

The process of managing change in payment and settlement systems in Poland

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The aim of my presentation is to share the experiences of the National Bank of Poland (NBP) in the “management of change in payment and settlement systems”. In particular, I would like to present some observations made during my five years of work in the area of settlement systems.

I would like to focus on the following issues involved in the process of change in payment and settlement systems in Poland:

- (i) questions of information and experience;
- (ii) interaction between the central bank and commercial banks;
- (iii) topics relating to the use of the central bank’s internal resources;
- (iv) consequences for central bank operations and their structure;
- (v) international cooperation.

My personal experience in the field of payment systems started at the time of the major changes in Polish payment systems which took place in April 1993, when the new uniform rules for interbank settlements were introduced.

But before starting to explain these changes, I would like to say something about the previous system. The old interbank settlement system was based on the following main principles:

- there was only one system for transferring both large and small-value payments;
- the settlement was performed not on consolidated accounts of banks in the head office of the NBP as today, but on the current accounts of banks’ branches with the NBP’s branches;
- payment orders, except for very urgent telegraphic orders, were sent between banks’ branches on paper, by mail only;
- in order to register all payment orders sent and received on the banks’ branches’ current accounts with the NBP, the relevant lists of payments were sent to the central bank separately by the sending and

receiving branch (with a minimum delay of a few days). This type of settlement generated a debit or credit float in the books of the NBP (according to whether settlement was in respect of cheques or credit transfers);

- an additional, but very important, element of the system was the control of the consistency of the lists of payments received and sent by banks’ branches at the head office of the NBP.

This system proved to be inefficient, because settlement sometimes took longer than a week and the central bank bore a considerable risk. This risk resulted from the excessive operational role of the central bank in the system, obliging the NBP to ensure settlement and giving rise to the possibility of potential abuses by dishonest entities in the settlement of cheques. In fact, dishonest practices occurred place in 1991, in what became known as the “Art-B scandal”.

The National Bank of Poland came to the conclusion that the system had to be changed. The questions were, How? In which direction to go? Who would carry out the change? It was not easy to find simple answers to all these questions but there was no doubt that change was needed.

One of the major problems at this stage was the fact that there were only a few specialists in the field of payment systems at the central bank, for example people who were familiar with the payment systems in other countries and the professional literature relating to this subject. Indeed, until 1989 the Polish central bank had not required this knowledge because it was part of an economic system which, on the one hand, still operated according to planned economy mechanisms and, on the other hand, was only just starting to emerge as a market economy. It should also be noted that at this time the NBP was still an element of the old system, and was the first to start implementing market mechanisms, restoring a proper role for money and fast evolving from a monobank to a real central bank. Small groups of experts with a background in accounting and data processing started to deal with payment system questions, so our knowledge of this subject resulted less from our own experience than from the experiences of other countries.

Intensive international cooperation between the NBP and international financial institutions, such as the International Monetary Fund (IMF) and the World Bank, began in 1989. Many foreign experts, including many central bankers, came to Poland and visited the NBP. One of the areas supported by the IMF was payment and settlement systems.

In this respect the NBP received help from the Federal Reserve Bank of Boston in particular. Thanks to its assistance, in 1990 and 1991 a real-time gross settlement system was designed, named NBP-Wire. Unfortunately, owing to weak telecommunication networks in banks, the impossibility of a quick implementation of this system, personnel changes at the central bank and urgent matters concerning retail payments that needed to be dealt with after the Art-B scandal, the implementation of the system was suspended and only some of the basics of the NBP-Wire system were used in the SORB system, which I shall describe later. It should be emphasised that the cooperation initiated by the IMF developed in many cases into bilateral cooperation between the NBP and some central banks independently of the IMF. This resulted in a few study visits by NBP employees to other central banks. This cooperation and support was very useful, answering many questions and permitting direct observation of how other systems work, thus enabling us to find the right direction for the development of the Polish payment system.

In accordance with the basic principles of the reform of the interbank settlement systems, two new payment systems were planned in 1991 and 1992, and implemented in April 1993. The first system is based on the exchange of customers' payment orders between banks via the intermediary of the National Clearing House (KIR). In this system the NBP acts only as a shareholding participant and the settlement agent of KIR. The KIR was established in 1992 as a joint stock company by 17 commercial banks, the National Bank of Poland and the Polish Banks' Association. The KIR calculates multilateral net settlement positions for participants and sends these three times daily to the Interbank Settlements Department of the NBP for interbank settlement. The KIR manages two clearing systems. The paper-based clearing system, SYBIR, came into operation in April 1993, and the electronic clearing system, ELIXIR, was launched in April 1994.

The second settlement system was set up by the NBP to handle typical interbank payments and banks' operations with the NBP. This settlement system is called SORB, which is an abbreviation of "System for Servicing Banks' Accounts".

This system is based on the following main principles:

- interbank payments are sent directly from the banks' head offices to the Interbank Settlements Department and executed on a gross basis throughout the business day, one exception being that there are two

or three settlement sessions a day (on a net basis) for payment orders sent via the KIR;

- debiting of the account of the sending bank and crediting of the account of the receiving bank take place simultaneously, unlike in the previous system where there was a delay of at least a few days between these bookkeeping operations;
- settlement is carried out provided that there are sufficient funds in the debtor's current account, otherwise orders are queued.

Since SORB's introduction in April 1993, the system has fulfilled the basic criteria for an RTGS system. However, the system is not completely efficient; for example, payment orders are sent to the NBP only in paper form, by fax or on diskette and are then entered manually into the system.

It was not an easy task for the NBP to reach agreement with the banks on these changes and to convince them of the new solutions. This was mainly because under the old system there was no risk of non-execution of settlement since any shortages of funds were always covered by the NBP, thus allowing banks to use vast amounts of float. It was a very difficult task to draw up the legal provisions, establish the telecommunications infrastructure (with the creation of a new, separate telecommunications company providing banking services, TELBANK), to set up the KIR and to implement a new system for servicing bank accounts managed by the Interbank Settlements Department. In order to create a well-organised clearing house, the central bank not only had to shoulder some of the financial costs (being one of 19 shareholders of the KIR) but also lost part of its workforce owing to the fact that some payment system specialists left the NBP for the KIR. In the course of all these preparations, which took place between 1991 and 1992 (still within the framework of the old interbank settlement system), the NBP consolidated all the current accounts of banks' branches into a single current account for each bank. These accounts were managed at the regional branch of the NBP appropriate for the head office of the bank concerned. In April 1993, the accounts of the KIR participants were moved to the Interbank Settlements Department and at the same time the new interbank settlement system was launched.

However, not all of the 90 Polish commercial banks participated in the new system from its inception. This was not possible because many banks had an inadequate technical infrastructure, particularly on the

telecommunications side. In the first stage only 17 commercial bank shareholders of the KIR exchanged payment orders through the KIR and held their current accounts at the Interbank Settlements Department of the NBP. From April 1993 till June 1994, groups of banks joined the system every two to three months, prior to which they were allowed to settle with other banks according to the old rules.

The principles of interbank settlement adopted in the SORB system were not easily accepted by all the banks. In particular, many of their treasury departments could not understand why it was not possible, as in the old system, to offset debit and credit orders on their current accounts, or why they had to find funds quickly on the interbank markets in order to meet the settlement obligations resulting from the exchange of payment orders through the KIR, when they expected inflows of sufficient funds in a short period of time. I noted that not all the employees of the treasury departments were aware that the introduction of the new system required a new approach to account management in order to maintain sufficient balances for settlement purposes during the day. As expected, the change from the old system, where clearing of credits and debits was possible, to the new system with gross settlement in real time was, at first, not easily understood or accepted. This was mainly because of the higher cost of obtaining funds and the need to hold larger balances on non-interest-bearing current account. In my opinion some commercial banks were ill-prepared for working with the new system and did not have enough skills to manage their current accounts properly.

In the judgement of the NBP the changeover to the new system had very positive results for the central bank, the banking system and all bank customers. The reform of the interbank settlement system was a significant step not only for decreasing the number of days taken to settle retail payments, but also for development of the interbank money market (it created an overnight interbank deposit market which did not exist earlier and for the NBP's open market operations and the primary and secondary short-term securities markets (Treasury bills and NBP bills). It thus led to a reorganisation of the central bank's operational role. Following the transfer of the banks' current accounts, other types of bank accounts and operations were also transferred, for example compulsory reserves and refinancing credit accounts and operations were moved from regional branches of the NBP to its head office. As a result, the role of the regional branches declined in favour of head office.

After the new system had been in operation for one year, it was clear that not all banks which had become members of the KIR and kept current accounts with the Interbank Settlements Department were able to provide sufficient funds on these accounts to meet their liabilities promptly and continuously. In 1994 and 1995, eight banks were excluded from the KIR, either because of a permanent lack of funds to cover their payments or because of the action taken by the banking supervisory authorities, which were informed by the Interbank Settlements Department about cases of significant delay in interbank settlements.

After a period of over four years of the functioning of this system, it should be emphasised that the general solutions for the new Polish interbank settlement systems, despite our insufficient knowledge and experience in the area of payment systems, were approved in 1992.

At the end I would like to present our two latest challenges in payment and settlement systems.

In a few months the National Bank of Poland is going to make a big change to our RTGS system, which is now named SORBNET. In March 1998 we plan to introduce electronic communications between banks and the Interbank Settlements Department for payment orders and for the receipt of information on current account balances and completed operations.

The second challenge is connected with Poland's desire to join the European Union in the next few years. The most important task is to bring Polish laws into line with EU recommendations and directives, also in the area of payment and settlement systems. The goal of the NBP is to implement all EU recommendations in order to ensure that Polish regulations conform to EU requirements. Of special importance is consistency with the recommendations made in reports concerning, for example, minimum common features for domestic payment systems or the TARGET system, as well as other reports and research of the European Monetary Institute. This is considered by the NBP to be essential for a common strategy of closely cooperating central banks in the European Union, and is also necessary for other central banks of countries applying for EU membership in order to adapt their payment systems to EU requirements.

I very much appreciate the reports and analysis made available by the Bank for International Settlements, in particular reports concerning issues connected with payment systems, for example RTGS systems, and

developments in payment systems in individual countries (the Red Book series). These reports have helped us to familiarise ourselves with solutions adopted elsewhere in the area of payment and settlement systems and to learn how similar problems are solved in other countries. All these reports, and the seminars and conferences like this one, enable us to find the right solutions to our problems and to develop Polish payment systems in a proper way.