with local and international recognition. This should lead to increased usage of the provided services and a wider spectrum of participants in the local economy.

ZIMBABWE NATIONAL PAYMENTS SYSTEMS (NPS)

INTRODUCTION

Background

The period prior to the economic reforms of 1990 was characterised by a relatively simple payment system that revolved around notes and coin and the cheque being the main payment instruments. The main participants were to a large extent limited to the Reserve Bank and the commercial banks.

The opening up of the economy has resulted in the payment system in Zimbabwe experiencing significant changes in recent years. These changes have included, inter alia, an increase in the number of participants. As participants began competing for the provision of better services to customers, developments relating to new technology and information systems were also experienced.

While these developments are welcome, they have also increased risks which are normally associated with increased activity in payment systems. The increases in volumes and values of transactions have brought about large unmeasured intraday exposures for participating banks. Lack of quality information that is provided in a timely and usable manner has increasingly become apparent. This is largely attributable to manual, cumbersome and inefficient paper-based systems used in the absence of a real time system for processing and settling inter-bank obligations.

It is against this background that the Reserve Bank has undertaken to collaborate with banks in addressing risk management issues in payment systems and ensuring that a sound payment, clearing and settlement system is put in place. In addressing risk, focus will be on risk faced by individual participating banks and minimisation of “systemic risk”. The latter relates to the risk that may arise through the failure of one participant to settle thereby leading to the failure of other participants to settle.

In December 1995, a Payment System Task Force (PSTF) was set up to discuss the status of the payment system in Zimbabwe and to make recommendations on the way forward. After conducting research visits to Mauritius, Singapore and the United Kingdom, the task force came up with the following recommendations:

1. The establishment of a formal National IT Management structure
2. The establishment of a broader based NPS Association which would include, representatives from customers, retailers and infrastructure providers.
3. The appointment of a Project Manager to work on the project on a full time basis.

4. The transformation of the clearing system from a manual paper-based system to an automated system.
5. The setting up of a formal NPS structure comprising of the Governor of the Reserve Bank and Chief Executives of clearing banks.

At a meeting held with Chief Executives of commercial banks on the 20th of February 1997, the Governor of the Reserve Bank of Zimbabwe, Dr. L. L. Tumba formally constituted the National Payment Systems Steering Committee (NPSSC) and the National Payments System (NPS) Project.

The main task of the NPSSC is to plan the evolution of the NPS and give general guidance to the project.

Project Rationale

The Reserve Bank of Zimbabwe has overall responsibility for financial stability. In this regard, the Reserve Bank must ensure that banks and other stakeholders operate in a stable and efficient financial environment and that the clearing and settlement system functions smoothly. A well functioning payment system facilitates the effective execution of monetary policy and bank supervision.

On the part of the banks, the evolution of the payment system in a coordinated manner will entail greater cooperation. This will in turn enhance operational efficiency and savings as unnecessary duplications are avoided and economies of scale are realised through shared infrastructure.

Goals of the project

- ✓ To reduce risk in payments system and financial service industry
- ✓ To provide all players in the financial industry equal access to payment services
- ✓ To assist the Reserve Bank in executing monetary policy through the provision of accurate and timely information
- ✓ To put in place a sound legal framework that is supportive of payment systems
- ✓ To facilitate irrevocability and finality to settlement
- ✓ To create public awareness on available options in the payments industry
- ✓ To reduce the length of payment cycles for bulk payments
- ✓ To provide a platform for effecting cross - border payments

PROJECT PARTICIPANTS

Steering Committee

The National Payment System Steering Committee (NPSSC) has the responsibility of steering the project towards the attainment of a secure, reliable and efficient payment system in Zimbabwe. Membership of the NPSSC comprises the Governor of the Reserve Bank (Chairperson), the Chief Executives of commercial banks, Postmaster General, the Registrar of Banks and Financial Institutions, and a representative of the Association of Building Societies. Members who participated in the steering committee meetings during the course of the project are listed in Table 1 below:

Table 1

Organisation	Name
Reserve Bank of Zimbabwe	Dr. L.L Tsumba (Chairperson) Mr. C. Chikaura, Mr. S. Gwasira, Mrs A.D. Zanza, Mr.O. Zuze, Mr.D. Zambe
Barclays Bank	Mr.I. G. Takawira/ Mr. M. L. Wood/ Mr.M.R.K. Green
CBZ	Mr. G. Gono
First Banking Corporation	Mr. L. T. Gwata/ Mr. W. Masvika/Mr. A. N. Ndewere/ Mr F.J. Mutete
Ministry of Finance	Mrs. M. S. Mpofu/Mr. E. M.Zvandasara/Mr.F.M. Rwenhamo
PTC	Mr. M. S. Mpofu /Mr. C. Shonhayi/Mr.B Mtandiro/Mr.G.Magodo
Project Office	Mr. E. S. Rwatirera/Mrs B.S. Morris
Association of Building Societies	Mr. D. Stephenson
Stanbic Bank	Mr.G.R. Brackenridge/Mr. C. H. Nyatsanza
Standard Chartered bank	Mr.B.R. Hamilton/Mr. R. A. Ehrich
Time bank	Mr. C. W. T. Tande/Mr. A. N. W. Ncube
Finhold	Mr. E. N. Mushayakarara/Mr.J.R. Pickering
Metropolitan Bank	Mr. C. Mukuna

Reserve Bank of Zimbabwe Payment Systems Department

The Department is responsible for the technical support on the ground, guidance, coordination of domestic and regional reform initiatives and the continuity of payments system beyond project stage.

The Project Office

The project director works on a full time basis to carry out and implement decisions as directed by the Steering Committee and in consultation with Reserve Bank of Zimbabwe Payment Systems Department.

Strategy Formulation Group

This was established in January 1998 to formulate and document strategies for the payment systems reform. Members who have participated in meetings during the course of the process are listed in Table 2 below:

Table 2

Organisation	Name
Barclays Bank	Mr. M.R.K. Green
CBZ	Mr. S.T Hove /Mr. D.T. Nyakusendwa/ Mr. R. Fambisai
First Banking Corporation	Mr. F. J. Mutete
Ministry Of Finance	Ms. C. Takarinda
POSB	Mrs. P. Chanakira
Project Office	Mr .E. S Rwatirera/Mrs .B. Morris
Reserve Bank Of Zimbabwe	Mrs. A. D. Zanza/ Mr.D.A. Zambe/Mr. O.Zuze/Mr. S. Gwasira
Stanbic Bank	Mr. C.H. Nyatsanza, Mr.H.Maimbo
Standard Chartered Bank	Mr. R.A Ehrich
Time Bank	Mr. T. Bhaswi
Zimbank	Mr. J. R. Pickering/ Dr. B.K. Nelson
Metropolitan Bank	Mr. S.V. Mathole

Legal Sub-Committee

This committee was set up to deliberate on legal issues that need to be considered in reforming the payment system. The sub-committee has the responsibility of formulating a legal framework that will address inadequacies in the current legal set up and ensure that the new payment system has a sound legal basis. Members who participated in discussions during the course of the project are listed in Table 3 below:

Table 3

Organisation	Name
Finfold	Mr. E.N. Mushayakarara (Chair), Mr. P. Kudita
Barclays Bank	Mr. A.D Lorimar
First Banking Corporation	Mr. F.J. Mutete
Commercial Bank of Zimbabwe	Mr. P. Mtetwa, Mrs. V. Chasi
Standard Chartered Bank	Mr. R. Ehrich
Stanbic Bank	Mr. J. Hamman
Law Development Commission	Mr. T. McMillan
Ministry Of Finance	Mrs. M.S. Mpofu/ Ms. C. Takarinda
Project Office	Mr. E.S. Rwatirera
Reserve Bank Of Zimbabwe	Mrs. A.D. Zanza/ Mr. F. Chasi/ Mr. D.A.Zambe
Attorney General's Office	Mr. B. D. Crozier
Metropolitan Bank	Mr. G. Chihota

Other Participants

Reserve Bank of Zimbabwe Internal Working Group Members

The main purpose of this group is to deliberate on payment systems as they cut across various Departments within the Reserve Bank of Zimbabwe thereby requiring cooperative and collaborative action by all. The group mainly looks at functional processes of the Bank from a cross functional perspective with a view to coming up with a common position for policy guidance.

Mrs. J. Tsuroh	-	Financial Markets	- Registry
Mrs. L. Mukurazhizha	-	Financial Markets	- Settlements
Mr.O Zuze	-	Financial Markets	-Banking Services
Mrs .N. Mukura	-	Banking Supervision	- Offsite Analysis
Mr .A. Mbirimi	-	Financial Markets	- Portfolio Management
Mr. F. Chasi	-	Legal Department	
Mrs. A. Vhokoto	-	Financial Markets	- Registry
Mrs. J. Njobo	-	Financial Markets	- Banking Services
Mr. A. Saburi	-	Financial Markets	- Market Operations
Mrs. A. D. Zanza	-	Payment System Department	
Mr D. A. Zambe	-	Payment System Department	
Mr. P.I.E. Ribatika	-	Financial Markets	- Banking Services
Mrs. F. Chinzvende	-	IT Department	

CHAPTER 1

THE PAYMENT SYSTEM

1.1 Definition of a payment system

- “A payment system consists of a set of instruments, banking procedures and interbank funds transfer systems that ensure the circulation of money.”

Bank for International Settlement (BIS)

Central Bank for the Group of Ten Countries

- “A payment system consists of a defined group of institutions and a set of instruments and procedures used to ensure the circulation of money in a geographic area, usually a country.”

European Community Central Banks

From the above definitions, the term “payment system” therefore encompasses information and communication systems that are used to transmit payment instructions from payer to payee and to settle obligations arising from these transactions.

1.2 Components of a Payment System

The components of a payment system are therefore:

- Banks and other financial institutions
- Service providers (access, system etc)
- Customers
- Legal Framework
- Rules, Regulations and Agreements used in the system
- Transactions
- Payments and settlement instruments
- Procedures, processes, systems and payment streams
- Infrastructure

1.3 **The Payments System and the Economy**

Trading that takes place in a national economy has to be settled at some stage to ensure completion. The settlement involves the exchange of the traded item against the transfer of funds through an acceptable means of payment.

A payment system therefore provides the means through which this exchange and settlement are effected.

Economic activity revolves around the banking system where payment and settlement are core functions.

“Payment and settlement systems are to economic activity what roads are to traffic: necessary but typically taken for granted unless they cause an accident or unless bottlenecks develop.”

Bank for International Settlement: Annual Report 1994

1.4 **Payment Instruments**

Payment instruments take various forms which include the following:

- Cash
- Cheques
- Postal and money orders
- Bank drafts
- Direct debits and credits
- Payment cards (debit and credit)
- Electronic funds transfers (POS, ATMs etc).
- Telegraphic transfers

Looking at economic history, economies have progressed from barter to notes and coin, cheques and credit cards. Today electronic money has gained widespread acceptance in financial circles.

1.5 **Payment System Development**

Payment system reform has to take place in a coordinated manner for maximum benefits to be realised. The following are some of the key considerations that need to be taken into account in planning for the reform process:

- Central Bank requirements
- Clearing banks' requirements
- Agreed principles
- Clearly defined rules
- Legal and statutory issues
- Agreed implementation schedule

1.5.1 Central Bank requirements stem from its responsibility of ensuring the prevalence of a sound and efficient payment system. The Central Bank has to ensure that basic fundamentals are in place to facilitate its role as banker, overseer, operator of the settlement system and risk monitoring and settlement.

1.5.2 Clearing Banks service a diversified portfolio of customers and hence have a need for cost effective clearing and settlement services with minimum exposure to/from other participants.

1.5.3 Principles governing the payment system need to be agreed upfront by all participants.

1.5.4 Rules provide the guidelines for issues such as participant roles, standards, default procedures and control exposures within the system.

1.5.5 The National Payment System should have a sound legal basis.

1.5.6 A phased implementation schedule needs to be formulated. The impact of disruptions to business operations should be minimised.

1.6 **The Payment process**

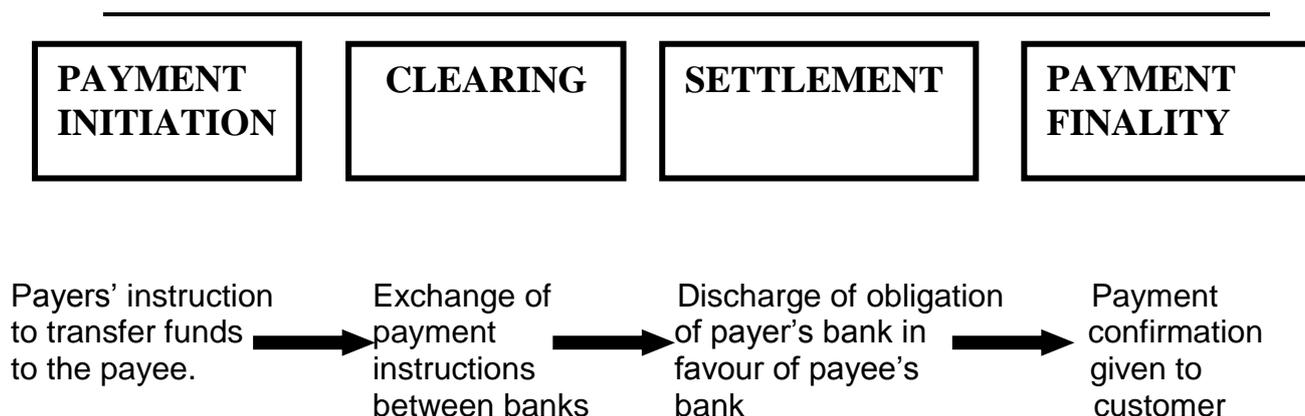
The payment process involves more than one player and various stages from initiation to completion of the transaction. Figure 1.6 illustrates the various stages

involved in a payment process. Depending on the medium used for payment, the stages indicated vary and may not be relevant in some transactions.

In a cash- based medium, for example, settlement and finality of payments are achieved a soon as cash is transferred from payer to payee.

In other non-cash based transactions, the payment process involves more than two parties and goes through various stages before the transaction is concluded.

Figure 1.6: PAYMENT PROCESS



1.7 Participants in a Payment Process

A major trend in payment business has been the diversification of customer needs from which distinct groups can be identified as illustrated in figure1.7

1.7.1 Private individuals and small businesses

This group usually requires reliable payment services in settlement time and price.

1.7.2 Business enterprises and Public Offices

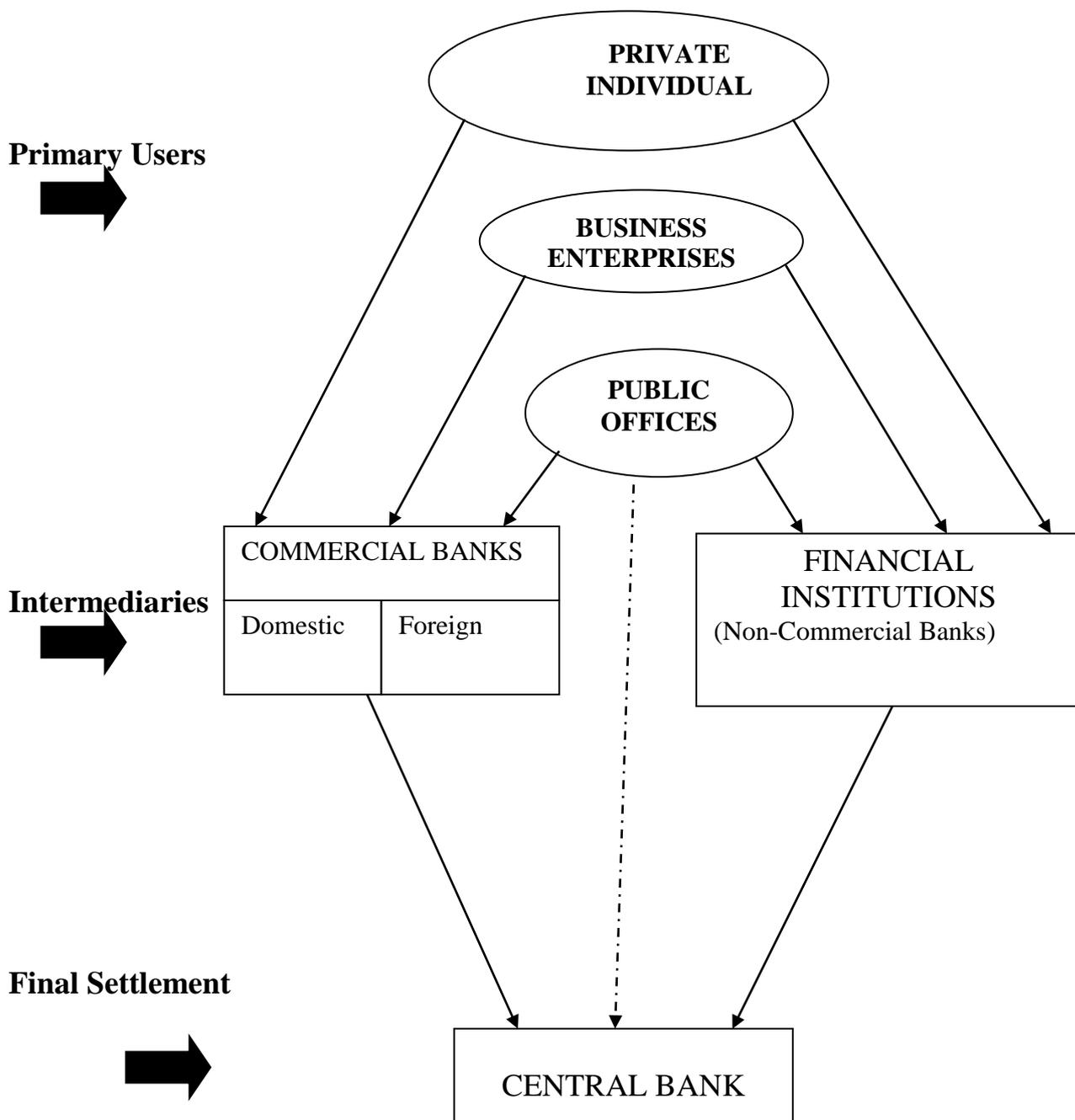
These require almost same day payments at low prices with added value services like cash management.

1.7.3 Commercial banks

These settle financial market transactions on a worldwide basis. They are mainly interested in reducing their settlement exposures, providing payment services to their customers and receiving good value for the payment services.

In most countries, the reform of payment services has responded to these different customer requirements by providing two payment streams - for small value and large value payments.

Figure 1.7 Participants in Payment Transactions



1.8 **The Payment System and Monetary Policy**

The fundamental duty of every Central Bank is to execute monetary policy. Traditionally, this has been done by influencing the rate and terms for bank reserves. The bank reserves, as well as amounts normally generated by money market and securities transactions, constitute large values which tend to be time and security critical by nature. Payment systems reforms worldwide have therefore generally tended to look at ways of reducing the risk associated with these large values and facilitating the adoption of indirect instruments of monetary policy and financial markets development. An efficient payment system therefore ensures compatibility with monetary policy by:

- Facilitating active liquidity management by banks
- Reducing the size and variability of float within the system
- Preventing uncontrolled increases in money and credit
- Facilitating the use of short term interest rates as a more reliable signal for monetary control.

1.9 **Payment System Design**

The design of payment systems is mainly driven by volumes and values of transactions. Once the volumes and values confirm the need for system development, a number of options can be considered and these include the following:

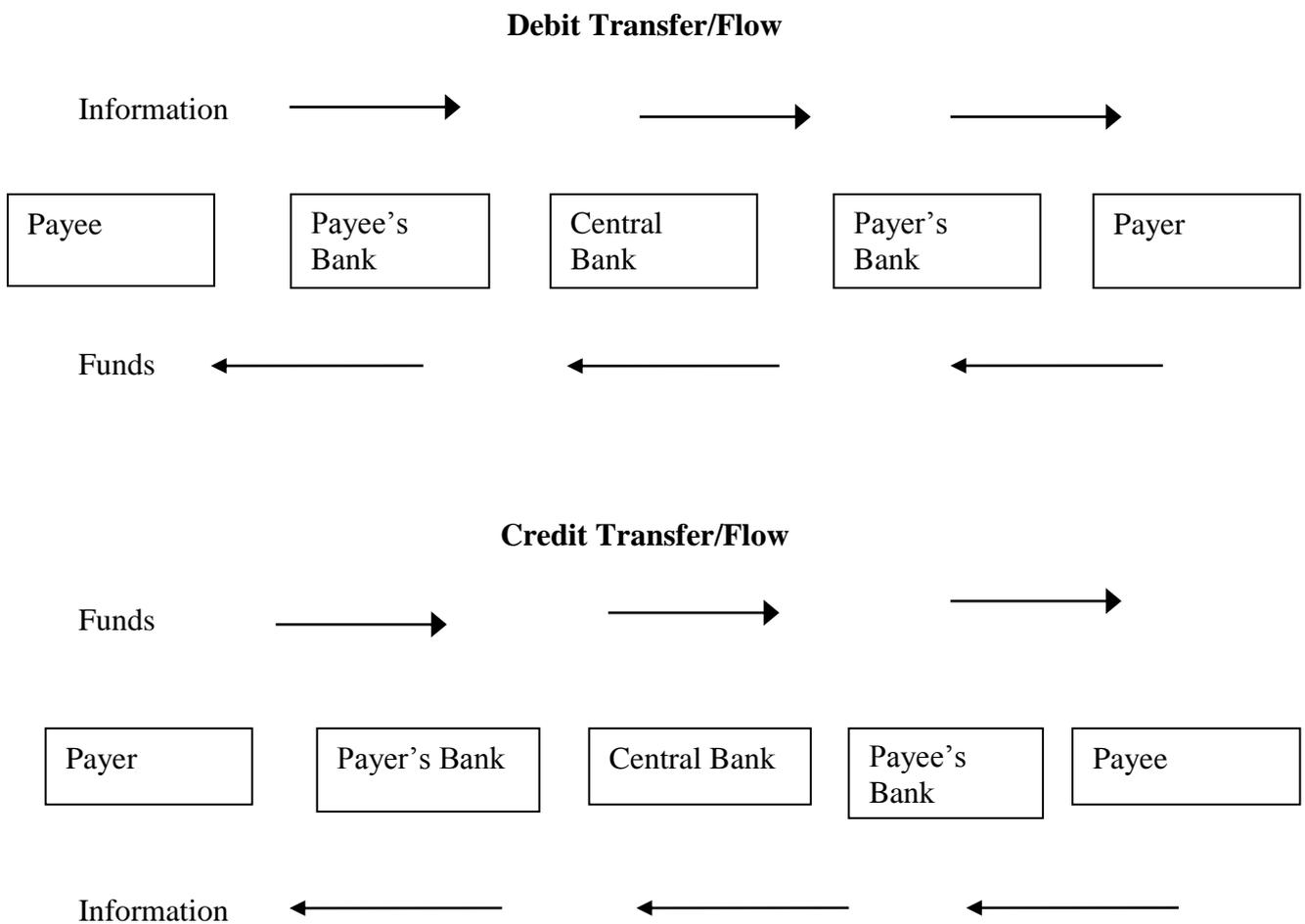
- Manual, paper based vs electronic system
- Large value (wholesale) vs small value (retail) systems
- Whether the system should operate on a gross basis or net basis or both. Gross transactions are settled individually whereas in a net system they are offset and settled on a deferred basis.
- Centralised vs decentralised system (large value systems are usually centralized since most of them operate on a real time basis which requires participating banks to be linked to a central settlement system.)

- Whether the system operates on a “credit” or “debit” transfer basis.

The illustration in fig 1.9 shows the flow of information and funds in the two options:

Under the credit transfer arrangement the payer initiates the transaction while the payee initiates the transaction in a debit transfer arrangement.

FIGURE 1.9 INFORMATION AND FUNDS FLOWS WITHIN DEBIT & CREDIT TRANSFER SYSTEMS



The choice of the system will to a large extent be influenced by the situation prevailing in each country or economy. Since the situation can change at any time, it therefore follows that the choice of a system is not an easy one to make. Hence, designers should strive for the best possible as at a particular time.

CHAPTER 2

STRATEGIC FRAMEWORK

2.1 VISION

The vision of the NPS is to have a secure, reliable and efficient payment system that is locally and internationally recognised.

2.2 OBJECTIVES

The objectives of the NPS are:

2.2.1 To establish an efficient infrastructure.

- There is increasing demand for greater efficiency in funds transmission within the banking systems to speed up the circulation of funds. Modern banking techniques and integrated technology provide the means to achieve this objective and replace the present manual and paper based systems.

2.2.2 To reduce risk in the payment system and financial service industry.

- Both the Central Bank and financial institutions need to ensure that payment risks are controlled and managed. This will facilitate the development of financial markets and the national economy.

2.2.3 To provide all players in the financial industry equal access to payment services.

- Subject to meeting the required criteria and standards, users of the payment system should have appropriate interfaces with the NPS to effect their payments and gain access to permitted services and information.

2.2.4 To assist the Reserve Bank in executing monetary policy through the provision of accurate and timely information

- Availability of up to date, complete and accurate information is critical for the Central Bank's decision making and execution of monetary policy. The information should assist the Central Bank in macro economic management and reduction of instability caused by market speculation.

2.2.5 To achieve payment finality and irrevocability of settlement

- High- value single payments for which there is sufficient liquidity should be finalised, concluded, and confirmed to both the Central Bank and the transacting parties immediately to eliminate any risk associated with delayed settlement and decisions.

2.2.6 To ensure that payment systems have a sound legal basis

- All efforts in the payment system reform will go to waste if there are no legal statutes in the form of Acts, rules and regulations to support the NPS business practices.

2.2.7 To create public awareness on the various available options in the payments industry

- To achieve a critical mass in the use of improved NPS services on offer, the public should be educated on the availability and variety of options in the financial industry.

2.2.8 To reduce the length of payment cycles for bulk payments

- Manual operations generally have processing inefficiencies which lengthen the payment cycle and increase float. The NPS will enable shorter payment cycles, reduce the float and increase the circulation of funds. This should result in positive developments towards a favourable monetary policy.

2.2.9 To provide a platform for effecting cross-border payments

- Banks currently use a variety of similar systems and platforms for effecting cross- border payments.
- The management and monitoring of foreign exchange risk can be executed effectively using one central system.

2.3 STRATEGIES

The following strategies are aimed at attaining the objectives as described in the NPS vision. The strategies are future oriented providing solutions which meet the long-term interest for the NPS as a whole.

2.1 **Minimise the manual, cumbersome, paper transactions by introducing electronic payment mechanisms and an on-line settlement system.**

- The majority of payment instruments in Zimbabwe are paper based i.e. cheques, treasury bills, scrip and other commercial paper. The processing, clearing and final settlement cycle of the paper instruments is lengthy, cumbersome and costly in terms of manpower and equipment used in the processes.
- There are a number of deficiencies in the processing of paper instruments. The paper is repeatedly processed manually and electronically by the banks; exchange is manual over a long cycle and there are a number of errors attributed to poor quality of paper and non adherence to standards.
- In order to overcome the above paper- related issues, the use of paper in effecting payments will be discouraged through the introduction of efficient and reliable electronic mechanisms in the trade, payment, clearing and settlement systems.
 - The core of the system will be an electronic settlement network connected to all clearing banks. This will enable banks to effect interbank funds transfers via the settlement system at the Central Bank.
 - The system will enable banks to conclude settlement in real-time, thereby reducing systemic and other payment related risks.
- The chosen method for effecting large value payments is “credit push,” where credit transfers are made by the paying bank.
- All payment service providers and traders will be urged to transform their systems and payment mechanisms from manual, paper-based, to secure electronic systems which promote credit push practices.

2.2 **Introduce electronic securities system for all money and capital market transactions**

- This is targeted at all money and capital market instruments which are paper-based and processed manually e.g. shares, bonds, debentures, treasury bills, certificates of deposit and bankers acceptances.

- The purchase and maturity of Treasury Bills (TBs), for example, currently involve physical delivery of paper, passing entries over central bank accounts and issuing cheques to pay holders on maturity of TBs.
- An electronic security transfer and book-entry system will be introduced for treasury bills (TBs) and government stocks. This will ensure the efficient management of the Reserve Bank of Zimbabwe securities portfolio.
- A Central Securities Depository (CSD) for government security will be established. The CSD will offer convenience, efficiency, and security and reduce risks that are generally associated with physical movement of paper.
- The book entry system and CSD will lead to immediate immobilisation of paper and dematerialisation in the long term.
- The RBZ is a key player in securities trade and should therefore act as the driving force, taking full responsibility for the establishment of a central securities depository.
- Delivery versus Payment (DvP) mechanisms should also be introduced for both securities and equities. It will ensure the transfer of title to the security or equity at the same time as the settlement of financial obligations.

2.3 **Introduce same-day settlement**

- Large value payments will be settled in real time while small value (bulk) payments will be settled on the day of clearance.
- Adequate time will be allowed for banks to source the necessary funds to meet their end-of-day obligations.
- Close monitoring and management of intra-day liquidity will be expected of each clearing bank by RBZ and senior executives of each participating bank.
- Multilateral netting will be retained in bulk payments.

2.4 **Establish a sound legal framework for the new payment system**

A sound legal foundation in respect of the payment system is one of the key objectives which demand appropriate legislative provisions and an effective legal framework to be put in place.

The legal framework will:-

- Provide a legal foundation for clearing, netting and settlement arrangements amongst participants in the payment system.
- Ensure that there is legal certainty on the finality and irrevocability of transactions processed and settled through the banks' accounts held at the Reserve Bank.
- Create a legal environment in which specified criminal activities can be identified and offenders accordingly prosecuted.
- Provide legal clarity in bank curatorship and liquidation situations.

Note:- legal issues to be addressed are covered in the legal framework document.

2.5 Established and adopt national and international NPS standards

- The corporate bodies will ensure that appropriate NPS standards are adopted, developed and legally enforced.

2.6 Promote and create public awareness on the services and options provided by the NPS

- The Zimbabwean public will be educated and made aware of the NPS concepts.
- Education and communication will be a continuous process.

2.7 Introduce risk-reduction and monitoring measures in the management of inter-bank exposures

- Participants must be aware of, and identify risks in the payment system so as to apply the most appropriate techniques for dealing with them. All participants must aim to anticipate potential problems, correct the causes, and avoid the potentially dangerous task of dealing with all the ramifications of a serious, unexpected payment system problem.

2.8 Introduce appropriate security and control mechanisms to ensure minimum operational risk

Comprehensive security measures and guidelines will be put in place to ensure:-

- Business continuity by coping with emergencies like system failure and natural disasters. This requires the setting up of disaster recovery plans (DRP's) and well tested back up facilities and systems.
- Authorised access to financial system, information and infrastructures.

2.9 **Establish a robust and efficient payment system infrastructure**

- Liaison with infrastructure service providers will be maintained in order to create awareness on the NPS infrastructure requirements. This will assist them in planning for the expected service.
- The NPS infrastructure must be able to withstand and cope with market volatility, lack of funds, financial stress, fraud, payments irregularities, natural disasters, mechanical failures and political shocks.
- Greater efficiency and economies of scale in the payment system will as far as possible be achieved through the use of common, shared infrastructure.
- The new infrastructure will take into account the needs of financial markets and end users in order to create the desired conditions for efficient financial and economic systems.

2.10 **Provide direct and equal access to payment services for all clearing banks**

- Banks with settlement accounts at the RBZ will have direct access to the clearing and settlement network.
- Any non-clearing banks i.e. all users and customers to clearing banks will not access the settlement network directly to effect their payments. They will only do so through their bankers.

2.11 **Provide management information for decision- making and execution of monetary policy**

- The system will provide the Central Bank with complete, accurate and timely information for monitoring and executing monetary policy.

- All banks/participants will have access to adequate information for managing their positions and risks, and making appropriate decisions on intraday liquidity requirements.

2.12 Introduce payment finality and irrevocability of settlements for all transactions processed through the settlement accounts in the Central Bank.

- Once the system confirms the provision for, or availability of sufficient liquidity in the paying bank's settlement account, the latter will be debited and the beneficiary bank's settlement account credited.
- The system will simultaneously provide the transacting banks with confirmation to this effect. At this point, the executed transaction becomes final and irrevocable.

2.13 Incorporate all cross-border payments into NPS and facilitate payment versus payment (PvP)

- Foreign exchange settlement risks are just as critical as domestic settlement risks.
- The current banking practices for cross-border payments need to be reviewed with a view to designing a common platform which facilitates continuous and simultaneous settlement, Payment versus Payment, Risk Controls and a reduction in settlement exposures.

Table 2.3**ACTION PLAN**

	STRATEGY	BY WHO
2.3.1	Minimise the manual, cumbersome, paper transactions by introducing electronic payment mechanisms and on-line settlement system.	Central Bank, banks, businesses, individuals and Inter-bank Sub-committees
2.3.2	Introduce electronic securities system for all money and capital market transactions and facilitate DvP.	RBZ, commercial banks, stock exchange and other financial institutions
2.3.3	Introduce same-day settlement	RBZ and commercial banks + other
2.3.4	Establish a sound legal framework for the new payment system.	RBZ, legal experts from banks, Government and professional institutions
2.3.5	Establish and adopt national and international NPS standards	All participants
2.3.6	Promote and create public awareness on the services and options provided by the NPS	RBZ, Government, commercial banks, payment services providers and other financial institutions
2.3.7	Introduce risk-reduction and monitoring measures in the management of inter-bank exposures	All participants
2.3.8	Introduce appropriate security and control mechanisms to ensure minimum operational risk	All participants
2.3.9	Establish a robust and efficient payment system infrastructure	All participants
2.3.10	Provide direct and equal access to payment services for all clearing banks	All participants
2.3.11	Provide management information for decision making and execution of monetary policy	All participants
2.3.12	Introduce payment finality and irrevocability of settlements for all transactions processed through the settlement accounts in the central bank	RBZ and commercial banks
2.3.13	Incorporate all cross-border payments into the NPS and facilitate payment versus payment (PvP).	RBZ and commercial banks

CHAPTER 3

CRITICAL SUCCESS FACTORS

The success of the NPS will be measured against the following critical success factors:

3.1 Risk containment and management

- All participants are aware of and understand the risk in the payment system, and accept liability for risk they introduce into the system.
- There are risk-control and containment measures in place.
- The system provides information and facilities for participants to manage their own risk.

3.2 Security and confidentiality

- The payment system ensures privacy of all transactions without compromising information and confidentiality.
- There is complete authentication and validation of all payments and settlement instructions.

3.3 Finality of settlement

- Once a transaction has been processed through the central bank accounts by the Central Bank settlement system, it becomes final and irrevocable.

3.4 Accessibility

- All individuals and businesses have measurable and demonstrable access to the NPS.

3.5 Variety of payment instruments

- The payment system allows the use of all payment instruments which are accepted in Zimbabwe.

3.6 Auditable system

- The system provides all participants with audit trails which are pertinent to their own business.
- The system provides the Central Bank with complete audit trail pertinent to all interbank activity.

3.7 Standards

- All the NPS standards are clearly documented, agreed on by all clearing participants and signed off.
- The NPS conforms to stipulated national and international standards.

- All payment instruments and products adhere to a set of minimum fraud-detection standards.

3.8 **Information Availability**

- The NPS provides complete and accurate information, on time, to facilitate decision making.
- The NPS provides banks/participants with adequate information to manage their positions, react to market conditions, and take appropriate action.
- There is synchronisation of payment details with the actual payment throughout the payment process.

3.9 **Liquidity**

- The NPS provides for funding options to enable liquidity management, for example, direct funding, and conversion of collateral to fund settlement accounts or RBZ loans against collateral.

3.10 **Legal basis**

- The payment system is supported by a sound legal framework.
- Legal procedures and regulations for NPS operations are in place.
- All participants, as providers of services and users of instruments, are clear as to their rights, responsibilities and obligations to each other.

3.11 **Monetary Policy**

- The NPS provides information that assists the Central Bank in monitoring and executing monetary policy. The system complies, and is compatible with monetary policy.

3.12 **Flexibility**

- The system has flexibility and modularity to allow for an evolutionary design suited to local conditions.
- The system has the capacity to accept change i.e. legislative, business, market and policy.
- The system can interface with all participants and their infrastructure in accordance with the NPS design and configurations.

3.13 **Reliability**

- The NPS is resilient and safeguards the banking system even in crisis situations.

3.14 **Delivery vs Payment (DvP)**

- The NPS provides the facility for the achievement of DvP on securities settlements.

3.15 **Rules, Procedures and Regulations**

- The rules, procedures and regulations are clear and practical for participants to apply in dispute resolution and reaching an agreement without disrupting normal business activities.
- The entry criteria for participants is clearly defined, agreed and enforced.

3.16 **Payment versus Payment (PvP)**

The NPS provides the facility for the achievement of PvP for cross-border transactions.

CHAPTER 4

FUNDAMENTAL PRINCIPLES

These principles are the guide for the development, implementation and management of the NPS. They are non-negotiable and provide the basis upon which disputes and conflicts will be resolved.

4.1 **The Central Bank has the responsibility to oversee the NPS**

- In order to ensure safety and soundness in the NPS and the economy, one of the key Central Bank functions will be the oversight of payment systems, especially those that may give rise to systemic risk
- Payment systems are at the core of every sound financial and economic system.
- The Central Bank's objective is to ensure settlement of funds among banks and other institutions, thereby contributing to the maintenance of orderly financial and economic systems.
- All interbank rules and procedures for payments, clearing and settlement must be agreed with and ratified by the Central Bank before implementation.

4.2 **The Central Bank will intervene in NPS issues and take appropriate action in order to restore and maintain continuity, stability and efficiency of the whole system.**

- Provision of intraday liquidity will be at the discretion of the Central Bank to overcome any liquidity shortages
- The amount which can be provided to a participant experiencing liquidity problems will be determined by the Central Bank and in accordance with its own terms and conditions.

4.3 Only clearing banks can participate in clearing and inter-bank settlement

- Any institution can provide payment services to both customers and other institutions, but only clearing banks can clear the payment and settle over central bank accounts.
- Clearing banks can be agents, clearing and settling on behalf of other banks. However, the clearing exposures will be reflected under each respective bank's own name, not under the settling agent's name.

4.4 Responsibility for the payment transaction lies with the payer

- In order for a payment to be effected and settled, the payer is expected to instruct and authorise their bank (the paying bank) to make a credit transfer to the receiving bank via the Central Bank. This method of payment is called "credit push".

4.5 Availability of funds is a requisite for settlement

- Every clearing bank will have a settlement account with the Central Bank into which funds for settlements will be lodged.

4.6 The participants have a co-operative responsibility for the growth and development of the NPS

- NPS evolution is a co-operative responsibility. A safe, secure, sound and robust payment system is crucial to the stability of the financial markets and the economy, and the confidence of all stakeholders.

4.7 A payment is irrevocable and final after settlement has been finalised over the Central Bank accounts.

- Finality of interbank settlement can only be guaranteed after the settlement entries have been passed over the bank's settlement accounts held in the Central Bank.

4.8 **Every clearing bank is responsible for its own inter-bank indebtedness.**

- All NPS participants will be aware of the risks they are exposed to and the risks that they introduce into the payment system.
- The management and containment of risk is the responsibility of each NPS participant.
- Each participant will have evidence of the existence of adequate measures to manage and contain risks.

CHAPTER 5

CONCEPTUAL DESIGN

5.1 Introduction

This chapter describes the envisaged design of the overall payment system at a very high level. The design covers the key concepts, features and processing characteristics of a framework within which every major component of the payment system can be identified, analysed and defined. The set of business processes and their interaction with one another are schematically presented in order to portray the overall flow of data and information through the system.

Further detailed analysis, system specifications will be based on the high level design and handled individually when the proposed projects are tackled.

5.2 NPS Architecture

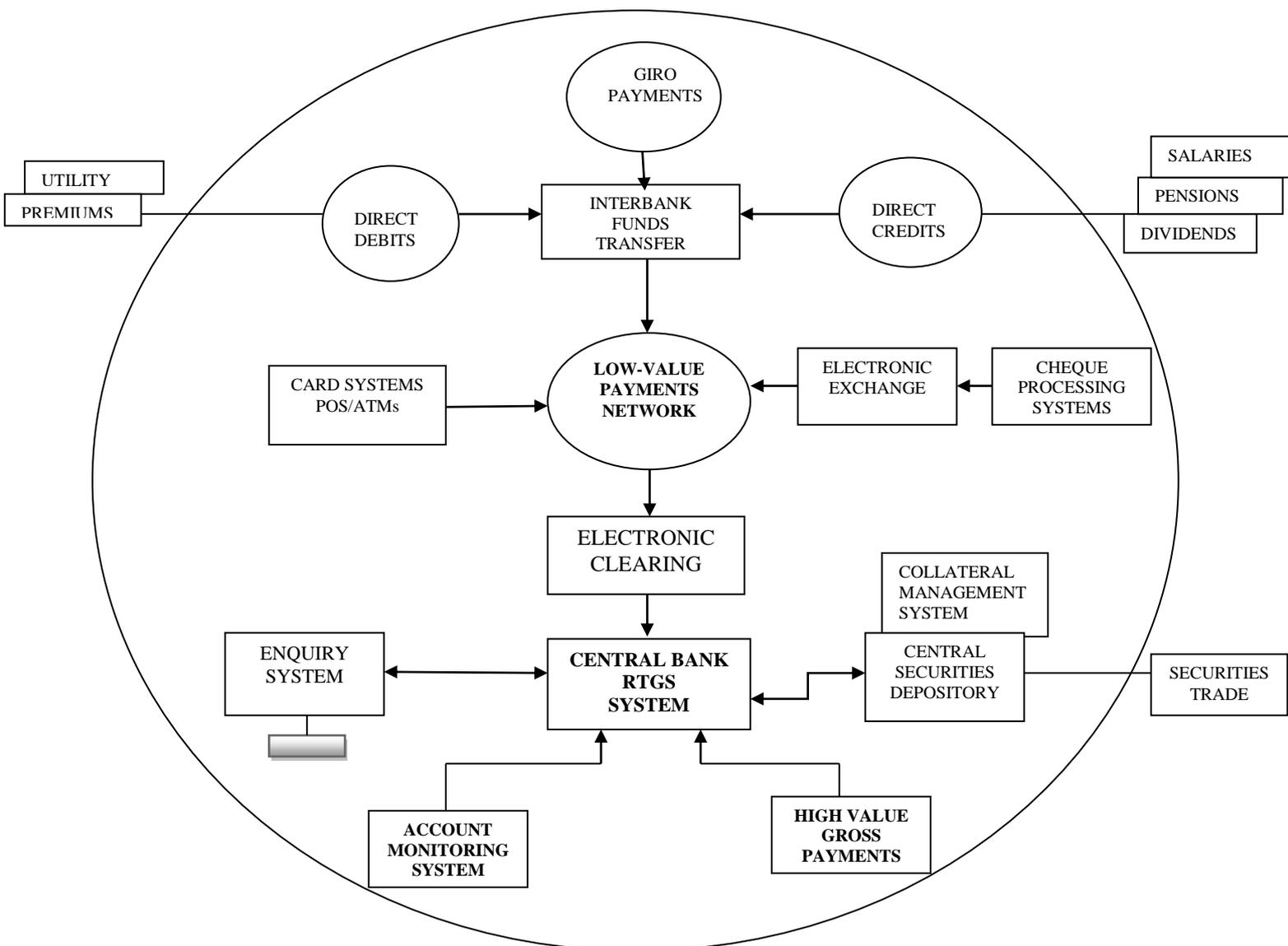
As indicated in figure 5.1 below, the real time gross settlement (RTGS) system is at the core of the payment system. It is envisaged that payments relating to the following transactions will eventually interface with the settlement system either directly or indirectly:

- Cash transfers (e.g ATM, POS transactions)
- Direct debit and credits
- Net position of clearing banks (from bulk payments)
- Securities trades
- Equities trades

The above interfaces will generate various projects which will have to be undertaken in order to achieve the final goal of an efficient payment system.

The system will also provide for on line enquiry facilities and information for account and risk monitoring.

Figure 5.1 : NPS Architecture



5.3 Business Processes and Models

The national payment system is at the centre of all economic activity since all transactions generated within an economy have to be executed through the use of a payment instrument. The volumes and values of activity within the economy will determine the payment system model to be adopted. In this regard therefore, there can be no uniform payment infrastructure that is best for all countries in the world.

The following sections give a perspective of the existing and potential payment services within the envisaged NPS. From the point of view of giving a general

framework for future discussion, an indication of the desired position for each payments model is also given.

5.3.1 **High Value Payments (HVPs)**

Unlike the current situation where HVPs are not handled differently from small value or bulk payments, a separate payments mechanism will be created for HVPs.

Generally two approaches with the characteristics indicated here below can be used in establishing the settlement of these HVPs:

5.3.1.1 **Gross Settlement**

General characteristics:-

- payments are individually done
- communication and booking form a single process
- costly
- requires considerable liquidity within the system
- negligible settlement risks
- immediate finality

5.3.1.2 **Net Settlement**

General Characteristics:-

- payments are offset to arrive at balances
- communication and booking form separate processes
- involves systemic risk
- less costly
- low liquidity requirements

HVPs Model

The designed HVPs model will allow for an RTGS solution to settle transactions continuously and individually on a real time basis. Furthermore, within the overall context of NPS, other large value systems may be operated to provide for netting requirements.

5.3.2 Low Value Payments

Several low value networks will co-exist to provide value added payment services and transmit payments from respective markets and payment streams for cheques, electronic funds transfers, direct debits and direct credits.

While each payment service can be market-specific, all payment service providers will be urged to automate their payment mechanisms in line with the NPS standards and reform initiatives. This will speed up and enhance efficiency through direct interfaces between their systems and the NPS.

5.3.2.1 Cheques

Cheque instruments are likely to continue being the most utilised means of effecting low-value, high volume paper based payments.

The present procedures of clearing cheques through the RBZ Clearing House will be retained and improved by introducing Electronic Clearing which will significantly reduce the clearing cycles.

The ongoing efforts to endorse MICR standards for formats, encoding, paper quality and size will continue in order to improve cheque-processing efficiency and acceptability of electronic data. Paper movement will be minimised through initiatives such as cheque imaging and truncation. It is noted here that some participating banks have already embarked on such initiatives.

5.3.2.2 ATM And POS Networks

These networks currently provide communication, authorisation of transactions and interbank financial settlement. Their operations are governed by uniform operating policies, procedures, controls and agreed cost-recovery mechanisms.

For the Zimswitch network, the interbank indebtedness is currently settled through the issuance of cheques amongst the participating institutions. The latter include clearing banks and building societies who are not members of the Clearing House. Other banks operate their own independent non-shared networks.

ATM And POS Model

A shared countrywide network is envisaged in the future with settlement of transactions being effected electronically. This will be preceded by the determination of each participant's net position.

5.3.2.3 Interbank Funds Transfer

These constitute both debit and credit transfer of funds between banks. Debit transfers are usually executed from standing orders that are given in paper form for payment of recurrent expenditure like premiums, mortgage and utility bills. Credit transfers mainly constitute payments initiated by corporate bodies in paying out salaries, dividends, pensions etc. There is a lot of scope for improving the current means of handling these payments.

It is envisaged that in future these will be effected through a fully fledged on-line interbank funds transfer system. The use of magnetic tapes and diskettes is envisaged to continue particularly where interbank funds transfers are facilitated through a centralised GIRO system. Infrastructure constraints will also justify the continued use of magnetic tapes and diskettes.

5.4 Securities Settlement

Participants in the securities market have for a long time lived with the inconveniences arising from the paper-based clearing and settlement procedures that are currently in existence.

These include among others:

- Physical collection and delivery of paper.
- Safekeeping of the security
- Registration of certificates in the buyer's name to ensure receipt of interest or dividends.

- Delayed settlement of transactions (e.g. T+7 basis for securities traded on the Zimbabwe Stock Exchange (ZSE)).

For efficiency to be achieved in this area, the reform initiatives will have to encompass the following:

- Introduction of an electronic trading system
- Establishment of a central securities depository and book-entry system.

The central securities depository (CSD) will offer convenience, efficiency and security by holding scrip in either material or dematerialisation form while book-entry will allow the transfer of securities to be effected as well as facilitate the dynamic management of collateral.

The delivery versus payment (DvP) model will be adopted for settling securities. In this regard, therefore, a link will be established to ensure that transfer of securities takes place in exchange for simultaneous irrevocable payment.

CHAPTER 6

STAKEHOLDERS – THEIR ROLES AND STRUCTURES

The success of the NPS will depend on all players' understanding and commitment to their roles and responsibilities. A broad spectrum of both individual and corporate bodies will be involved in the NPS, therefore, it is necessary to identify all the players and clearly specify their responsibilities. The various organisational and management structures must also be specified.

6.1 Stakeholders

A stakeholder is any person or organisation who

- has an interest in the NPS
- uses any part of it
- interacts with it or,
- needs to be informed or consulted.

The main stakeholders include:

- Reserve bank of Zimbabwe
- Banks and other financial institutions
- Payment services providers
- Government
- Regulatory bodies
- End users (individuals and businesses)

6.2 Roles

6.2.1 Reserve bank of Zimbabwe

- Own and operate central settlement system
- Ensures business continuity /disaster recovery plans are in place
- Overseer of payment system (soundness of system)
- Monetary policy formulation

- Settlement agent
- Ensuring financial stability
- Ensures NPS serves all stakeholders
- Lender of last resort
- Banker to the banks
- Issuer of Government paper
- Central depository
- Issuer of money (legal tender)
- Reduction of risk within payment system
- Supervision of participants to ensure compliance with prudential standards
- Resolution of disputes
- Establishment of legal framework
- Support and cooperate with banks to ensure a coordinated approach in the development of interbank market structures.
- Providing strategic leadership and vision in the evolution of the NPS
- Rendering support in the development of the necessary infrastructure
- Resolution of disputes to protect the NPS functionality

6.2.2 Registered Clearing Banks

A clearing bank is a registered bank which maintains a settlement account at the Central Bank.

- Participate in clearing and settlement
- Service provider for third party payment instruments
- Provide payment processing infrastructures
- Manage own risks in the system
- Act as principle and intermediary in payment transactions
- Provide interface with RTGS
- Maintain sufficient liquidity with Central Bank

- Distribution and collection of notes and coin
- Settlement of obligation with the Central Bank

6.2.3 **Financial Institutions-(Non Clearing Banks)**

These institutions do not have settlement accounts with the Central Bank. They can however provide infrastructures to end users and interface to the NPS on behalf of their customers through clearing banks.

- Participate in NPS via a registered clearing bank
- Collection of payment instructions and preparation of payments into acceptable formats
- Risk reduction/prevention measures

6.2.4 **End-users (Individuals and Businesses)**

- Participate in NPS via registered clearing bank
- Can participate in payment streams directly
- Use payment system
- Initiate payments
- Participate in payment system through clearing banks
- Create demand for new products and services

6.2.5 **Government**

- Facilitator of regulatory framework within which the NPS operates i.e. provides legislation
- Represents collective interest of community

6.2.6 **Payment Infrastructure Service Providers (PISP)**

PISPs' may include bodies like PTC for telecommunication networks, SWIFT for payment messaging systems and international card operators, VISA and Master Card.

- Provide shared systems, mechanisms, infrastructures and services that process payment instructions for participants.
- Provide efficient service and maintain service levels according to agreements with users.
- Provide the required operational information
- Enforce the prescribed controls and security measures

6.2.7 NPS Steering Committee

It is envisaged that the NPS Steering Committee will evolve into a body that will be responsible for the overall management of the NPS as well as ensure that interests of all participants and stakeholders are served.

6.2.8 Other Bodies

The following bodies are currently in existence and will continue to be involved through the Steering Committee as and when necessary.

- Strategy Formulation Group
- Interbank Committee
- Bankers' Association
- Clearing House Committee
- SWIFT User Group
- Treasurers' Association (Treasurers' Forum of Zimbabwe)

CHAPTER 7

IMPLEMENTATION

7.1 Implementation Strategy

- A strategic and evolutionary approach to the design and implementation of the NPS will be adopted.
- Implementation of both new and enhanced features of the system will be done in phases to minimise the impact of changes on the business operations.
- Existing infrastructures which can be utilised in the new NPS will be retained and where necessary, upgraded to meet the new requirements.
- A number of business processes will need to be reviewed and revised. It should however be realised that this will be a learning curve for all involved in the new environment, therefore the new procedures will be rolled out in phases and within specified operational functions/units.
- All work will be according to the NPS Project Plan endorsed by the Project Steering Committee.

7.2 The Following is a List of the Major Tasks to be accomplished:

- Document the NPS Framework and Strategy
- NPS standards and principles
- Define the legal status of the NPS
- Confirm NPS roles and management structures
- Functional requirements specification
- Identify possible solutions
- Recommend technical partners/suppliers
- Technical specifications/design
- Security and control specifications
- Co-ordinate/link other payment streams
- Site preparation/ communication centre
- Establish a shared communications network
- Implement RTGS

- Procedural changes
- System implementation
 - Build/customise
 - Install
 - Training
- Establish a central securities depository (CSD)
- Electronic clearing and settlement via RTGS
 - Bulk payments
 - Other payment streams (e.g electronic cards)

7.2.1 Implementation Structures and Responsibilities

- The RBZ will drive the publicity, liaison between various stakeholders and the overall project co-ordination and implementation.
- The RBZ will sponsor, acquire, own and manage the agreed central solution.
- Each clearing bank will be responsible for the installation and operation of their own interface systems which enable them to access and interact with the central settlement system.
- Each payment service provider will be responsible for managing its own infrastructure which allow users and customers, access to the NPS.

7.2.2 Implementation Plan

The following high-level implementation plan highlights the main activities for each implementation phase.

Each phase will have specific sub-projects agreed by the NPS steering committee. The NPS Framework and Strategy document highlights the NPS solutions and issues at high level only. Detailed analysis and refinement will therefore need to be conducted and documented within each sub-project.

7.2.3 Implementation schedule

It should be noted that the tasks listed in the following phases are not in any order of priority. Some tasks commenced in one phase may spill over into the next phases and run concurrently with tasks in the subsequent phases.

Phase 1

The main objective will be to establish an enabling environment within which the new NPS system can be implemented. The business specifications, policies and guidelines for each payment stream will also be addressed during this phase.

The focus for Phase 1 will be on the following:

- a) Complete the drafting of the NPS bill.
- b) Establish NPS management structures (i.e. the roles, responsibilities and functions of key participants).
- c) Define and agree on risk reduction measures, risk monitoring and exposure monitoring procedures.
- d) Define a detailed NPS architecture and agree on the payment streams within the payment system framework.
- e) Specify the NPS standards.
- f) Specify collateral arrangements and the management policy.
- g) Conduct an analysis and address the impact of the new NPS on monetary policy, float and market practices.
- h) Agree on the clearing and settlement arrangements for all payment streams.
- i) Establish the requirements of the Zimbabwe Stock Exchange and how the NPS can fulfil any of them.
- j) Establish a consolidated NPS Business Model containing the processes, the data and system interfaces.

Phase 2

The initiatives from phase 1 will be implemented during phase 2 whose main focus is on readiness for implementing the system.

- a) Introduce the NPS Act.
- b) Conduct an analysis of banking practices and the trends in risks and exposures with the view to aligning them to the new NPS.
- c) Implement the new collateral management practices and policies.
- d) Adopt and implement the new NPS standards.
- e) Endorse acceptance of the new NPS architecture.
- f) Document the Functional Specification for the settlement system, interface applications and networks.

- g) Document the Suppliers bid documents:- Request for Information and Request for Proposal (RFI &RFP).
- h) Select Suppliers, design the Technical Architecture and the implementation plan for the settlement system.

Phase 3

System delivery will be started and completed in phase 3.

- a) Implement the settlement system, interbank applications and settlement network.
- b) Implement the agreed risk reduction measures, risk monitoring and exposure monitoring procedures.
- c) Monitor the new system and resultant developments in the market.

APPENDICES

A. INTERNATIONAL STANDARDS AND PRINCIPLES

B. NPS GLOSSARY OF TERMS AND ACRONYMS

Agent: A person (natural or juristic) who has authority to act on behalf of and legally bind his/her principal contractually with third parties. When an agent receives money on behalf of his/her principal, he/she acts as a conduit, and money paid to an agent is treated as having been paid to the principal. The person paying the money has no right to reclaim it from the agent, but must look to the principal, even if, in fact, the money is still in the hands of the agent.

Automated Teller Machine (ATM):

Electro-mechanical device allowing the authorised user to withdraw cash from his/her account and/or to access varying range of other services such as balance inquiry, transfer of funds and acceptance of deposits. The ATM may be operated on-line with real-time reference to an authorisation database or off-line

Bank:

A draft company registered as a bank or a mutual bank in terms of the provisions of the Banks Act or the Mutual Banks Act.

Bank draft:

A draft drawn by a bank on itself. The draft is purchased by the payer and sent to payee, who presents it to his bank for payment. That bank presents it to the payer's bank for reimbursement.

Bilateral Netting:

An arrangement between two parties to net their bilateral obligations. The obligations covered by the arrangements may arise from financial contracts, transfers or both. See netting, multilateral netting, net settlement.

Book-Entry System:

An accounting system which permits the transfer of claims (e.g. securities) to facilitate elimination of movement of paper documents.

Card:

See cash card, cheque guarantee card, chip or IC card, credit card, debit card, delayed debit card, prepaid card, retailer's card or travel entertainment card.

Central Bank Settlement System:

A central bank system whereby irrevocable interbank settlement is achieved in central bank money.

Certificate:

Physical document which evidences an ownership claim in, indebtedness of, or other outstanding financial obligations of the issuer.

Charge card:

See travel and international card.

Cheques

A written order from one party (the drawer) to another (the drawee, normally a bank) requiring the drawee to pay a specific sum on demand to the drawer or to a third party specified by the drawer. Widely used for settling debts and withdrawing money from banks. See also bill of exchange

Clearing/ Clearance:

Clearing includes the physical exchange of payment instruments between the payer's bank and the payee's bank (or their agents). Clearing process can be centralised in a clearing house (participants exchange payments instruments among themselves on a multilateral basis). Alternatively, the clearing can be distributed (the originating and receiving banks deal directly with each other on a pair wise basis (bilateral clearing)).

Clearing system:

A set of procedures whereby financial institutions present and exchange data and/or documents relating to funds or securities transfers to other financial institutions at a single location (clearing house). The procedures often also contain a mechanism for the calculation of participants' bilateral and/or multilateral net positions with a view to facilitating the settlement of their obligations on a net basis. See also netting.

Clearing bank:

A bank that participates in the clearing of payment instruments between banks.

Clearing house (payments clearing house):

A central location or central processing mechanism through which financial institutions agree to exchange payment instructions or other financial obligations (e.g. securities). The institutions settle for items exchanged at a designated time based on the rules and procedures of the clearing house. In some cases, the clearing house may assume significant counterparty, financial or risk management responsibilities for the clearing system. See clearing/ clearance, clearing system.

Collateral (for Accommodation Purposes):

Acceptable security provided by banks to the central bank for liquidity purposes.

Confirmation:

A process by which a market participant notifies its customers of the details of a trade.

Credit card:

Card indicating that the holder has been granted a line of credit. It enables him to make purchases and/or draw cash up to a pre-arranged ceiling; the credit granted can be settled in full by the end of a specific period, or can be settled in part, with the balance taken as extended credit. Interest is charged on the amount of any extended credit and the holder is sometimes charged an annual fee.

Credit push:

This implies that the paying bank initiates the settlement instruction (to the Reserve Bank) and assumes responsibility for obtaining finality of settlement. It does not imply a movement away from e.g. debit orders for low value payments.

Credit transfer:

One or more payment orders, beginning with the originator's payment order, made for the purpose of placing funds at the disposal of a beneficiary. In the course of a credit transfer, payment orders may be transmitted through separate credit transfer systems.

Credit transfer system (or Giro system):

A system through which payment and the funds described therein may be transmitted for the purpose of effecting credit transfers.

Cross- border transaction:

A transaction in which at least one of the parties is located outside the home country.

Customer Payment Service Provider (CPSP):

A facility or an institution that utilises its own system to provide payment -related services to its customers. These services include accepting payment instructions and delivering them into the payment system. When a CPSP is not a bank, it acts as a conduit to deliver the payment instruction to a bank.

Default

Inability to complete a funds or securities transfer according to its terms for reasons that are not technical or temporary, but usually as a result of bankruptcy. Default is usually distinguished from a "failed transaction".

Delivery

Final transfer of a security or financial instrument.

Delivery-versus –Payment System (DvP, delivery against payment):

A mechanism in an exchange-for-value settlement system that ensures that the final transfer of one asset occurs if and only if the transfer of (an) other asset (s) occurs. Assets could include monetary assets (such as foreign exchange), securities or other financial instruments. See exchange-for-value settlement system, final transfer.

Dematerialisation

The elimination of physical certificates or documents of title which represent ownership of securities so that securities exist only as accounting records.

Direct debit:

Debit on the debtor's bank account initiated by the creditor, based on the prior written agreement of the debtor.

Draft:

A written order from one person (the drawer) to another (the drawee) to pay a party identified on the order (payee) or to bearer a specified sum, either on demand (sight draft) or on a specified date (time draft). See cheque, bank draft, bill of exchange.

Electronic Data Interchange (EDI):

Electronic exchange between commercial entities (in some cases also public administrations), in a standard format, of data relating to a number of message categories, such as orders, invoices, customs documents, remittance advices and payments. EDI messages are sent through public data transmission network or banking system channels. Any movement of funds initiated by EDI is effected in payment instruments flowing through the banking system. EDIFACT, a United Nations body, has established standards for electronic data interchange.

Electronic securities:

Securities that exist in an electronic, as opposed to a material, form (referred to as dematerialised securities).

Final (finality):

Irrevocable and unconditional.

Final Settlement:

Settlement which is irrevocable and unconditional.

Finality of payment:

When a bank has given a customer confirmation, implicitly or explicitly, that a payment is irreversible and irrevocable.

Giro system:

See credit transfer system.

Immobilisation:

Placement of certificated securities and financial instruments in a central securities depository to facilitate book-entry transfers.

Interbank funds transfer system (IFTS):

A funds transfer system in which most (or all) direct participants are financial institutions, particularly banks and other credit institutions.

Interbank settlement:

Final and irrevocable settlement of interbank obligations over bank's accounts held at the central bank.

Issuer:

The entity which is obligated on a security or other financial instrument. For example, a corporation or government having the authority to issue and sell a security; a bank that approves a letter of credit. Sometimes used to refer to a financial institution that issues credit or debit cards.

Lender of last resort:

A discretionary function performed by the Central Bank in providing credit facilities to a bank that can not obtain funds in any other way.

Monetary policy:

Consists of decisions (excluding decisions involving the taxation and spending powers of the central government, but possibly including decisions involving its borrowing powers) that are made and implemented by the monetary authorities (i.e. by the central bank, or by the treasury and the central bank) in their various fields of operations to attain or to help to attain the volume or composition of domestic expenditure and output or, in other ways, certain broad objectives with regards to the country's economy.

Money order:

Document used to remit money to persons who don't hold an account with a bank or whose account number is unknown. Payees can either cash their order or present it to their bank for collection.

Multilateral:

Three or more transacting parties.

Multilateral netting:

An arrangement among three or more parties to net their obligations. The obligations covered by the arrangement may arise from financial contracts, transfers or both. The multilateral netting of payment obligations normally takes place in the context of a multilateral net settlement system. See bilateral netting, multilateral net settlement position, multilateral net settlement system.

Multilateral net settlement position:

The sum of the value of all the transfer a participant in a net settlement system has received during a certain period of time less the value of the transfer made by the participant to all other participants. If the sum is positive, the participant is in a multilateral net credit position.

Net settlement:

The settlement of a number of obligations or transfers between or among counterparties on a net basis. See netting.

Net settlement system:

A system to effect net settlement.

Netting/ netting scheme:

An agreed offsetting of positions or obligations by trading partners or participants. The netting reduces a large number of individual positions or obligations to a smaller number of obligations or positions. Netting may take several forms which have varying degrees of legal enforceability in the event of default of one of the parties. See also bilateral and multilateral netting, position netting, novation, substitution.

Obligation:

A duty imposed by contract or law. It is used to describe a security or other financial instrument, such as a bond or promissory note, which contains the issuer's undertaking to pay the owner.

On-line:

Pertaining to data processing equipment or procedure which operates with real-time reference to data managed by a central unit.

Paying bank:

The bank that has to meet a payment instruction that has been directed to it from a collecting bank.

The player's transfer of a monetary claim on a party acceptable to the payee. Typically, claims take the form of banknotes or deposit balances held at a financial institution or at a central bank.

Payment instruments:

Every instrument that provides a method to exchange value for money, i.e. notes and coin, paper and electronic payment instructions.

Payment order/payment instruction:

An order or message requesting the transfer of funds (in the form of a monetary claim on a party) to the order of the payee. The order may relate either to a credit transfer or to a debit transfer.

Payment stream:

Payment instructions that are homogeneous in terms of their nature, risk and processing requirements and that have the same legal basis, i.e. cheques, credit cards and electronic payments.

Payment system:

A payment system consists of a set of instruments, banking procedures and, typically, interbank funds transfer systems that ensure the circulation of money.

Prepaid card/payment card:

A card “loaded” with a given value, paid for in advance.

Principal:

A person that legally acts in his own capacity and that obtains the rights and incurs the responsibilities of such an act. A principal also refers to a person that mandates an agent to act legally on his behalf, but where the principal obtains the rights or incurs the responsibilities as a result of the mandated act of such an agent.

Real-time gross settlement (RTGS):

A gross settlement system in which processing and settlement take place in real time (continuously).

Registration:

The listing of ownership of securities in the records of the issuer or its transfer agent/registrar.

Securities depository/ book-entry system:

See central securities depository.

Settlement:

Completion of a payment or the discharge of an obligation between two or more parties. Frequently used to refer to the payment or discharge of interbank transactions or a series of prior existing transactions. See also final settlement,

gross settlement system, net credit or debit position or net settlement (credit and debit) position and ultimate settlement.

Settlement agent:

An institution initiating the final settlement of a clearing, on behalf of all the participants.

Settlement instruction:

The instruction to the central bank issued by a bank and/ or an authorised (payment) clearing house to effect settlement of payment obligations.

Settlement risk:

General term used to designate the risk that settlement in a transfer system will not take place as expected. This risk may comprise both credit and liquidity risk.

Settlement system:

A system in which settlement takes place.

Standing order:

An instruction from a customer to his bank to make a regular payment of a fixed amount to a named creditor.

S.W.I.F.T. (Society for Worldwide Interbank Financial Telecommunication):

A cooperative organisation created and owned by banks that operates a network which facilitates the exchange of payment and other financial messages between financial institutions (including broker-dealers and securities companies) throughout the world. A SWIFT payment message is an instruction to transfer funds; the exchange of funds settlement subsequently takes place over a payment system or through correspondent banking relationships.

Systemic risk:

The risk that the failure of one participant in an interbank funds transfer system or securities settlement system, as in financial markets generally, to meet his/her required obligations will cause other participants or firms to be unable to meet their obligations when due. Such a failure may cause significant liquidity or credit problems and, as a result, might threaten the stability of financial markets.

Transfer:

An act which transmits or creates an interest in a security, a financial instrument or money.

Transfer system:

A generic term covering interbank funds transfer system and exchange of value systems.

Truncation:

A procedure in which the physical movement of paper items within a bank or between banks is curtailed, being replaced by the transmission of all or part of their content in electronic form.