



# TARGET2 – Slovakia's new target in the area of payment systems

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*The number one topic of present days is the approaching Slovakia's accession to the euro-area. We learn almost every day that we will pay with euro banknotes and coin soon, i.e. we learn about cash payment transactions. However, the euro is not only a cash currency; in fact, a major part of funds circulates in ways other than through our purses, shop cash registers or bank vaults. In the case of money transfers, cashless payment transactions are the more important part in terms of volume. Accession to the euro area will bring about fundamental changes also in this area, although they might not be as obvious for a common citizen as with the said currency. These changes affect entities involved in the payment infrastructure, i.e. banks and other financial institutions, all the more.*

## WHOLESALE VERSUS RETAIL

One very distinct difference exists in the world of cashless transfers – their subdivision according to whether they serve directly the institutions involved in the payment infrastructure, or their clients. The first group is usually designated as *wholesale transfers* and the other one as *retail transfers*. This foreshadows that the next most marked difference will be in the volumes of the individual transfers and in the subsequent risks brought about by such transfers. The differences in these two spheres also require differences in the approaches and properties of systems, via which these transfers are carried out. Exactly this feature will become even more evident upon Slovakia's adoption of the euro, as domestic wholesale transfers will belong to the new payment system TARGET2 from 2009 and the existing SIPS system will thereby lose a substantial proportion of the volumes processed.

## WHAT IS TARGET2

Together with the FEDWIRE system (the payment system of the US Federal Reserve Bank) and the CLS system (*Continuous Linked Settlement* – a global system for the settlement of operations on FX markets), TARGET2 is one of the largest and most important independent settlement systems in the world. It will perform the settlement of 350,000 payments in the total value of 2.4 trillion euros. TARGET2 is an abbreviation of *Trans-European Automated Real-time Gross settlement Express Transfer system*. That means that every single funds transfer carried out by means of this system is settled independently, without setting off against other transfers, and immediately, without undue delay. The settlement is carried out on the accounts of the central bank; therefore this system involves no credit risk. One can rightly say that our current system – the SIPS (Slovak Interbank Payment System) – can carry out a final payment in

Slovakia within a few minutes, but in the case of the TARGET2 system this also holds for transfers directed to other European countries. There is no difference in the speed and quality of payment processing between domestic and cross-border payments. Although TARGET2 is primarily designed for transfers of large volumes in connection with monetary policy operations, there are no restrictions regarding the value or purpose of the transfer. The system does not reject client reimbursements, provided, of course, the client can afford them (the price of a RTGS priority payment for the client can be as much as more than 100 times higher than that of a normal payment product).

## A LOOK AT THE HISTORY OF THE TARGET2 SYSTEM

TARGET2 is the second generation of the original TARGET system, which was started for the first time in 1999 in connection with the creation of the single currency euro as a safe and fast instrument for performing cross-border transfers mainly for monetary policy operations and other operations on the European money and capital market. The then TARGET system consisted of 15 national RTGS systems (real-time gross settlement systems) operated by the central banks of individual European Union countries (11 of them were euro area members at that time). Those systems were mutually connected by a network called *interlinking*. The actual network consisted of technological SWIFT infrastructure and special rights destined for communication between individual central banks, including the European Central Bank (ECB). If a member of the TARGET system (most frequently an institution) wanted to carry out a transfer, he first sent a payment report to his central bank and the central bank, after debiting his account, sent a report to the central bank of the beneficiary via the interlinking network.



<sup>1</sup> A queue stands for a set of payments that have been entered in the system, but are still waiting for processing due to a current lack of liquidity on the account of the sender.

The central bank of the beneficiary then completed the operation by crediting the account of the receiving bank. Last but not least, records of these transfers were also kept by the ECB itself. This record-keeping yielded the numerical state of mutual receivables and payables of euro area countries, which resulted for them from the individual transfers. This short description is sufficient to demonstrate the main drawback of the system – three, usually completely different, platforms, which increased not only the potential risk of such transfers, but also their price. Also, in the TARGET system, domestic RTGS transfers were substantially cheaper than cross-border transfers. In addition, in the case of domestic transfers there was price harmonization, so that the prices differed in the individual countries. Moreover, the situation was supposed to become more complicated by the planned euro area enlargement. That would require the setting up and operation of compatible RTGS systems also for the newcomers, which would not be the cheapest affair for them. Within a short time, the first voices calling for a change appeared and in 2002 the Governing Council of the ECB decided to create a new generation of the system. TARGET2 was supposed to be the new generation.

### UNITY IS STRENGTH

The basic requirement for the creation of the new system was the elimination of the heterogeneous architecture of the original system and the enabling of maximum possible harmonization regarding the level of services, technological environment and prices of system usage. The original proposal of the German central bank, the Deutsche Bundesbank, to create a new system on one technological platform, was developed later in cooperation with two other central banks – the Banca d'Italia and Banque de France, and the consortium "3CB" was created. The consortium thus became the manager and provider of the so-called *Single Shared Platform* – SSP.

SSP means that the users communicate with the system directly and in the same manner via standard technological interfaces (i.e. not via the original RTGS platforms). From the start of the solution, however, it has been seen to it that the system continues to be legally and economically presented and understood as an association of national RTGS systems. Each participating central bank continues to operate its own RTGS system and governs its relations with the customers independently (it keeps their accounts, concludes contracts with them etc.), "outsources" only the provision and operation of the technological platform to another supplier (in this case to the 3CB consortium). This solution has some fundamental advantages. First of all, the costs of operation of technological platforms on the part of the central banks do not arise. Thus this concentration should bring about reductions in final prices and a shorter period of time necessary for the finalization of the settlement process in the case of cross-border

transfers. Within the integrated SSP solution, it is also possible to provide the participants with comprehensive information on the state of current and projected liquidity, taking into account queues<sup>1</sup> in the broad European context, which has not been possible in the previous system.

Furthermore, it is possible to apply full harmonization of the used infrastructure and transmission formats. Last but not least, the important concentration of responsibility for risk management for the operator of the technological platform has to be mentioned. If any risk management framework and requirements on the security of technological components of the SSP are applied, they relate to the services of all central banks without exceptions.

Disadvantages that can be mentioned are the increase in prices for the performance of domestic RTGS transfers in connection with a more intensive use of the not quite cheap SWIFT services. It has to be said, however, that in the case of interest in using the system, it is not necessary to operate own SWIFT interfaces at any rate, but it is possible to use for example services of the so-called Service Bureau, which acts as intermediary for the connection. In addition, the TARGET2 system enables several forms of participation, where besides direct participation it is possible to access the system even without an own account and own communication interfaces in the form of indirect participation, with the responsibility for the management of the necessary liquidity and for the exchange of payment reports with system being assumed by the direct participant acting as intermediary for the connection of the indirect participant.

In connection with measures for the renewal of activity, it has to be mentioned that the SSP is operated in two regions, in two different sites in each of them. The sites are mutually connected by a synchronous system for data mirroring and are fully identical in terms of computer and operational capacity. In case of site breakdown, processing can continue at the other site within one hour. In case of a breakdown of the whole region, the limit for the continuation of processing in the other region is two hours.

### MODULAR STRUCTURE OF THE SSP

SSP services are differentiated within what is called modules. In addition to the basic functionality (carrying out transfers between RTGS accounts), the SSP offers also other services that are close to the actual RTGS system and to activities of central banks. These services are for example the support of the minimum reserves management, the performance of automatic overnight operations (overnight refinancing and sterilization operation) and the keeping of additional accounts for special purposes with a restricted payment functionality. In the case of these additional modules, each central bank can decide, whether it will convey their services to the banking community. The use of modules is not free of charge



and each central bank has to weigh whether a purchase of such a service within the SSP will be effective, whether, for example, cost savings and improvement of the service quality for the banking community will be reached, or whether it will be more advantageous to provide services within one's own solutions. The financing of the development and use of the platform is performed on the basis of the so-called capital key. The key is applied absolutely in the case of the obligatory basic functionality, and in the case of optional modules the amount of the key is adjusted relatively, within a group of central banks that have decided to use the module jointly.

### MIGRATION TO TARGET2

In connection with the TARGET2 system, the term *migration* stands for the gradual or immediate replacement of the original TARGET system and local RTGS systems with a single shared platform.

The transition to the SSP from the original RTGS systems has been planned from the beginning as gradual, but variability in individual cases should be retained. The central banks had the possibility to choose the conditions, under which they gradually "renounce" to their RTGS system and pass to the SSP. In some cases, the central banks have decided to keep their original RTGS system, although they have migrated already to TARGET2. The term PHA (*Proprietary Home Account System*) has been introduced for such a parallel system. The motives of such a procedure of banks were of different nature and the complicated and sudden transition of a large number of local banks to the new platform is mentioned as the main reason. There are two variants of such an approach. The first variant consists in keeping the whole payment functionality in the parallel RTGS system and it can be used for any transfers of banks and their clients. In the second case, only the specific functionality typical of the activity of central banks is kept in the PHA, such as for example cash operations or the monitoring of minimum reserves. It holds for the first variant that the appropriate central bank can operate it for general RTGS purposes not longer than 4 years from the migration to the TARGET2 system. In addition, it has to apply such a price policy that the participating banks are motivated to a transition to the SSP (the prices for general PHA services are supposed to be higher than the harmonized prices for services in the SSP). On the other hand, if the PHA platform is destined only for specific purposes<sup>2</sup>, it can be operated over an indefinitely long period of time. When a PHA is operated, the central bank must ensure the possibility of real-time liquidity transfers between the SSP and PHA accounts.

The migration of the member states to the TARGET2 system has been planned in four stages, the last one having been reserved only as an emergency "time window" for banking communities whose transition would fail in the first three waves. The third wave of countries migrated successfully on 19 May 2008 and the original TARGET

system became a thing of the past<sup>3</sup>. At present, after the end of the migration, the TARGET2 system currently uses approximately 1000 banks (direct participants) and 60 ancillary systems in 21 countries of Europe.

### SLOVAKIA – THE FIRST COUNTRY NOT TO MIGRATE

By its accession to the euro area, Slovakia was obliged to join the new TARGET2 payment system, because the system is a mandatory requirement for carrying out monetary transactions. However, in our case the issue is the operation of a RTGS system that has not participated in the original TARGET system. Thus, the process will constitute no migration process in the true sense of the word, but a connection to a fully new system. The preparation of the strategy and procedure for this process started at Národná banka Slovenska as early as in 2005, when the National Euro Changeover Plan for the Slovak Republic was adopted. The current RTGS-SIPS system has been and, for the time being, still is the only platform for the settlement of payments in large volumes in Slovakia. In addition, it is also a system, by means of which hundreds of thousand of retail payments are processed and settled daily. Consequently, it is a system that fulfills two basic functions within one technological platform, which enables to achieve cost savings and low prices for the services offered for financial institutions – the participants of the system.

During the preparation of the strategy, several available possibilities were weighted and space in the payment infrastructure was searched, which the existing SIPS system and its technologies could take besides the TARGET2 system after accession to the euro area. The decision arose at the end of 2006, when a strategy reckoning with the SIPS system as a platform for the processing and clearing of retail payments in the form of what is called the Ancillary System (AS) to the TARGET2 system. The RTGS functionality will not be supported in the SIPS system any more and will be completely transferred to TARGET2 under the conditions of Slovakia. This solution supports several arguments. Should the RTGS functionality be kept also in the SIPS system, i.e. the system would function as the PHA, quite hard changes would be necessary, which would add a functionality for ad hoc real-time liquidity transfers between the systems SIPS and TARGET2. Moreover, the risk management framework applicable to the TARGET2 system would have to be applied to the SIPS system. As for the potential cost savings for the users of such a system compared to the use of the SSP, it has to be said that it is barred by rules that are supposed to place at a disadvantage in such a PHA in terms of price. The only merit of the solution would be the possibility to use the existing proprietary communication infrastructure of the SIPS system, if the banks would not pass to the SSP and to SWIFT. However, when it was taken into account that most banks had already

- 2 Specifically only for the management of minimum reserves, cash operations and the provision of automatic operations (standing facilities).
- 3 Before the completion of the whole migration, the interlinking system was used for the purposes of RTGS transfers between countries still using the original system and countries that have already migrated to the new system.



*4 An intraday is the authorised overdraft of the RTGS account to the amount of the value of the pledged collateral.*

used SWIFT because of correspondence banking, this advantage started to appear as not quite convincing.

The reconstruction of the SIPS system to a retail payment system was finally supported by the Slovak banking community. The new SIPS EURO system has been designed as a so-called net multilateral positions calculation system, which will be settled twice a day on RTGS accounts in the TARGET2 system. A special interface for the support of AS settlement will be used for the information transmission. The interface also includes a special procedure for the settlement of net multilateral positions.

Because a part of the SIPS RTGS system served primarily for the settlement of transfers of large volumes in connection with the performance of monetary policy and other operations on the financial market and the accounts maintained in it were simultaneously accounts for the monitoring of minimum reserves of banks, this mission will be the responsibility of the TARGET2 system. The launch of the Slovak component, called TARGET2-SK, is planned for the first working day after accession to the euro area. The main participants of the Slovak component will be some 30 financial entities (primarily credit institutions) and three ancillary systems (besides the said SIPS EURO system, the participation of the Central Securities Depository, a.s. and of First Data Slovakia, a.s., a company involved in the clearing of payment card transactions, is expected).

The contractual partner and place of everyday support for all institutions participating in the TARGET2-SK system will be the system provider Národná banka Slovenska. In terms of staff, the operation will be ensured by settlement managers, support center operators and crisis managers. The presence of employees for the implementation of all the said activities is required approximately from 6.30 to 21.00 o'clock. Because the operating days of the TARGET2 system in the euro area are not identical with the working days in Slovakia, the TARGET2-SK system will be operated also during some Slovak state holidays, which are no holidays.

#### **LEGAL ASPECTS OF THE TARGET2-SK SYSTEM**

Although the TARGET2-SK system is part of the large TARGET2 system built on a uniform technological basis, the operation and use of the system will be always governed by the Slovak commercial law. Participation in the system will be based on a contractual basis, where the party undertaking to provide TARGET2 services according to the agreed conditions is Národná banka Slovenska. The basic legislative norms, according to which the TARGET2-SK system will be operated, include Act No. 510/2002 Coll. on Payment Transactions as amended. Although the European Commission Directive on the so-called settlement finality (the Settlement Finality Directive 1998/26/EC) has been transposed to the current wording of the act

as a necessary condition for the legal protection of the irrevocability of payments entered in the system, only the prepared current amendment to this act, effective from the day of the adoption of the euro in Slovakia, will remove some further obstacles to the connection to the TARGET2 system. The technological conveniences enabling to centralize European liquidity within one technological platform, entail some legal problems. The so-called liquidity pooling is a frequently discussed topic among professionals being close to the TARGET2 system. This feature enables the virtual connection of several RTGS accounts, even in a cross-border context, with the liquidity obtained this way being able to be sufficient to cover also the payments, for which balances of independent accounts would not be enough. This also applies to the total available liquidity, i.e. also after setting off with the amount of undrawn intraday credit<sup>4</sup>. It can thus happen that an intraday credit, which has been granted to a credit institution for example in Germany, will be drawn also by its Slovak branch, although the branch has not granted any collateral to Národná banka Slovenska and will be able to have a debit balance on the RTGS account. Although this applies only to states during an operating day and at the end of an operating day everything must be in line with the requirements of the central bank, only detailed analyses will show, whether such possibilities are compatible with domestic legislation.

In connection with the operation of the TARGET2 system, the European Central Bank issued the Guideline on a Trans-European Automated Real-time Gross settlement Express Transfer system (ECB/2007/2). A substantial part of this document is made up of the so-called harmonized conditions of participation in the TARGET2 system representing a kind of collection of the rights and obligations of the system participants and central banks when using and operating the system. The entire collection is expected to be applicable and enforceable in the legal system of any country participating in the TARGET2 system. Although small exceptions or adjustments are allowed in the case of some provisions, some facts cannot be changed at all. These include above all prices of system usage, the time schedule of the operating day or the technological specialization for the processing of payment orders.

#### **PAYMENT SYSTEMS – A NEVER-ENDING STORY...**

The launch of the TARGET2 system in November 2007 and the completion of the migration in May 2008 is considered a great success by the European banking community. More than 200 experts of the 3CB consortium, including the active help of workers from other central banks, have participated in the development of the system. The coordination activity and supporting activity of the ECB has enabled all central banks to participate in the definition of the system properties. The representatives of Národná banka Slovenska



had the possibility to actively participate in such a process. However, the development has not been and will not be completed, because there is still room for the creation of new specifications and the development of its properties. Out of the next tasks, one can mention for example the solution of alternative technological possibilities for the connection to the platform and the enabling of a cost reduction, especially for small banks, as well the ensuring of the compatibility of the system with the SEPA (Single Euro Payment Area) standard. A new project called TARGET2-Securities already ties up with the successful TARGET2 project. As the name suggests, the objective of the new project is to develop a platform that could help

to eliminate the disintegration and disharmony in the European infrastructure for the securities trading, clearing and settlement. The objective of almost all activities in Europe in the area of payment systems is harmonization and integration, which is primarily substantiated by an increase in quality and decrease in prices of the services for the participating institutions; and logically, the end client should be main winner of such a development. However, we will have to wait some time for a final assessment – only five or six years later we will be able to start evaluating the economic and qualitative impacts of the harmonization and globalization of services in the area of European payment infrastructure.

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