

CHAPTER 1
Definition of the National Payment System (NPS)
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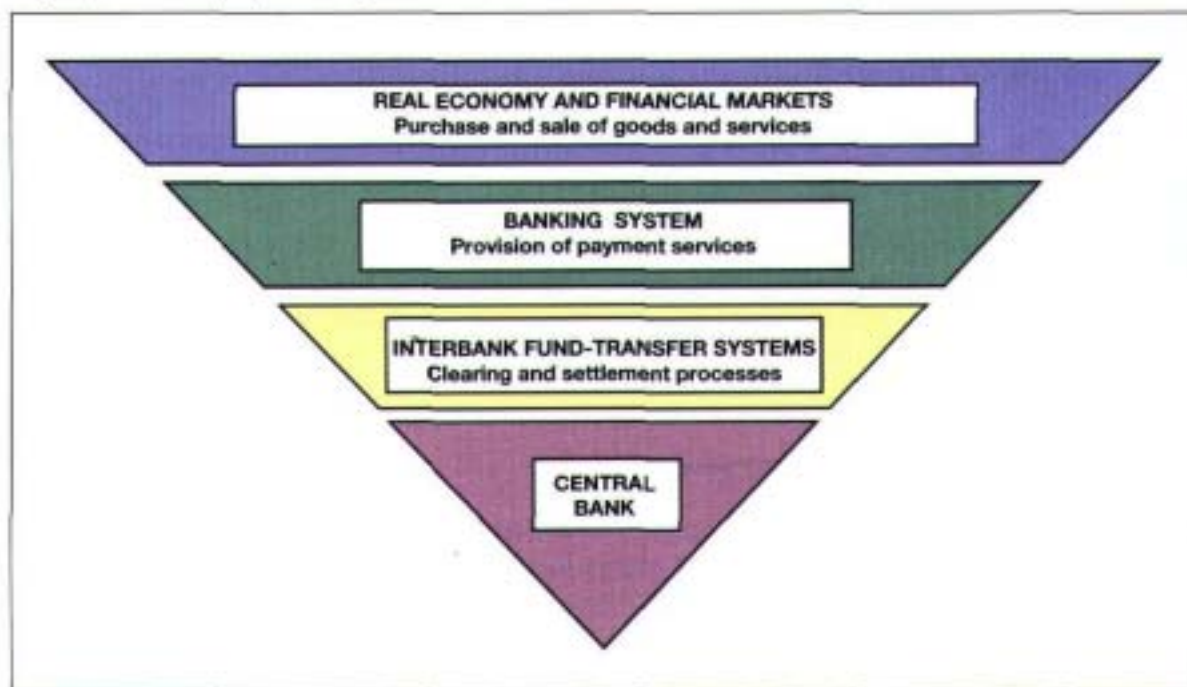
CHAPTER 1

Definition of the National Payment System (NPS)

1.1 THE NPS IN CONTEXT (Figure 1)

[1] According to the central banks in the European Community, "a payment system consists of a defined group of institutions and of a set of instruments and procedures, used to ensure the circulation of money within a geographic area, usually a country. Any country's economy can be shown as a series of layers in an inverted pyramid, in which each layer is supported by all layers beneath it. The broadest layer of the pyramid represents the real economy and the financial markets - the buying and selling of goods and services throughout the nation. It is supported by the country's banking system - the next level of the pyramid - which provides payment services. The third level consists of a limited number of interbank fund-transfer systems through which payment transactions are processed. The final settlement of payment transfers takes place across the accounts which banks hold with the central bank, whose pivotal role is vital for the functioning of the economy as a whole."²

Figure 1: The payment system in the context of the economy



[2] The NPS is therefore a core component of the broader financial system. It should be viewed as the infrastructure that provides the economy with the highways for processing the payments resulting from various economic activities. The NPS supports the full spectrum of financial activity, from South African businesses transacting in the global market to servicing the individual payment requirements of South Africa's population.

2. Issues of Common Concern to EC Central Banks in the Field of Payment Systems, September 1992, p.8.

[3] The NPS requires a delicate balance between market-driven competition, co-operation and public-good considerations. Banks and other customer payment-service providers compete for payments business and customers, whilst the efficiencies of sharing infrastructure necessitate that the participants also co-operate in setting up non-competitive infrastructures. In the national interest, it is imperative for economies of scale to be achieved and for a national payment-service infrastructure to be created to allow as many participants as possible to offer their services to the public.

1.2 COMPONENTS OF THE NPS

[4] The NPS consists of the following components:

- Banks providing financial intermediation;
- a legal and statutory framework;
- rules, regulations and agreements;
- a number of payment instruments and payment streams;
- systems, processes and procedures;
- a technological infrastructure;
- payment and settlement transactions;
- providers of access to payment-related services; and
- end-users of the different products provided by the customer payment-service providers.

1.3 SCOPE OF THE NPS

[5] The NPS encompasses all payment-related activities, processes, mechanisms, institutions and users.

[6] The term NPS thus refers to payment systems in the widest context and is not restricted to NPS mechanisms only. The term NPS mechanism is used to refer to the physical infrastructures, for example, payment-processing utilities, networks, computer systems, etc.

1.3.1 Spectrum of services and users

[7] The NPS caters not only for the financial payment needs of the inhabitants of South Africa in particular, but also the multilateral monetary area (MMA - previously CMA) and Southern African region in general. The focus is on:

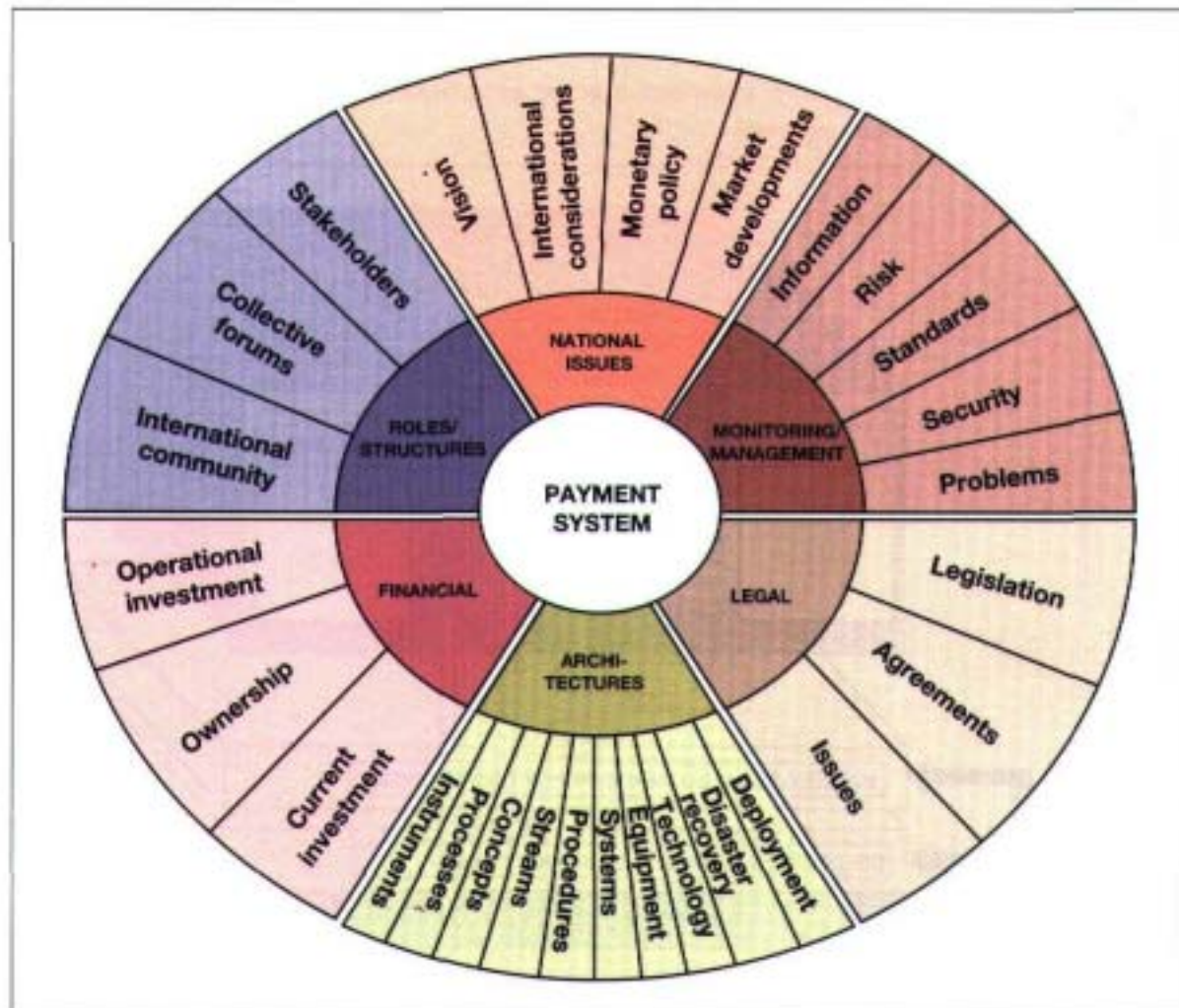
- South Africa, in providing comprehensive domestic payment services;
- the region, in ensuring the efficient transfer of South African currency and the handling of multi-currency cross-border transactions; and
- the international community, in being internationally acceptable and compatible with major trading partners.

[8] The NPS serves the needs of all markets, businesses and individuals in all sectors of the community. This includes both international and domestic business, as well as the entire South African community.

1.3.2 Diversified nature of payment system issues (Figure 2)

[9] The NPS can be viewed from at least six different perspectives, as illustrated in Figure 2. Although these perspectives are not exhaustive, they do serve as an indication of the diversified nature of the NPS.

Figure 2: Perspectives on the NPS



1.4 CONCEPTUAL FRAMEWORK

[10] The following conceptual framework underlies the strategic thinking and the envisaged business processes:

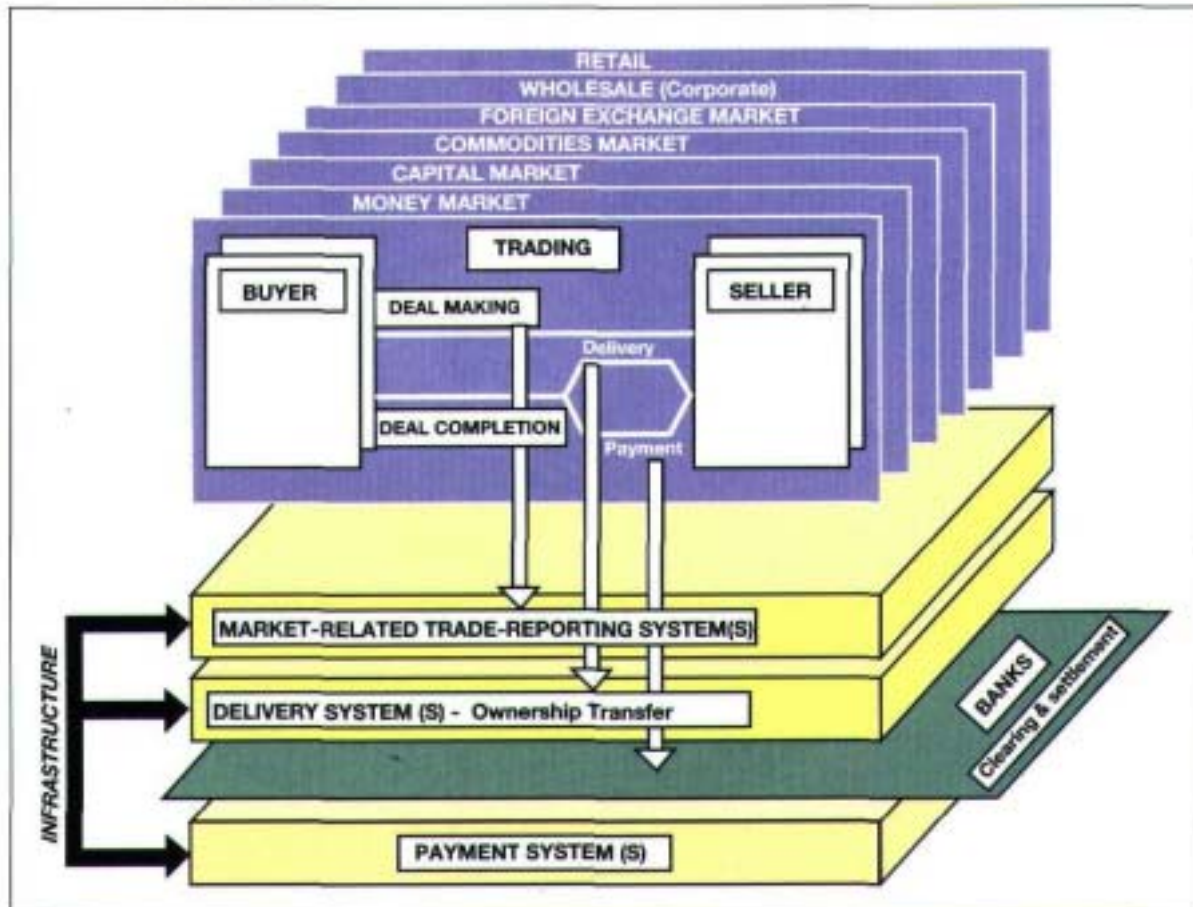
- Relationship between market activities and national processing infrastructures;
- payment-process phases; and
- interface between the trading system and the payment system.

1.4.1 Relationship between market activities and national processing infrastructures

(Figure 3)

[11] Payments originate in trade between buyers and sellers in a market.³ The common denominator of trade in the various markets is the fact that an agreement is reached as a first step. This is referred to as deal making.⁴ Thereafter, the deal must be completed, or finalised, in accordance with the agreement. This includes both payment and, where applicable, delivery, (for example, where scrip is involved).

Figure 3: Relationship between market activities and national processing infrastructures



[12] Most payments therefore originate in the market place. The market place, however, needs an infrastructure to give effect to the deal agreement. To this end, a common national processing infrastructure, underlying the very different markets, offers various instruments, systems and procedures, with the objectives of facilitating the trade process and providing finality. Various distinct layers of national processing infrastructures can be identified, for example:

- Market-related trade-reporting systems (where applicable);

3. Trading can take place in a formal market, for example the capital market, but also includes transactions between major corporates (wholesale) and individuals in retail business. The markets referred to also include various other markets, for example, the capital market includes the bond market, the stock market, derivatives, etc.

4. Payments need not necessarily be a result of a trade but of an obligation, which may be the result of a trade or in terms of a contractual commitment (that is, the final distribution of an estate) or a court order (the payment of alimony).

- the delivery system, taking care of, for example, securities in a central depository (CD); and
- the payment system with its various subsystems.

Although these layers of infrastructures interface with each other, the emphasis of this document is on the interfaces with the payment system.

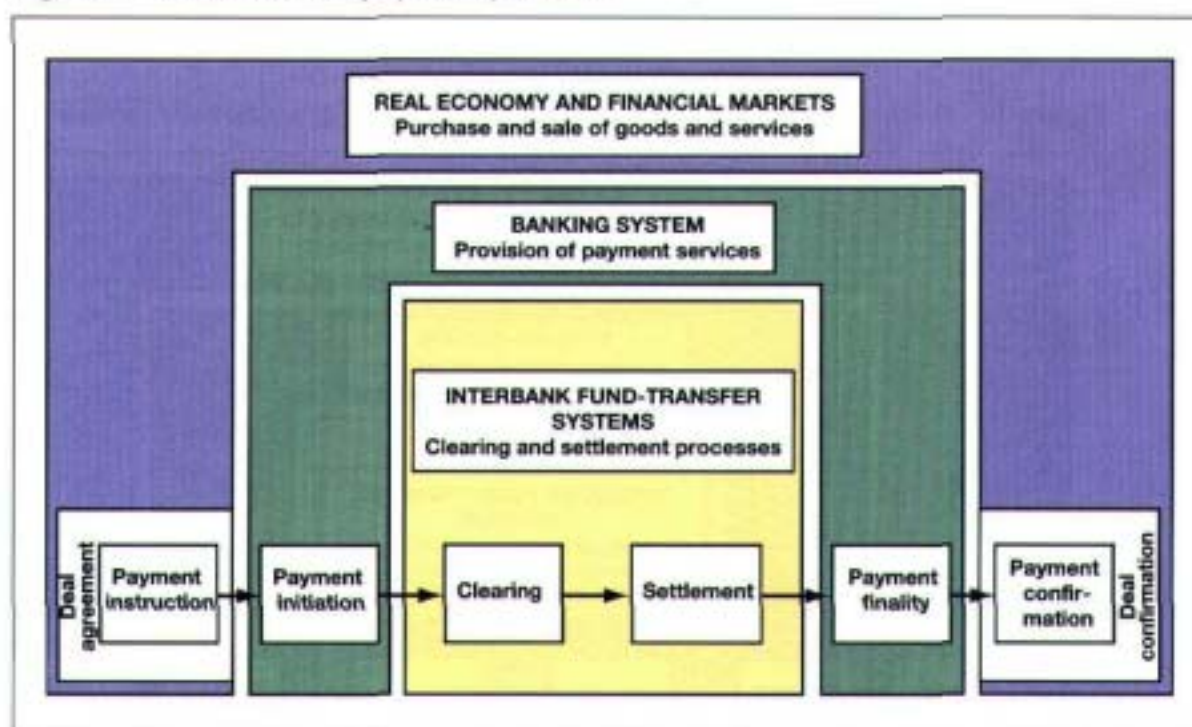
[13] A payment requires the transfer of value, which is accomplished either through cash or, more often, through deposit balances held at a financial institution. In both cases, the role of a bank in effecting the transfer is central to the process. The gateway to the core of the payment system, that is, clearing and settlement, is through a bank.

1.4.2 Payment-process phases (Figure 4)

[14] A payment system enables the transfer of money. This is accomplished by a process, which is triggered by the end-user (customer), who, following a deal agreement, wishes to make a payment and issues a payment instruction. Various instruments can be used to instruct payment, for example, an electronic credit transfer or a cheque.

[15] Once the payment instruction has been received and accepted by a bank, the bank will assume responsibility for facilitating the desired result - final and irrevocable transfer of value. Banks initiate payment by verifying certain aspects of the payment instruction and determine the processing path to be followed through interbank fund-transfer processes.

Figure 4: *Phases of the payment process*



[16] The next phase in the process is the exchange of payment instructions between banks, referred to as clearing.

[17] Unless the paying and beneficiary bank are represented by the same institution, interbank settlement is required. This is accomplished by posting entries across the

accounts of the banks held at the SA Reserve Bank, resulting in final and irrevocable interbank settlement of the amount concerned.

[18] Once this has been confirmed by the SA Reserve Bank, the banks involved complete their accounting processes and provide payment finality to the end-user (that is, their respective customers).

[19] The cycle is completed once the end-user receives payment confirmation, either explicitly or implicitly. This means that the payment is final and irrevocable and, therefore, the payment leg of the deal is completed.

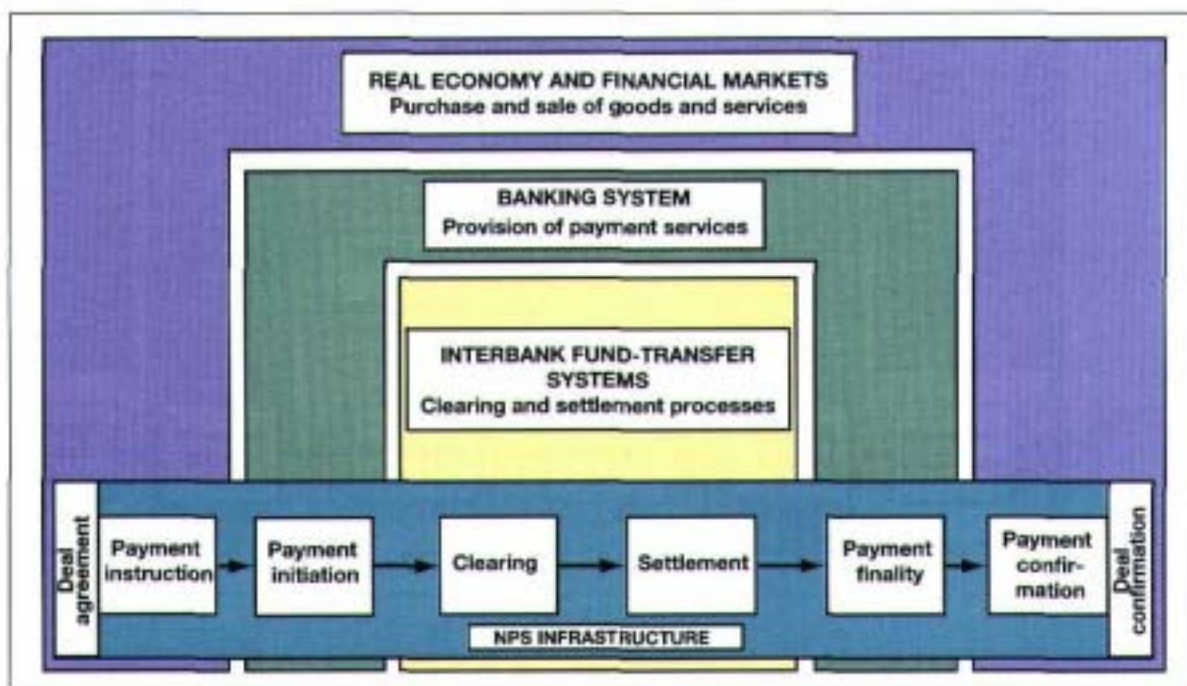
1.4.3 Interface between the trading system and the payment system (Figure 5)

[20] It is important to distinguish between trading systems and the payment system. The functioning of the financial markets is of little concern to the payment system *per se*. Likewise, the functioning of the payment system falls outside the domain of the trading system.

[21] These two systems are, however, interdependent and require a smooth interface. Payments originate in the real economy and in the financial markets. The activity in this domain, therefore, creates the need for a payment system. Likewise, the payment system can be viewed as part of the national processing infrastructure and is often referred to as the highways of the economy. The NPS is therefore the only mechanism available to buyers and sellers to settle non-cash payments finally and irrevocably.

[22] The various trading systems and the NPS interface with one another at the point of the payment instruction and payment confirmation.

Figure 5: Distinction between the trading system and the payment system



1.4.4 Clearing, netting and settlement (Figure 6)

[23] Clearing, netting and settlement are three distinct processes pertaining to the payment system environment, each with its own, very specific, purpose.

[24] Netting, as a means to minimise liquidity required for settlement, can be applied either as a post-clearing operation or a pre-settlement operation.

Figure 6: *Clearing, netting and settlement concepts*

