

EUROPEAN CENTRAL BANK

Overview of TARGET

(Update July 2005)

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What is TARGET?

Distinctive features of the system

TARGET, which stands for the Trans-European Automated Real-time Gross settlement Express Transfer system, is the real-time gross settlement (RTGS) system for the euro. It began operations on 4 January 1999.

TARGET offers a premium payment service which transcends national borders between payment systems in the European Union (EU).

TARGET has a decentralised structure which consists of 16 national RTGS systems and the ECB's payment mechanism (EPM), which are interlinked to provide a uniform platform for the processing of inter-Member State euro payments.

Decentralised structure of TARGET:



TARGET is a real-time system: payments go directly to their destination, reaching it under normal circumstances within a couple of minutes, if not a few seconds, of being debited from the sending participant's account.

TARGET is a gross settlement system in which each payment is handled individually. Acknowledgement that each individual payment order has been carried out successfully is sent in real time.

TARGET provides intraday finality: settlement is final for the receiving participant once the funds have been credited. The money received is central bank money. It is possible to re-use these funds several times a day.

TARGET is accessible to a large number of participants. Hence, most credit institutions are able to use TARGET to make payments on their own behalf, independently of other participants. Even indirect participants can be addressed directly.

TARGET is very easy to use. To initiate an inter-Member State payment via TARGET, participants simply send their payment orders to the euro RTGS system in which they participate.

Why was TARGET developed?

TARGET was developed to meet three main objectives:

- I. to provide a safe and reliable mechanism for the settlement of euro payments on an RTGS basis;
- 2. to increase the efficiency of inter-Member State payments within the euro area; and, most importantly,
- 3. to serve the needs of the ECB's monetary policy.

TARGET is the benchmark for processing large-value payments in euro. It provides individual real-time processing and intraday finality. TARGET is very easy to use and is accessible to a large number of participants.

Who can use TARGET and which payments can be made?

The possibility of reaching almost all EU credit institutions

At the end of 2004 there were 1,001 direct participants in TARGET and around 9,480 indirect participants. The overall number of banks (including branches and subsidiaries) accessible via TARGET is around 50,800 worldwide.

It is possible to reach almost all credit institutions established in the EU via TARGET and, hence, all their account holders. All credit institutions which are addressable through TARGET (i.e. direct or indirect participants) have to be identified by a Bank Identifier Code (BIC). The BICs of TARGET participants are listed in the TARGET Directory and in the SWIFT BIC directories. TARGET obviates the need for a service level agreement with other participants. Furthermore, at the inter-Member State level, there is no longer any need for a bilateral exchange of SWIFT authentication keys.

All credit transfers are possible

TARGET can be used for all credit transfers in the 12 countries that have adopted the euro as their currency (euro area countries), as well as in Denmark, Poland, Sweden and the United Kingdom. TARGET processes both interbank (MT-202) and customer payments (MT103/103+). There is no upper or lower value limit for TARGET payments.

TARGET provides a highly efficient service, especially for time-critical large-value payments. Therefore, by using TARGET for all large-value payments, in particular those related to inter-bank operations, market participants not only receive a premium service, but also make a substantial contribution to reducing systemic risk throughout the EU.

Payments directly related to monetary policy operations involving the Eurosystem, whether as the recipient or the sender, have to pass via TARGET. Inter-Member State large-value net settlement systems operating in euro also settle their end-of-day balances via TARGET. TARGET is thus used for the end-of-day settlement of EURO I, the system operated by the European Banking Association (EBA) and for euro payments between CLS Bank and its members.

Although TARGET is mainly intended for large-value payments, the number of participants using TARGET for all their inter-Member State euro payment business is continuously increasing. In this way, even smaller credit institutions in the EU are able to offer their customers an inexpensive inter-Member State payment service, as they are independent of correspondent banking.

- The average value of inter-Member State inter-bank payments in 2004 was €17 million. However, during the last hour of the working day (when customer payments are no longer possible) the average payment size reached €117.8 million.
- The average value of customer payments in 2004 was €0.8 million.

It is possible to make credit transfers to almost all credit institutions in the EU via TARGET without any limitation on value. With its special focus on large-value payments related to inter-bank operations, TARGET helps to reduce systemic risk.

What are the advantages of using TARGET?

I. Relations with TARGET users

The performance of and developments in TARGET have benefited from a very active and fruitful dialogue with its users at both the national and European levels. This dialogue has ensured that users and operators fully understand the system and market requirements. This cooperation has proved to be very beneficial for all parties in preparing and implementing CLS operations, in strengthening TARGET's contingency measures, developing TARGET's single compensation offer and dealing with market demands on the current and future TARGET systems.

2. Flexible liquidity management

Liquidity is widely available in TARGET. Minimum reserve holdings are available for settlement purposes during the day and the Eurosystem provides unlimited (collateralised) intraday credit free of interest to its counterparties. Incoming funds are available for immediate re-use. Furthermore, the full collateralisation of intraday credit has proved to operate smoothly.

The co-existence of several alternative payment channels has required careful management of payment routing and multiple liquidity positions in euro. This co-existence of payment channels has not precluded that even larger banks, which have access to cheaper alternatives for processing their payments, use TARGET extensively for very high-value payments, since TARGET provides advantages in terms of liquidity management and security.

TARGET facilitates liquidity management because liquidity is widely available and the turnover of funds can be high. Any risk of having liquidity trapped can thus be avoided.

3. Operating days and times to suit everyone

TARGET operating days are, de facto, the settlement days for the financial markets in euro, as well as foreign exchange transactions involving the euro. TARGET (including all the national RTGS systems) is closed therefore on Saturdays and Sundays, and on New Year's Day, Good Friday, Easter Monday, I May (Labour Day), Christmas Day and 26 December.

To meet the needs of its customers and those of financial markets in general, TARGET operates for 11 hours on each of its working days. The system is available from 7 a.m. to 6 p.m. C.E.T., with a cut-off time for customer payments of 5 p.m.

These long operating hours help to reduce foreign exchange settlement risk substantially because they overlap fully during the first operating hours in the morning with those of the Fedwire system in the United States and the Bank of Japan's Payment System, thus enabling simultaneous settlement of CLS positions.

4. Risk reduction

TARGET provides a firm foundation for the management of payment system risks. It enables participants to settle payments in central bank money with immediate finality, thereby eliminating the settlement risk between participants.

TARGET payments become final for receiving participants once they have been credited to the participant's account held at the national central bank (NCB). This means that participants are, in principle, able to pass on third-party payments they receive to the final beneficiary immediately and without credit risk.

5. Real-time operation

The high speed at which payments in TARGET are processed facilitates and improves cash management. Moreover, this enables participants to increase their turnover of funds.

Under normal circumstances, the time between the debiting of the account of the sending participant and the crediting of the account of the beneficiary participant is a couple of minutes, if not a few seconds. This rapid processing of funds, which are credited to the appropriate account with finality, yields direct benefits for TARGET's participants.

International corporate cash management is also able to make substantial efficiency gains. The real-time execution of TARGET payments makes it possible to optimise cash management in euro. Participants' corporate customers therefore have a particular interest in having their treasury payments made via TARGET.

6. Inter-bank straight-through processing

Straight-through processing (STP) rules in TARGET are seen as a way of facilitating further automation in the processing of payment messages, thus reducing the associated costs and risk. Since TARGET started operations, it has supported the fully automated processing of inter-Member State payments between banks within the EU (i.e. from the debiting of the ordering bank's account to the crediting of the receiving bank's account). TARGET fully supports STP standards for the SWIFT message types. This is reflected in the very low rate of rejected

payments at the inter-Member State level. In 2004 this rate further reduced to around 0.16% of the total number of inter-Member State TARGET payments (from 0.22% in 2003). This means that on average only 104 out of 65,000 inter-Member State payments per day had to be returned to the sending bank.

7. The cost of making a payment

The use of TARGET is supported by a transparent pricing structure, where inter-Member State payments are subject to the following degressive transaction fees:

- €1.75 for each of the first 100 transactions per month;
- €1.00 for each of the next 900 transactions per month;
- €0.80 for each subsequent transaction in excess of 1,000 per month.

For extensive users, the average fee per payment is in the region of $\notin 0.85$. The inter-Member State fee depends neither on the destination nor on the value of the payment and is charged by the sending NCB only. Intra-Member State transaction fees (including entry and periodical fees) are not harmonised.

8. EBA settlement (EURO I) via TARGET

The ECB provides EURO I with an access point to TARGET. Through the EPM, EBA Clearing Company banks are able to settle their positions in a final and irrevocable way.

As settlement service provider, the ECB is informed (at around 4 p.m. C.E.T.) of the final balances of the EBA clearing banks. Before the deadline defined by the EBA, banks with a short position send a inter-Member State TARGET payment to their NCB in favour of the EBA's settlement account at the ECB; the ECB then sends confirmation to the EBA that the clearing bank has covered its position.

If all short banks have paid in and sufficient funds have been received on the settlement account at the ECB to cover the aggregate long banks' positions, the EBA instructs the ECB to pay the clearing banks with a credit balance via an inter-Member State TARGET payment. This brings the balance of the settlement account back to zero.

Upon confirmation that the payment has been credited to the beneficiary, the ECB notifies the EBA that the payment has been made successfully. Once all confirmation messages have been received, the EBA sends confirmation to the clearing banks and the ECB that the settlement has been completed.

9. Continuous linked settlement and TARGET

In September 2002 the continuous linked settlement (CLS) system, a system designed for the settlement of foreign exchange transactions, went live. CLS largely eliminates foreign exchange settlement risk by settling the transactions in its books on a payment-versus-payment (PVP) basis. The remaining balances of CLS settlement members in the books of CLS Bank are squared by pay-ins and pay-outs in central bank money for each of the eligible currencies (AUD, CAD, CHF, DKK, EUR, GBP, HDK, JPY, KOW, NOK, SEK, SGD, USD and ZAR¹).

For the euro, the pay-ins and pay-outs in central bank money are made via TARGET. For this purpose, CLS Bank holds an account with the ECB and the CLS settlement members or their *nostro* agents hold an account in their respective national RTGS system. The banks fund a debit position in euro by transferring money from their RTGS account to the CLS Bank account held with the ECB and vice versa if CLS Bank has to fund a euro credit position of a bank.

The ECB's "Recommendations for CLS payments in euro", published in February 2001, together with its explanatory memorandum and the contingency measures in place, aim to ensure the smooth processing of CLS-related payments even in the event of a TARGET incident during the settlement time-frame.

10. TARGET is a reliable system

TARGET was developed by the European System of Central Banks (ESCB), most of whose members have a long and proven track record in building and running RTGS systems.

¹ Eligible currencies at the time of printing.

The Eurosystem continues to improve TARGET availability, which is defined as the average availability of the RTGS systems belonging to TARGET. In 2004 the overall availability of TARGET was 99.81%, compared with 99.79% in 2003.

SWIFT², which has more than 30 years' experience in financial messaging services, is the network service provider for TARGET. Special agreements have been concluded with SWIFT with a view to providing the best possible support in terms of speed, capacity, availability and security.

II. TARGET security

The security policy for TARGET is based on an agreed security strategy and methodology. Since early 1997, TARGET risk analyses have been conducted on a regular basis. A new TARGET risk management framework was developed in 2002. The state-of-the-art security policy ensures that TARGET is protected from all threats – internal or external, deliberate or accidental – and minimises the impact on the continuity of TARGET business of any threats that, despite all measures taken, may occur.

12. TARGET contingency measures

The Eurosystem attaches top priority to the enhancement of TARGET contingency measures. TARGET contingency measures ensure that, even if TARGET is not fully operational, systemically important payments can be processed on time. The Eurosystem has always required all local TARGET components to have both TARGET business continuity measures and TARGET contingency measures available. TARGET business continuity requires each national component to be able to switch to a secondary site as quickly as possible should a failure occur at the primary site. In addition, TARGET contingency measures ensure the processing of systemically important payments in the event of both primary and secondary sites being temporarily affected.

Regular tests are carried out to verify that TARGET business continuity and contingency measures are fully operational and that staff are familiar

² Society for Worldwide Interbank Financial Telecommunication (SWIFT).

with the use of them. Credit institutions often participate in these exercises.

13. TARGET information system

The TARGET information system (TIS) is a common information tool that allows all TARGET participants to access simultaneously standardised information on the status of the TARGET system via the information providers Reuters, Telerate/Bridge and Bloomberg.³

Recent developments in TARGET

I. TARGET release 2004

In line with other major payment system providers and to ensure that system upgrades are managed in a professional and structured way, enhancements to the TARGET system are introduced in annual releases. The changes implemented by the TARGET release 2004 were related to a change in the SWIFT validation rule for International Bank Account Numbering (IBAN), which came into effect on 14 June 2004. Modifications in the SWIFT validation rule also implied similar modifications for the TARGET national components⁴. All RTGS systems were fully certified to TARGET 2004 specifications before the new release went live.

2. The connection of Narodowy Bank Polski to TARGET

On 24 October 2002 the Governing Council of the ECB decided that new EU Member States would, on accession, be given the same rights and obligations with regard to TARGET connection as the current noneuro area NCBs. Connection to TARGET will only become mandatory when a new Member State joins the euro area.

³ Reuters (page ECB46), Telerate/Bridge (pages 47556-47557), Bloomberg (page ECB17).

⁴ The TARGET release 2002 introduced the mandatory validation of the IBAN in MT103+ for customer transfers, where the country code belonged to 32 specific countries. The TARGET release 2004 extended this mandatory validation to six new countries (Cyprus, Hungary, Lithuania, Malta, Slovakia and Slovenia).

On this basis, Narodowy Bank Polski, Poland's central bank, decided to connect to TARGET before Poland joins the euro area. This connection took place on 7 March 2005 via a bilateral link between SORBNET-EURO (the Polish RTGS system) and the RTGS system of the Banca d'Italia. NBP's connection to TARGET is the first enlargement of the system since operations began.

3. Migration from SWIFT FIN to SWIFTNet FIN

The migration of TARGET to SWIFTNet FIN, in stages starting on the first quarter of 2003, was completed in November 2004.

4. Compensation scheme

In 2003 the new TARGET compensation scheme was set up for the benefit of TARGET participants in the event of a malfunctioning of TARGET. The TARGET compensation scheme is an attractive, simple and standardised compensation offer by the ESCB, which largely follows market practices. The scheme compensates participants for certain additional costs incurred as a result of non-completion of a payment order on the processing day owing to TARGET malfunctioning. The TARGET compensation scheme applies to all national RTGS systems participants (including TARGET participants of national RTGS systems of non-euro area countries) for all TARGET payments (no distinction is made between intra and inter-Member State payments).

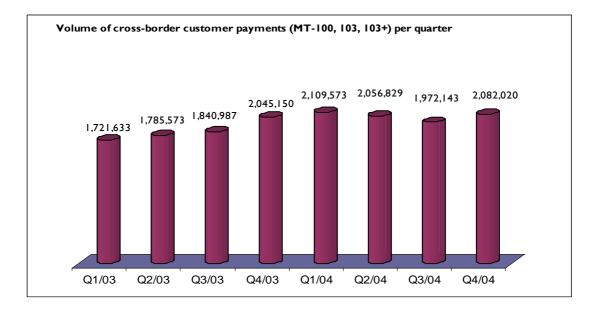
In 2004 the Compensation Scheme was enhanced so that both sending and receiving parties affected by TARGET malfunctioning can claim a fee to compensate the administration expenses of such an event.

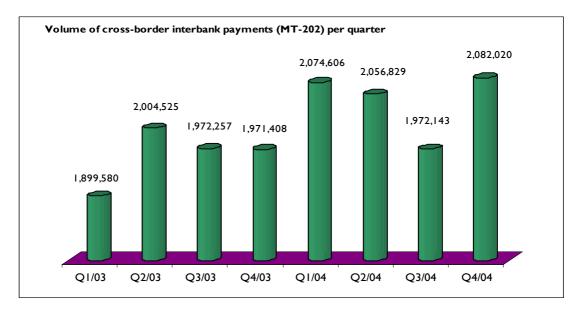
Facts and figures

- There are 1,001 direct participants in TARGET and the overall number of banks (including their branches and subsidiaries) accessible via TARGET is around 50,800, which means that almost all EU credit institutions are accessible via TARGET.
- In 2004 TARGET processed more than 69 million payments, representing a value of €444 trillion. This makes TARGET the

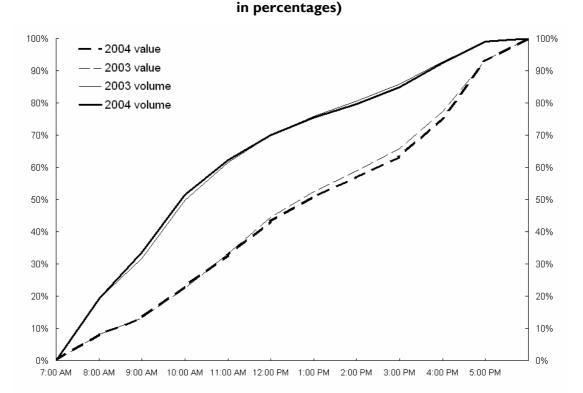
preferred system for large-value payments in euro and – alongside the Fedwire system in the United States – one of the largest wholesale payment systems in the world.

• The number of inter-Member State customer payments in TARGET increased fivefold between 1999 and 2005.





In 2004 the number of payments processed in TARGET as a whole, i.e. inter-Member State and intra-Member State payments taken together, amounted to more than 267,000 as a daily average (of which 65,000 were inter-Member State). The average daily value processed in TARGET in 2004 reached ≤ 1.7 trillion (with inter-Member State payments totalling ≤ 564 billion); this is equivalent to an 88% share of the total value processed by all large-value payment systems operating in euro.



Intraday distribution of TARGET inter-Member State traffic (cumulative figures

TARGET inter-Member State payments are submitted early, with more than 50% of the volume processed in the first three hours of operations (between 7 a.m. and 10 a.m.). By 2 p.m. almost four out of five payments have been processed. The significant volume in the morning is partly related to the release of a high number of warehoused payments from previous dates. In 2004 TARGET processed a daily average of nearly 15,000 inter-Member State payments in the first hour of operations (equally distributed between interbank and customer payments).

In terms of the value of TARGET inter-Member State payments, the highest values are processed between 4 p.m. and 5 p.m. 23% of the inter-Member State turnover is processed by 10 a.m., while 51% is processed by 1 p.m. At 5 p.m. 93% of the total value has already been processed.

Future of TARGET – TARGET2

With TARGET2 the Eurosystem is pursuing the three main objectives decided by the ECB's Governing Council in October 2002:

- TARGET2 should provide a harmonised level of service on the basis of a common technical platform.
- It should follow the principle of cost recovery and have a single price structure that is applicable for both inter-Member State and intra-Member State payments.
- It should meet new user demands including those from the ten new Member States that joined the EU on I May 2004.

TARGET2 will replace the decentralised technical structure of the current TARGET system by a single technical platform, the Single Shared Platform (SSP). It will offer some new features and functionalities that users requested in the public consultation held in early 2003. TARGET2 will apply the latest payment system and information technology and standards (e.g. SWIFTNet in the field of messaging). It will offer the highest possible level of reliability and resilience and sophisticated business contingency arrangements that correspond to the systemic importance of the TARGET infrastructure.

All Eurosystem central banks have confirmed that they will join the SSP for TARGET2.

How do users gain access to TARGET?

Multiple access points

Most credit institutions participate in the euro RTGS system of their home country. Credit institutions with a wide network of branches or subsidiaries across the EU can choose to become members of different euro RTGS systems within which they are able to obtain intraday credit from the respective NCBs.

TARGET payments can be made via the following systems:

ELLIPS
RTGS ^{plus}
HERMES

Spain	SLBE
France	TBF
Ireland	IRIS
Italy	New BIREL
Luxembourg	LIPS-Gross
Netherlands	TOP
Austria	ARTIS
Portugal	SPGT
Finland	BoF-RTGS
European Central Bank	EPM
Outside the euro area: ⁵ Denmark Poland Sweden United Kingdom	KRONOS SORBNET-EURO ERIX CHAPS euro

⁵ Special liquidity conditions apply to TARGET participants operating from these countries.

Further information on TARGET

More detailed information on TARGET can be found in the *Information* guide for credit institutions using TARGET and the TARGET Annual Report. All relevant documents and reports can be downloaded from the ECB's website at <u>http://www.ecb.int</u>

Alternatively, hard copies can be ordered from any of the NCBs or from the ECB at the address below:

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