

CURRENCY CIRCULATION

Well-functioning and efficient payment systems are a necessary precondition for an efficient financial system. Payment systems should meet the needs of the society as well as comply with the legal framework of the country. They should operate without any risks that might endanger the financial system. Managing and developing various payment channels, including interbank payment systems, is one of the main functions of Eesti Pank.

DEVELOPMENT OF THE PAYMENT AND SETTLEMENT ENVIRONMENT

In 2006, the payment and settlement environment was enhanced further with the aim of ensuring efficient operation of payment flows in the international environment. The key priority was preparing for connecting the Real-Time Gross Settlement System of Eesti Pank (EP RTGS) with the Trans-European Automated Real-Time Gross Settlement Express Transfers (TARGET) system. Preparations involved elaborating the system's legal basis, assessing the system's compliance with the oversight and security requirements of the TARGET, and defining the finality of a transaction in the system's rules.

Eesti Pank has been participating in the euro-area settlement system TARGET since 20 November 2006. Until then Eesti Pank managed interbank settlements only in Estonia, but now it also provides the financial sector with a channel for performing cross-border payments denominated in euro. The TARGET is an alternative channel to correspondent banking and payment systems operated by the private sector for transferring payments in euro. Besides lower costs, another advantage of the TARGET is the speed – cross-border payments are transferred from one European bank to another within five minutes.

Joining the TARGET was executed through Banca d'Italia. Besides Eesti Pank, four more members of the EP RTGS joined the TARGET:

- OMX Tallinn;
- the Estonian Branch of AS Parex Banka;

- AS Sampo Pank; and
- the Estonian Branch of Svenska Handelsbanken AB.

Joining the TARGET means that the settlement system of Eesti Pank is ready for the adoption of the euro and ensures the necessary infrastructure for conducting transactions related to the implementation of monetary policy once Estonia becomes a full member of the Economic and Monetary Union.

Along with joining the TARGET also the **working day** of the Settlement System of Ordinary Payments (**ESTA**) was extended by **one hour** – retail payments are now settled from 8 AM to 6 PM by Eesti Pank.

Today, the new challenge facing the European System of Central Banks, including Eesti Pank, is updating the current TARGET by developing the **TARGET2**. The TARGET operating today is composed of the RTGS systems of national central banks and a network linking them, whereas the new TARGET2 is a system functioning on a single shared platform. According to the schedule, the TARGET2 will be launched on 19 November 2007. Eesti Pank will join the TARGET2 in the third wave on 19 May 2008.

PAYMENT AND SETTLEMENT SYSTEM OF INTERBANK PAYMENTS

The Estonian Settlement System of Interbank Payments contains two sub-systems: the Settlement System of Ordinary Payments (ESTA) and the Real-Time Gross Settlement (RTGS) System. The ESTA settles domestic interbank retail payments in Estonian kroon, whereas the EP RTGS settles domestic express payments in kroon and since joining the TARGET on 20 November 2006 also domestic and cross-border payments in euro.

The number of payments settled through the **EP RTGS system has increased by 40%** year-on-year. On average, **200 transactions a day** were settled in 2006 (see Figure 1). The growth stems

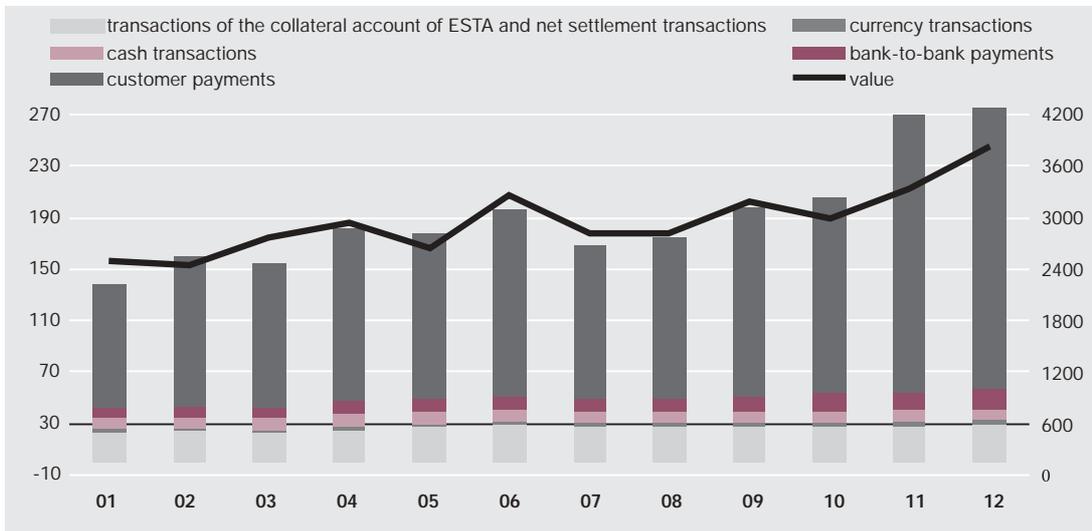


Figure 1. Number of payments processed in EP RTGS (left scale) by transaction types and their average daily value (EEK m; right scale) in 2006

from the option of making cross-border payments after joining the TARGET. The largest share (79%) of EP RTGS payments comprises payments originated by bank customers. On average, 133 domestic customer payments were settled a day. Since joining the TARGET, an average of 75 cross-border express payments were settled a day in November and December.

The average daily value of payments reached 3 billion kroons. Banks' "compulsory" payments (transactions related to the collateral account of the ESTA) accounted for the largest share of the value (50%). Year-on-year, the value of payments settled through the EP RTGS grew by 8%.

The average value of domestic customer payments of the EP RTGS stood at 3.6 million kroons, whereas that of cross-border express payments in euro was 284,000 kroons.

Further growth in the number and value of ESTA payments stems from the longer and faster

settlement day.¹ Payments made from one bank to another usually reach the beneficiary within 30 minutes but no later than in an hour and a half on a working day.

On average, **80,000 transactions a day** were settled through the ESTA in 2006 (see Figure 2). The number of payments has increased by 14%, year-on-year. An average of **1.2 billion kroons** a day were settled through the ESTA. The value of ESTA payments has increased by 39% year-on-year. The average payment settled through the ESTA was 15,100 kroons.

MEETING THE CASH DEMAND

Banknotes and coins in circulation and their structure

As at 31 December 2006, the total amount of currency in circulation was 11,763.2 million kroons (see Table 1). 1,695.4 million (14.4%) of that was in the vaults of credit institutions and savings and loan associations operating in Estonia

¹ Eesti Pank settles retail payments from 8 AM to 6 PM.

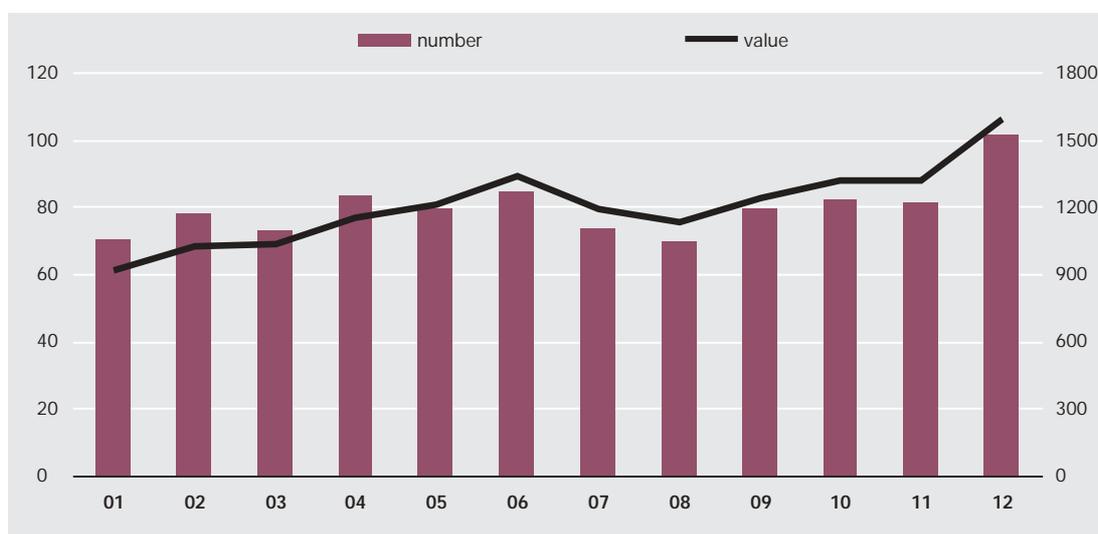


Figure 2. Number of payments processed in ESTA (thousands; left scale) and their average daily value (EEK m; right scale) in 2006

Table 1. Banknotes and coins in circulation as at year-end

Nominal value	Total amount (EEK m)				Number (m)			
	31/12/2003	31/12/2004	31/12/2005	31/12/2006	31/12/2003	31/12/2004	31/12/2005	31/12/2006
1 kroon	4.7	4.6	4.6	4.6	4.7	4.6	4.6	4.6
2 kroon	23.9	26.0	29.6	33.5	11.9	13.0	14.8	16.8
5 kroon	36.7	38.8	43.1	47.8	7.3	7.8	8.6	9.6
10 kroon	66.8	70.6	77.5	85.6	6.7	7.1	7.7	8.6
25 kroon	179.6	187.4	207.1	225.4	7.2	7.5	8.3	9.0
50 kroon	49.5	45.4	46.6	49.0	1.0	0.9	0.9	1.0
100 kroon	1,068.6	1,076.1	1,122.4	1,180.1	10.7	10.8	11.2	11.8
500 kroon	6,796.8	7,337.8	8,450.3	10,001.2	13.6	14.7	16.9	20.0
Banknotes total	8,226.6	8,786.7	9,981.2	11,627.3	63.1	66.3	73.1	81.3
5 sent	2.2	2.1	2.1	2.1	43.0	42.4	42.0	41.5
10 sent	10.5	11.4	12.3	13.4	104.9	113.7	123.2	134.4
20 sent	16.2	17.7	19.8	22.3	80.8	88.7	99.2	111.3
50 sent	14.5	16.4	19.1	22.1	29.0	32.9	38.2	44.1
1 kroon	41.3	46.6	52.9	61.0	41.3	46.6	52.9	61.0
5 kroon	7.6	8.1	8.3	8.5	1.6	1.5	1.7	1.7
Coins total	92.2	102.4	114.6	129.4	300.6	325.9	357.1	394.1
Collector coins	5.4	5.9	6.0	6.4	0.1	0.1	0.1	0.1
Banknotes and coins total	8,324.1	8,895.0	10,101.7	11,763.2				

and 10,067.8 million (85.6%) was in circulation outside the credit institutions and savings and loans associations.

The growth rate of the currency in circulation was one of the fastest in recent years, reaching 16.4% (13.6%

in 2005). Compared to 2005, the quantity of all banknotes and coins has risen. This reflects directly economic expansion and rapid income growth.

The number of 2- and 500-kroon banknotes increased the most (see Table 1). The value of 500-

kroon notes posted the strongest growth (18.4%) and accounted for 85.0% of the total value of currency in circulation.

The number of coins in circulation exceeded 394 million, which means that there is an average of over 293 coins in circulation per resident. The number of 20-sent coins increased the most.

The average value of a banknote in circulation grew by 6.5 kroons, compared to 2005, and stood at 143 kroons at the end of 2006. The average value of a coin in circulation was 33 sents, i.e. 0.8 sents higher than in 2005.

Expert analysis and handling of cash

In 2006, the amount of currency issued and received by Eesti Pank grew even further. The central bank issued 12,399.0 million kroons to credit institutions and received 10,732.5 million kroons (see Table 2). In terms of amount, 118.6 million banknotes and 37.5 million coins were issued, whereas 110.4 million banknotes and 0.7 million coins were returned.

All banknotes returned to Eesti Pank are sorted with fully automatic sorting machines. In addition to the existing sorting machine De La Rue 5000, a fully automatic sorting machine CPS 1800 was purchased from Thomas De La Rue & Co Ltd in 2006. The machine can be used for sorting both euro and kroon banknotes.

Banknotes unfit for circulation are destroyed and the rest are returned to circulation. In 2006, 4.5 million banknotes totalling 640.2 million kroons were withdrawn from circulation (see Table 3).

In 2006, Eesti Pank performed expert analyses for 16,102 damaged and worn-out banknotes submitted by credit institutions and discovered 28 banknotes suspected of being counterfeit.

All in all, 251 counterfeit banknotes were discovered in Estonia during the expertise performed by the Forensic Service Centre in 2006. 50-kroon banknotes formed the largest share of counterfeit money (44.2%). Given the amount of currency in

Table 2. Movement of currency between Eesti Pank and credit institutions

Year	Total amount (EEK m)		Number (m)			
	Issued by central bank	Received by central bank	Issued by central bank		Received by central bank	
			Banknotes	Coins	Banknotes	Coins
2003	8,495.8	8,282.8	88.9	23.1	86.8	0.5
2004	8,881.7	8,306.0	93.7	26.1	90.5	0.7
2005	10,445.0	9,237.8	105.8	31.7	99.0	0.6
2006	12,399.0	10,732.5	118.6	37.5	110.4	0.7

Table 3. Banknotes unfit for and withdrawn from circulation as at year-end

Nominal value	Total amount (EEK m)				Number (m)			
	2003	2004	2005	2006	2003	2004	2005	2006
1 kroon	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0
2 kroon	3.2	0.3	0.4	0.7	1.6	0.2	0.2	0.4
5 kroon	8.6	10.0	9.3	6.3	1.7	2.0	1.9	1.3
10 kroon	13.8	5.0	5.3	2.9	1.4	0.5	0.5	0.3
25 kroon	75.3	14.4	13.5	16.3	3.0	0.6	0.5	0.7
50 kroon	31.7	27.2	10.6	12.4	0.6	0.5	0.2	0.2
100 kroon	245.5	74.0	74.7	63.7	2.5	0.7	0.7	0.6
500 kroon	631.2	701.6	751.0	537.9	1.3	1.4	1.5	1.1
Total	1,009.4	832.6	864.7	640.2	12.2	6.0	5.6	4.5

circulation, the number of counterfeit banknotes is relatively small. Since the end of 2005, Eesti Pank no longer carries out expert analyses of banknotes suspected of being counterfeit.

Eesti Pank also has a Counterfeit Analysis Centre, which has to ensure data exchange with the Counterfeit Monitoring System at the European Central Bank.

Defective 100-kroon banknotes

At the end of January 2006, the case of defective 100-kroon banknotes issued in 1999 drew considerable media attention. Eesti Pank announced on 27 January that some 100-kroon banknotes were missing a security feature, which is invisible to the eye (it becomes visible when exposed to an ultra-violet lamp).

At the beginning of 2007, Eesti Pank reached an agreement with Bundesdruckerei according to which the latter was to compensate for the costs related to the additional expertise of these banknotes. Eesti Pank is going to use the compensation for organising cash-related awareness campaigns.

Preparation of new banknotes and coins

In connection with the postponement of the adoption of the euro, Eesti Pank started to organise for an additional supply of new Estonian kroon banknotes and coins in 2006. To this end, the central bank prepared a procurement for 2- and 10-kroon banknotes with renewed security features.

As a result of the adjudication, the new 2-kroon banknotes were supplied by Giesecke & Devrient (Germany) and the 10-kroon notes by De La Rue Ltd (United Kingdom).

In addition, Eesti Pank also purchased new coins with 2006 as the year of issue:

- 10-sent coins from Staatliche Münze Baden-Württemberg (Germany);
- 20-sent coins from Staatliche Münze Baden-Württemberg and the Mint of Finland;

- 50-sent coins from the Royal Mint (United Kingdom);
- 1-kroon coins from the Koninklijke Nederlandse Munt (Netherlands).

Furthermore, Eesti Pank issued 10- and 100-kroon silver collector coins in 2006. The 10-kroon silver collector coin, which is partly golden, is dedicated to the Winter Olympic Games. This was an addition to the Olympics related coins issued by the central bank. The skier depicted on the silver coin symbolises the success of Estonian athletes in the Winter Olympic Games and the growing popularity of skiing and the Olympics. Altogether 5,000 coins were minted in the Mint of Finland. The coin was designed by Mati Karmin.

The silver 100-kroon coin is dedicated to the 100th anniversary of the Estonian National Opera. It was minted in the Mint of Finland, the maximum number to be minted being 10,000. The coin was designed by Tiiu Kirsipuu.

Preparations for the changeover to the euro cash

In 2006, Eesti Pank continued preparations for the euro cash changeover. Experts of the central bank took part in various working groups at the European Central Bank, e.g. the Banknote Committee (BANCO), and the European Commission as well as in relevant working groups established in Estonia.

For resolving practical issues related to the euro cash changeover, the cash working group was established involving representatives of Eesti Pank, credit institutions and the Cash Centre. This working group included separate working groups on ATMs and security issues. At present, the activities of the working groups have reached the stage that it is possible to adopt the euro within one year after the actual transition date becomes clear.