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**THE COMPUTER READABLE REPORTING OF FOREIGN PAYMENTS AND  
OTHER BALANCE-OF-PAYMENTS DATA**

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Contents	page
1. How did it all start?	1
2. Where are we now?	2
3. Customer terminal systems for foreign payments	2
4. Netting	3
5. The mailbox systems and central bank reporting	4

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THE COMPUTER READABLE REPORTING OF FOREIGN PAYMENTS AND OTHER BALANCE-OF-PAYMENTS DATA.

1. How did it all start?

The automatic data transmission of foreign payments from authorized banks to the Bank of Finland dates back to the early 70's. In the very beginning, punch cards were used but these were soon superceded by magnetic tapes. In practice, this also marked the beginning of the coding of foreign payments by the banks. However, bank coding did not cover all payments, and the Bank of Finland had to complete the work.

During the last few years of the 70's, the automation of various functions at the Bank of Finland advanced, coinciding with the acquisition of a new mainframe. A new economic database and new analytical programs were introduced. The system of processing foreign payments and other systems related to the balance of payments were also reformed.

The planning of the new reporting system for foreign payments was carried out in collaboration with the authorized banks with the intent that the banks daily transfer the payments to the Bank of Finland. In practice this meant that the information received by the Bank of Finland was only three days old.

The Finnish system does not include the so called 'home loop' because export earnings were in those days very centralized on only a hundred corporations - as is the case even today. Capital movements were strictly regulated. Since the banks were assumed to know the exporters and the payments related to capital movements were regulated, it was thought that also incoming payments would be easy to code.

At the same time the Finnish Board of Customs developed a computer based declaration system which included the so called reference number of foreign trade for both imports and exports and for both customs documents and payments.

The system of foreign payments was introduced on April 1, 1980. The system included the complete coding of foreign payments going through the nostro- and loro accounts of the authorized banks, the data transmission with magnetic tapes from both

the banks and the customs and thus the use of the reference number of foreign trade. This was achieved by the means of dividing one payment into subitems related to different payment codes or references if needed.

## 2. Where are we now?

The system described above is still mainly unchanged in use. There have been major changes in the institutional background - the exchange controls have been totally abolished and asset securitization has altered the related procedure. The volume of the payments to be reported has also multiplied; foreign business has become more frequent for corporations and banks. Similarly, the non-balance-of-payment-transactions like domestic interbank and intercompany foreign exchange business on the accounts subject to reporting have increased in manifold.

Consequently, errors in coding of incoming payments have increased as have errors between real balance-of-payments transactions and non-balance-of-payments transactions. In this situation we regard the comparison of payment flows and real flows of foreign trade very important. The exchange control data and the 'home loop' have been substituted by surveys. However, the system of foreign payments is of utmost importance in avoiding magnitude errors in the balance-of-payments statistics and in keeping the survey data and populations in check. Large items also exist in both current and capital accounts where the payments are the only source for information.

Negotiations with major banks have started in order to transfer the balance-of-payments information on-line. The same on-line connection serves the Bank of Finland's cheque account system in domestic interbank payment arrangements.

## 3. Customer terminal systems for foreign payments.

It was evident that banks soon started to avoid the burden of coding foreign payments for the central bank. Customers and not the banks have the basic information. During the 80's banks introduced various systems for firms to make payment orders through terminals connected to the banks's computers. Where foreign payments were concerned, an extra page was inserted for the central bank data, the Bank of Finland being an active agent in this development.

In a later stage the system did not work only with terminals but some firms supplied their banks with magnetic tapes containing payment orders.

During the 80's it also became a usual practice that firms had a customer relationship with more than one bank. The payment terminals had to operate with the systems of various banks. This challenge was met by some programming houses, which developed multibank payment programs fulfilling the Bank of Finland's regulations. Nowadays some 3000 firms participate in these systems. Naturally, these include all the major exporting and importing firms.

The legal background of the balance-of-payments reporting also supports this development. It is stated in the foreign exchange regulations that the party engaged in the foreign transaction bears responsibility for submitting the relevant and correct information to be reported to the central bank.

#### 4. Netting

As corporations became more and more interational, the need arose to rationalize the payment system within individual international company. This had implications for the balance-of-payments reporting system. The standard reporting system provided an unwieldy and labor-intensive procedure where both the reporting bank and the Bank of Finland were occupied with clearing netted payments. In order to avoid overlap and to improve information, the Bank of Finland introduced a system in which international corporations themselves could report to the balance-of-payments authority.

The system development occurred in collaboration with one major commercial bank and one major multinational company in Finland. The netting system satisfies the principles of the reporting system also in view of the fact that it includes accounts subject to reporting where all the payments in question are settled. The net flow -if any- to and from those accounts is reported both by the bank and the firm - with opposite signs. Then the firm reports the gross flows which together make up the observed net.

The system allows multicurrency netting and the use of internal exchange rates by the firm in the calculation of the balancing net item.

The system involves an extensive interchange of discettes between the reporting corporations and the Bank of Finland. The number of companies (at concern level) in the system is presently some 50 and the number of netting partners is some 110.

The potential number of netting partners in Finland is some 250. Some of our reporting companies have started to use the public electronic mailbox systems.

A similar discette or electronic mailbox system has been offered to firms having payment accounts abroad, but in most cases firms prefer to report on paper.

5. The mailbox systems and central bank reporting.

In the netting and foreign account reports the public mail box systems are used. The procedure is similar compared to discette reporting and does not markedly decrease the workload. Naturally the discette mail will come to an end as will the risks of receiving virus infected discettes.

Increased security is no doubt the major advantage of electronic mail. It will be recommended to all minor banks and to all firms reporting to the Bank of Finland. In the surveys, the relevant Lotus-based electronic forms are used and these forms are offered to the reporting firms. No major break-through has taken place in the number of firms reporting via electronic mail but it is soon anticipated.