

## AN INTEGRATED FINANCIAL MARKET SOLUTION: TARGET2-LATVIA

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### Abstract

This paper aims at analysing the role of central banks in enhancing smooth operation of payment systems towards an integrated EU financial infrastructure. The research is based on a number of views regarding the significance of payment systems for the implementation of the central bank's monetary policy and improvement of the financial market development process. The novelty of this research is the assessment of the launch of TARGET2 in the EU countries, including Latvia. Regarding TARGET2-Latvija, the authors have evaluated its objectives, tasks, legal framework and launching within the first wave of migration to TARGET2, and have conducted the analysis of indicators determining the operation of payment systems. In the context of large value euro payments, the single shared technical platform, uniform legal framework and similar services across the EU are the advantages of TARGET2. Smooth integration into TARGET2 is the basic condition for the convergence of EU12 with the euro area countries in the payment system area.

### Keywords:

**TARGET2, central banking, payment systems.**

### Introduction

A secure and smoothly operating payment system is a precondition for effective functioning of the financial market. Central banks play an essential role in this respect as they ensure the maintenance of payment systems in the name of monetary policy implementation and engage in payment systems oversight. This paper concentrates on one of these roles – the maintenance and operations of the interbank payment system.

In recent decades, the role of payment and securities settlement systems in the economy has increased notably. In the current globalisation environment, operation of a modern payment system promotes business competitiveness as payments are fast and secure.

The objective of a central bank is not only to manage the monetary conditions of the economy, but also to support the development and maintenance of safe payment and settlement systems. A payment system is a significant component of the financial infrastructure, and its smooth operation is a driver of country's economic processes. The preparation for the adoption of the euro in the 1990s required

that an adequate payment system be established within the EU. The idea was supported by both the national central banks and commercial banks in the EU countries. In 1995, the Council of the European Monetary Institute (EMI) decided to set up the Trans-European Automated Real-time Gross settlement Express Transfer (TARGET) system, establishing links among real-time gross-settlement (RTGS) systems of central banks in the EU countries. The EU enlargement and technological evolution of payment systems acted as drivers for building TARGET2, a payment system of the new generation, which was launched on 19 November 2007.

This research paper aims at assessing the introduction of the new payment system and the first results of its operation in Latvia and other EU countries.

In the pursuit of the objectives set, we have made use of such methods as statistical analysis of indicators, and the graphic and monographic approach.

### Central banks and payment systems

The authors of this paper share the view that central banking and payment systems are inextricably linked and that roles of central banks in the field of

payment systems are changing in a number of ways as a result of progressing globalisation, increasing complexity, and the emergence of new players and services (Tumpel-Gugerell, 2008). The role central banks play in the area of payment systems has emerged and evolved historically (Goodhart, 1990). The importance of payment systems in facilitating both real and financial transactions in an advanced monetary economy as well as in implementing and transmitting central banks' monetary policy decisions is critical (Manning, Russo, 2008). Financial stability is a broad concept, encompassing different aspects of the financial system, with infrastructure being one of them (Schinasi, 2004). Payment systems are among the most important components of this infrastructure.

To keep funds on account with the central bank is the safest way of depositing, for the central bank ensures free accessibility to them for settlements, preventing the liquidity risk and credit risk with respect to settlement assets of the system's participants. Systemically important payment systems deserve an ever growing attention across the globe. To promote the development of reliable and efficient payment systems, the Committee on Payment and Settlement Systems of the Bank for International Settlements published *Core Principles for Systemically Important Payment Systems*, acknowledged by governors of the G-10 central banks. The basic principles therein lay down core criteria for a systemically important payment system to be internationally acknowledged as adequately safe and efficient. According to the assessment carried out by the International Monetary Fund (IMF) in 2001, the Eurosystem maintains high transparency of the payment system policy, and overall, TARGET complies with the basic principles of systemically important payment systems.

The main objective of the Eurosystem is to ensure that TARGET evolves along the lines of a system that

- ensures high concentration of transactions, financial market stability, payment efficiency and risk hedging;
- provides broadly harmonised services to better meet the customer needs;
- guarantees cost efficiency;
- is apt to adjust quickly to future developments, e.g. the enlargement of the EU and Eurosystem.

The importance of financial integration for the smooth and effective transmission of monetary impulses throughout the euro area is large. TARGET is an example of a central bank service which is conducive to financial integration. It will be achieved through a harmonised service level, single price structure, and harmonised set of cash settlement

services in central bank money for retail payment systems, clearing houses and securities settlement systems (Papademos, 2007).

### A new generation of TARGET

TARGET and now also TARGET2 are the RTGS system of Eurosystem's central banks via which large-value and urgent payments are executed. TARGET provides immediate intraday finality and settlement in central bank money. TARGET uses gross settlement which means that each transfer is settled individually. TARGET can be used for all credit transfers in euro, both interbank and customer payments, and there is no upper or lower value limit for payments.

The TARGET system has contributed to a high degree of liquidity in the euro money market. The launching of TARGET on 4 January 1999 enabled euro area money markets to integrate efficiently in the single euro money market practically overnight.

TARGET is developed as a decentralised payment system combining central bank RTGS of 13 euro area countries and the payment mechanism of the European Central Bank (ECB). In addition, RTGS of Denmark, Estonia, Poland and Slovenia as well as the UK have also joined TARGET (with Sweden not participating in TARGET since 2007). These 18 systems are all interlinked in order to provide a uniform platform for the processing of euro payments.

The development of TARGET pursued the objectives

- to serve as a benchmark for the processing of euro payments in terms of speed, reliability, opening times and services level;
- to facilitate the conduct of single monetary policy and promote the integration of euro money market;
- to contribute to the integration of financial markets in Europe by providing its users with a common payment and settlement infrastructure.

The IMF acknowledges that TARGET has fulfilled the policy objectives for which it was set up and largely met the needs of the market.

The authors of the present research share this view and believe that the TARGET system has enhanced the EU financial market growth, which in turn determined the need for improving and upgrading the system. As a decentralised system, the harmonisation of TARGET would require the improvement of each individual system component. Such transformations, however, would be more resources- and time-consuming as well as less stable.

What are TARGET2 benefits over TARGET? To answer, a number of TARGET2 specific features can be pointed out:

- highly efficient, resilient and competitive;
- Pan-European liquidity management;
- single interfaces leading to harmonised services at a single price;
- flexible enough to accommodate future customer needs;
- able to handle euro area enlargement.

As a result of discussions within the Eurosystem, on 16 December 2004, the Governing Council of the ECB authorised Banca d'Italia, Banque de France and Deutsche Bundesbank to develop and operate the Single Shared Platform (SSP) of TARGET2. Information and Control Module (ICM) of the SSP allows the participants of TARGET2 to obtain on-line information and gives the possibility to submit liquidity transfer orders, manage liquidity and initiate backup payments in contingency situations.

A simultaneous migration of participants in TARGET to TARGET2 could result in an enormous risk and reduce flexibility of the transformation process; therefore the Eurosystem opted for the country window approach, splitting countries into four migration waves within a six month period during which both systems would be operational (see Chart 1).

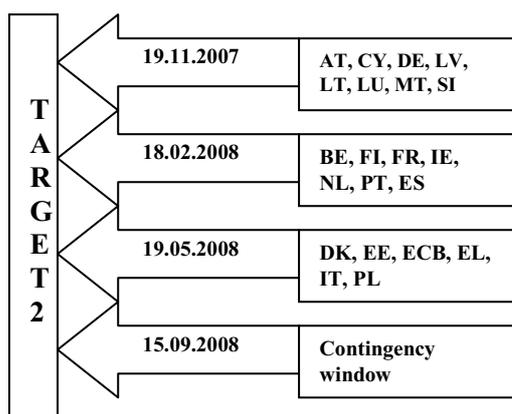


Chart 1. Country windows of the TARGET2 and its start dates

The first migration wave comprises three EU15 countries and five EU12 countries, including two Baltic States. The second migration wave includes only EU15 countries, while the third wave is made up of three EU15 countries, two EU12 countries, including Estonia, and the ECB. The fourth is the contingency window for cases when a central bank or banks of a country fail to complete the migration process.

The launching of TARGET2 built not only on technical solutions but also on a new legal basis.

### Legal framework

The Statutes of the ESCB and ECB stipulate that one of the primary tasks of the ESCB is to promote the smooth operation of payment systems. The related issues are also regulated by the EU legislation, with

the provision to ensure efficient operation of payment systems incorporated in the central bank laws and regulations of the EU countries.

The decision on the development of TARGET was taken by the EMI Council, ECB predecessor, in 1995. Duly accounting for the projected enlargement of the EU, in October 2002, the ECB Governing Council resolved to allow the new EU Member States to connect to the TARGET system. A strategic decision to proceed with the development of TARGET2, the next level of the TARGET system, was simultaneously taken, projecting its launch after 2005.

Although like TARGET, TARGET2 is legally structured as a multiplicity of RTGS systems, the rules of TARGET2 component systems have to be harmonised, to the greatest extent possible, with certain derogations in the event of national law constraints. It implies that a uniform set of regulatory provisions is applied irrespective of the country in which the TARGET2 system operates, and a step towards closer convergence with the EU regulations is made. It will alleviate the participation of those banks in the payment systems whose structural units are located in several EU countries.

The legal framework for TARGET2 rests upon Guideline ECB/2007/2 of the ECB General Council of 26 April 2007, which is binding on euro area central banks. This Guideline becomes binding on central banks of other EU countries upon concluding the Agreement on a Trans-European Automated Real-time Gross settlement Express Transfer system (TARGET2). In order to comply with the Guideline provisions in Latvia, the Council of Latvijas Banka passed a resolution on participation in TARGET2, projecting to join the system and to start the operation of TARGET2-Latvija as of 19 November 2007. The objective of launching TARGET2-Latvija was to make payment systems ready for the introduction of the euro and to provide the banks with the euro banking facility making settlements in central bank money with immediate finality. In order to implement the harmonised conditions for participation in TARGET2, the Council of Latvijas Banka:

- approved "System Regulations for Participation in TARGET2-Latvija" and agreement samples for participants and ancillary systems for participation in TARGET2-Latvija;
- resolved that Latvijas Banka's electronic clearing system (EKS) starts operation within TARGET2-Latvija on 1 January 2008;
- decided on the amount of fees for liquidity reservation in the maximum amount of TARGET2-Latvija intraday credit.

The authors presume that the development of the legal framework for TARGET2 was a time-

and effort-consuming process, requiring lengthy harmonisation of the documents with the ECB, with effective planning of activities missing at the concluding phase of launching TARGET2. Hence the decision to introduce the country window approach should be treated positively. From the systemic point of view, the inclusion of both the EU15 and EU12 countries in the first wave of migration was also a gain of the approach.

### TARGET2 going live

On 19 November 2007 and 18 February 2008 the ECB announced the successful connection to TARGET2 of the countries of the first and second country windows respectively. As a result, currently 15 EU Member States, of which 11 are euro area countries, participate in TARGET2.

On 31 January 2008, the Eurosystem hosted a conference on preliminary assessment of the contribution of TARGET2 to the European integration and main impacts of TARGET2 on bank organisation and functioning of the market. A very good start of TARGET2 illustrates the ability of the Eurosystem, together with the users, in building a major market infrastructure. The cooperation among Banca d'Italia, Banque de France and Deutsche Bundesbank in developing SSP is assessed positively and is definitely a valuable asset for the future (V. Bonnier, 2008). TARGET2 has fulfilled the banking industry's vision of an integrated market for payment services in euro (P. Poncelet, 2008).

Due to the so-far short life of TARGET2, the relevant statistical information is limited. Deutsche Bundesbank summarised the results of the first day of TARGET2 operation, which show that 171.3 thousand transactions with a value of 833.4 billion euro were conducted. At the end of the migration period, the daily average volume of TARGET2 is expected to amount to 380,000 payments (Bruneel, 2007). Compared with the daily average number of transactions (326.2 thousand) and their value (2 092 billion euro) conducted via TARGET in 2006, the TARGET2 first-day results were around two times lower. The bulk of transactions on the first day of TARGET2 operation were on account of Germany (94.2% of transactions and 87.1% of value), followed by Austria and Luxembourg in respect to the value and Slovenia and Luxembourg in respect to the number of transactions. Cyprus, Lithuania, Latvia and Malta conducted 101 transactions (0.06% of total) worth 88.1 million euro (0.01% of total). The average transaction volume was in the range between 68.4 thousand euro in the case of Lithuania and 24.0 million euro in the case of Austria. On the first day of TARGET2 operation, the average transaction value

was 4.9 million euro, accounting for 77% of the average value of a TARGET transaction in 2006.

### TARGET services in the Baltic States

As of 19 November 2007, the go live day of TARGET2-Latvija, 21 banks (100% participation), one foreign bank branch, Latvijas Banka, the Treasury and the Latvian Central Depository participate in it. The number of banks in TARGET2-Lietuvos, the system of Lithuania, is considerably smaller, with 2 banks (22%), one foreign bank branch, Lietuvos bankas and the Central Securities Depository of Lithuania participating. Overall, the first wave of migration to TARGET2 was made up of 259 direct participants, 2 925 indirect participants and 7 ancillary systems.

An increase in the volume of payments handled by TARGET-Latvija has been observed, while the value of these transactions has been unstable possibly due to seasonal volatility (see Chart 2). In the case of TARGET2-Lietuvos bankas, the volume of handled payments has stabilised, while the value is on an upward trend (see Chart 3).

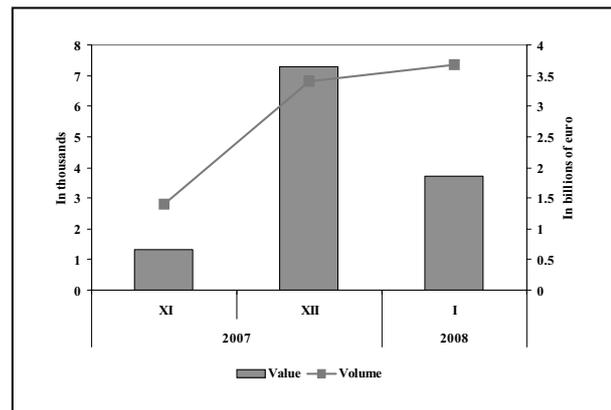


Chart 2. Payment instructions handled by TARGET2-Latvija

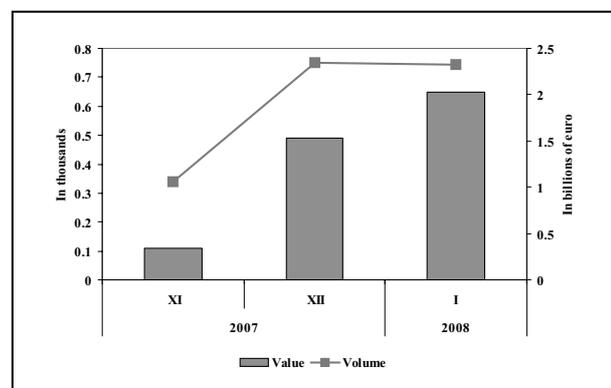


Chart 3. Payment instructions handled by TARGET2- Lietuvos bankas

Estonia (and also Poland) has opted for another solution. Eesti Pank (also Narodowy Bank Polski) connected its EP RTGS system to TARGET via

a bilateral link with Banca d'Italia's RTGS on 20 November 2006. In turn, Banka Slovenije decided, for efficiency reasons, not to develop its own RTGS system, but to use Deutsche Bundesbank's RTGS system to connect to TARGET.

TARGET services in Estonia are used by two banks, one foreign bank branch and OMX Tallinn. As this system has been operational for over a year, its performance can be assessed over a longer time span. Substantial fluctuations in both volume and value of the handled payments were observed, reaching the peak in May and June 2007 (see Chart 4). In the case of Estonia (similar to Latvia), the value of handled payments posted a decline in January.

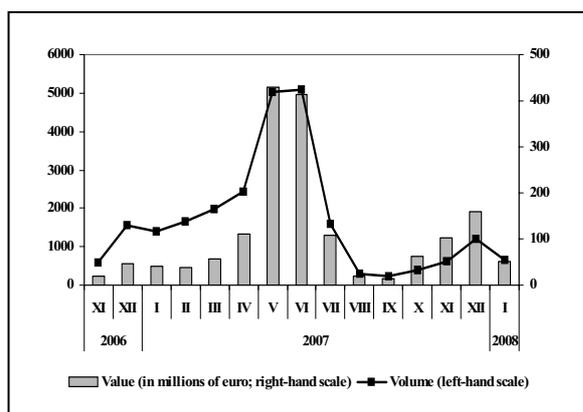


Chart 4. Payments handled by Eesti Pank's EP RTGS link with TARGET

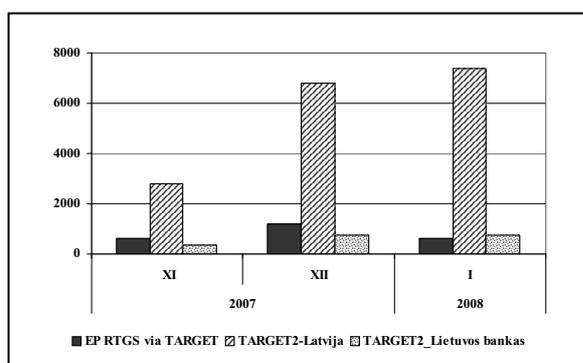


Chart 5. Number of payments handled via TARGET in the Baltic States

The comparison of the value of payments handled in the Baltic States via the two TARGET systems in November and December 2007 and in January 2008 shows that a notably smaller value of payments was processed via Eesti Pank's EP RTGS (see Chart 6). The largest value of payments was handled via TARGET2-Latvija in December (3.7 billion euro). The value of payments handled via TARGET2-Lietuvos bankas in January exceeded the respective indicator for TARGET2-Latvija. On average, the value of payments handled daily via TARGET2-Latvija was between 66 million euro in November and

192 million euro in December, whereas the respective value handled via TARGET2-Lietuvos bankas ranged from 34 million euro in November to 92 million euro in January. At the same time, the value of payments handled via Eesti Pank's EP RTGS has not reached 10 million euro.

A notably larger average daily value per payment handled was recorded for the TARGET2-Lietuvos bankas (2.7 million euro in January; see Chart 7).

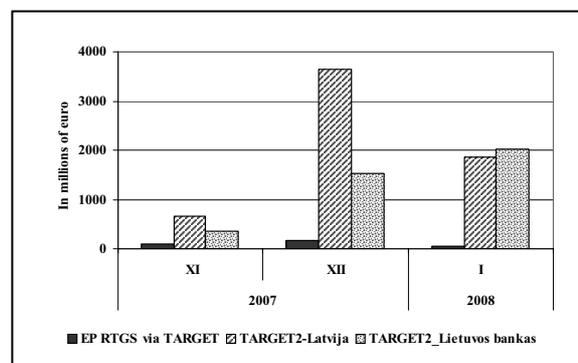


Chart 6. Value of payments handled via TARGET in the Baltic States

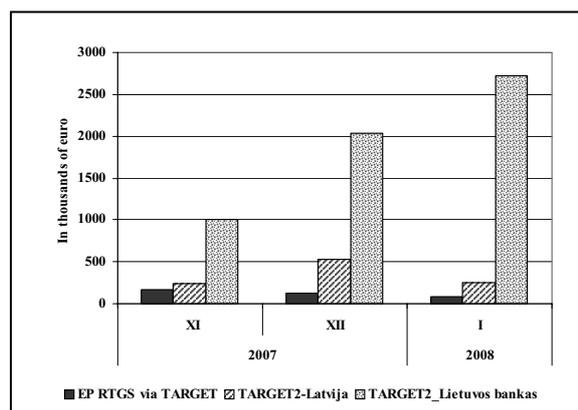


Chart 7. Average value of payments handled via TARGET in the Baltic States

## Evolution of the payment systems

Latvian banks have made essential adjustments to their internal payment systems to speed up and improve customer payments. They offer a number of new products using modern bank technologies. Cashless payment instruments in electronic form, payment cards and payments to institutions issuing electronic money using Internet or telephone banking services are used more and more extensively. The importance of cashless payments in non-bank mutual settlements is gradually growing. Consequently, the volume and value of payments handled by payment systems of the central banks have increased, and the authors expect that it will continue to increase in the future as well. This is well-supported by the value

and volume of customer TARGET payment flows (see Chart 8) as well as by the performance indicators of the other two Latvijas Banka's payment systems (RTGS SAMS and electronic clearing system EKS; see Charts 9 and 10).

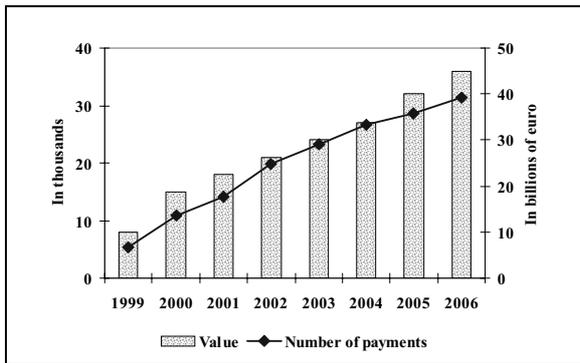


Chart 8. Daily average of customer TARGET payment flows

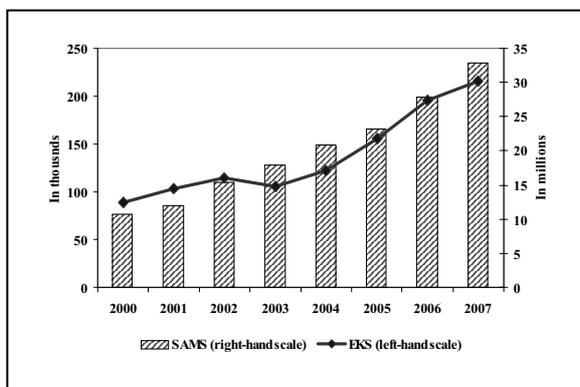


Chart 9. Volume of Payment Instructions Handled by SAMS and EKS of Latvijas Banka

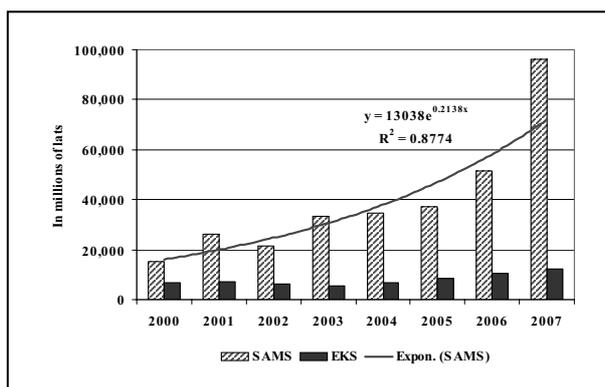


Chart 10. Value of Payment Instructions Handled by SAMS and EKS of Latvijas Banka

Securities settlement systems also form an essential part of the financial infrastructure, hence their development ranks important; however, the integration of these systems has not yet come close to the high level achieved by the payment systems due to the advance of TARGET2. Therefore the Eurosystem develops also TARGET2-Securities for securities settlement and

a new level of correspondent central banking model CBM2 for collateral management. The authors of the paper support the view that TARGET2 and the two other systems in an independent but integrated way will allow efficiency to be increased, market integration to be stepped up and competition to be fostered (G. Tumpel-Gugerell, 2008). These will be important challenges for the central banks in EU countries and also for other players of the financial market.

## Conclusions

Payment systems play an essential part in ensuring the implementation of central banks' tasks. It is vital for the EU to develop payment systems that would facilitate the integration of the financial market and support the conduct of a single monetary policy. TARGET2 is a more up-to-date RTGS system ensuring a uniform legal framework and similar payment services in any country participating in TARGET2 as well as facilitating the integration and competitiveness of the EU financial market.

The first TARGET2 performance indicators show an upward trend; the dynamics of other payment systems' indicators point to an increase as well, hence the volume and value of payments via TARGET2 are expected to grow. The functioning of this system is a positive phenomenon requiring a further in-depth analysis when all projected countries have joined it and time series required for the assessment of the system's performance indicators and seasonality effects accumulated.

The completion of the go live TARGET2 as well as the development of TARGET2-Securities and CCBM2 are among the most important challenges for central banks and other financial market players in the EU countries.

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