

The EPM is operated by the European Central Bank

€PM

THE ECB PAYMENT MECHANISM



EUROPEAN CENTRAL BANK

Introduction



Since 4 January 1999 the national central banks of the 15 Member States of the European Union (EU) have interconnected their local (euro) real-time gross settlement (RTGS) systems in order to process cross-border payments with intraday finality in central bank money. In addition to this, the European Central Bank (ECB) operates its own payment processing tool, known as the ECB payment mechanism (EPM), which is connected to the 15 national systems in exactly the same way as they are connected to one another. Moreover, the EPM's core functions are very similar to those of any other TARGET component. The EPM is an integral part of TARGET.

For a better understanding of TARGET as a whole, a short overview of the system is given in the next chapter. It should not be viewed as an exhaustive description of the TARGET system, as it describes only the most important elements of a cross-border RTGS system, as well as its main goals and a few organisational aspects.

After this short overview of TARGET, the EPM itself is described as one of the components of the overall TARGET infrastructure.

An overview of the main core functions, the accessory features, the legal and operational environment and other relevant information from a user's point of view are described.

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TARGET overview

TARGET's core features are:

TARGET (the Trans-European Automated Real-time Gross settlement Express Transfer system) is a euro payment system consisting of 15 national real-time gross settlement (RTGS) systems and the ECB payment mechanism (EPM).

They are interconnected via common infrastructures and procedures, known as the Interlinking, in order to provide RTGS participants across the European Union (EU) with a uniform platform for processing euro payments.

TARGET is a system composed of 16 legally distinct entities. It is a decentralised system based on a certain level of harmonisation, with some common functions undertaken by the ECB. There are more than 5,000 RTGS participants in TARGET and almost all EU credit institutions are accessible via TARGET. These are all listed in the TARGET Directory, as prepared by S.W.I.F.T.

TARGET has been developed to achieve three main objectives:

- to provide a safe and reliable mechanism for the settlement of cross-border payments on an RTGS basis;
- to increase the efficiency of intra-EU cross-border payments; and, most importantly,
- to serve the needs of the monetary policy of the Eurosystem (the Eurosystem is composed of the ECB and the national central banks (NCBs) of the countries which form the euro area).

a **Its high availability** – given the main objectives described above, TARGET has a very central role to play in the processing of large-value payments in the EU. Therefore, the availability of the RTGS systems and the Interlinking components is seen by all as a key factor behind its smooth operation.

b **The irrevocability of payments** – payment orders become irrevocable when the account of the sending participant held at the sending NCB/ECB is debited, adding a certainty factor to the processing of payments.

c **Immediate finality** – real-time gross settlement is an important building block for the management of payment system risks, as credit institutions are able to settle obligations in central bank money with intraday finality, thus eliminating any settlement risk between banks.

d **Its very quick processing time** – under normal circumstances, the processing of a cross-border payment (the time between debiting at the sending NCB and crediting at the receiving NCB) takes no longer than a few minutes.

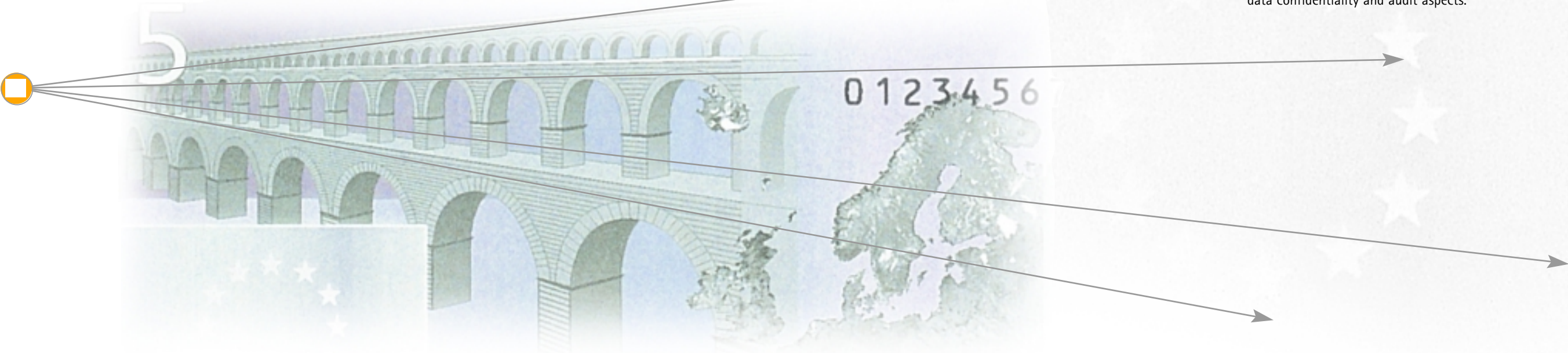
e **Transparency** – although TARGET processes only euro payments, it is also able to transport information regarding the original amount and currency denomination in a similar way to correspondent banking.

f **Security** – the security features of TARGET are a matter of major importance to the NCBs/ECB, which have a genuine interest in ensuring that TARGET payments are handled in a secure and highly reliable way. The technical security requirements defined for TARGET cover system availability, data and system integrity, message authentication and non-repudiation, data confidentiality and audit aspects.

TARGET's future will be shaped by experience and by the evolution of technology and business requirements. Improvements are being made with the aim of further enhancing the smooth functioning of TARGET and the service provided to its participants.

As an ongoing exercise, this means developing more common features and increasing harmonisation, and includes the establishment of a common business practice for the use of TARGET all over Europe.

In addition, the Eurosystem supports banks' initiatives to create appropriate business rules and best business practices for using the system.



The ECB payment mechanism

Features and functioning

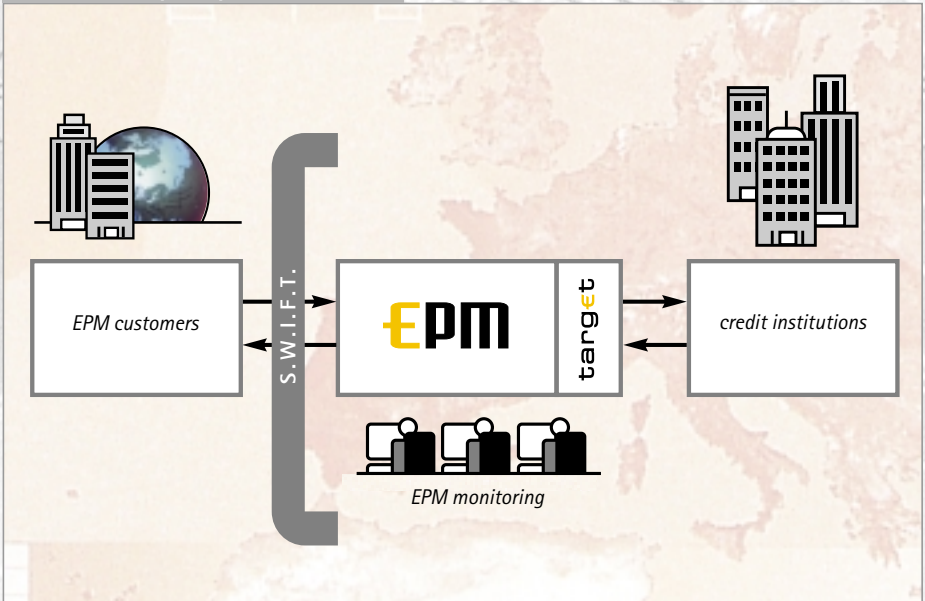
The ECB payment mechanism (EPM) enables the ECB to act as a full member of the TARGET Interlinking system. The EPM is a settlement system which technically operates in the same way as any other RTGS system within TARGET.

The EPM provides not only payment and associated accounting facilities in euro for the ECB's own needs, but also offers a high quality real-time correspondent banking service to a restricted group of ECB customers. It contains the necessary Central Accounting System (CAS) for the settlement of payments between customers and is capable of sending the required confirmation and/or payment messages to those customers. It is a flexible and efficient cash management tool for its account holders.

For example, through the EPM, the ECB acts as settlement service provider for Euro 1, the large-value net settlement system operated by the EBA Clearing Company (EBA). For that purpose, the EBA has opened a settlement account in the EPM. The settlement process itself is governed by a predefined timetable and by operational procedures which cover both normal and abnormal circumstances.

At the agreed cut-off time (4 p.m. C.E.T.), the final balances are calculated and the clearing banks are informed

The EPM's principal interfaces



accordingly. All banks with a debit position (short banks) send a cross-border TARGET payment order to their NCB in favour of the EBA's settlement account with the ECB, within the deadline set by the EBA. Upon receipt of these funds, the ECB sends a confirmation to the EBA, in order to enable it to manage the settlement process. The EBA monitors all messages received from the ECB to check that all expected payments have been credited to its account.

When all short banks have paid in, and sufficient funds are available to cover the aggregate long banks' balances, the EBA instructs the ECB to pay the credit balances out to the long banks.

With this instruction, the EBA's settlement account in the EPM is debited and a TARGET payment is sent to the NCBs at which the accounts of the long banks are held. This brings the balance of the settlement account back to zero.

The EBA has extremely high requirements in terms of availability and processing speed. The EPM has proven that it is able to provide the required service and that it can meet the very high standards set by the EBA. Once the Continuous Linked Settlement (CLS) service is made available to the market, a similar role will be played by the EPM, as also in this case the ECB will act as the euro settlement service provider for CLS.

a EPM customers

The EPM only offers its services to three categories of customers: non-EU central banks, European and international institutions and clearing and settlement organisations. Consequently, all other entities, including credit institutions, are excluded as possible EPM customers.

b Operating hours

The EPM operates from 7 a.m. to 6 p.m. (C.E.T.) on TARGET business days, details of which can be found in the TARGET section of the ECB's website (<http://www.ecb.int>).

c Communication

The normal communication channel with the EPM is the S.W.I.F.T. network. Customers may process their payments (and enquiries) in their own applications, which then communicate with the EPM via the S.W.I.F.T. FIN service. Account holders without a S.W.I.F.T. connection may be allowed to deliver

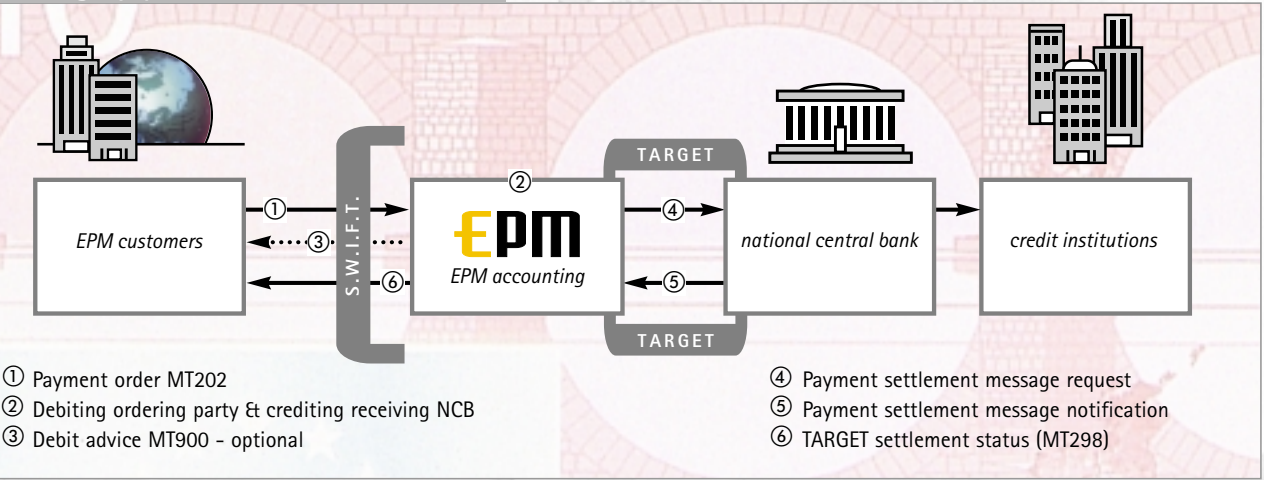
their payment orders in a predefined file format, and can receive information on the status of their account(s) and transactions in a similar way.

d Payment cycles

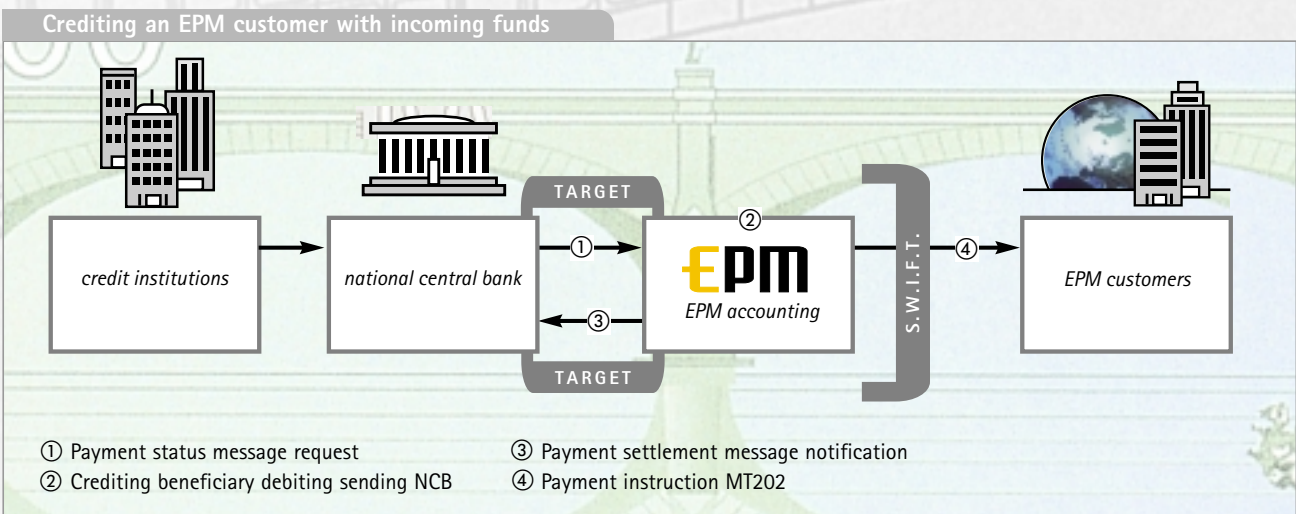
- 1) Instructions from EPM customers to make outgoing payments
 - The EPM customer sends a correctly formatted S.W.I.F.T. message to the EPM.
 - The EPM checks the validity of the payment order.
 - The EPM checks the account balance. If either sufficient funds or overdraft facilities are available to cover the amount of the payment to be processed, then the amount is debited from the ordering customer's account and a debit advice (MT900, optionally) is returned to the customer via S.W.I.F.T.
 - If the beneficiary of the payment order is another EPM customer, the payment instruction is processed and a credit confirmation is forwarded via S.W.I.F.T. to the beneficiary customer.

- If this is not the case, and the payment order contains a valid TARGET BIC of an EU national central bank (NCB), the payment is forwarded automatically through TARGET. Once the payment has been executed (i.e. the receiving NCB has credited the receiving credit institution), a confirmation is also sent to the ordering customer. This confirmation assures the ordering institution, only a few minutes after the payment has been debited on its account, that the next credit institution in the payment chain has received the funds on its central bank account.
- However, a payment instruction may not lead to the successful crediting of the beneficiary account in TARGET, e.g. if the credit institution specified in the instruction is not addressable via TARGET or, possibly, not addressable via the NCB indicated. In this case, the EPM customer account is re-credited (a credit confirmation will also follow) and the customer is informed of the reasons for the payment being unsuccessful.

Settling a payment from an EPM customer



The ECB payment mechanism



2) Incoming funds for an EPM customer

- EPM customers are able to receive incoming euro payments on their account via TARGET. To do so, the customer needs to be identified by its BIC code (which should appear in the first of the fields 56, 57 or 58 of the payment instruction).
- Customers may also receive payments from another EPM customer.
- When funds are received, the customer account is credited and a payment instruction (full MT202 information) is forwarded, via S.W.I.F.T., to the customer in real time. Upon request, the customer can receive a credit confirmation (MT910), provided that it is the final beneficiary of the payment.

e Reporting and status notifications

The EPM provides its customers connected via S.W.I.F.T. with a number of real-time enquiry and control facilities, enabling account holders to monitor the status of their payments, together with their overall treasury

position. Customers have real-time read access to their balances, that is to say to all payments settled on their accounts. They even have modification rights on the status of the payments they have requested, but which are still not settled (e.g. owing to a lack of funds).

These control facilities include:

- **Commands:** the account holder is able to change the priority of a queued payment or cancel an instruction.
- **Enquiries:** customers may enquire about specific details of an inward or outward payment, access summarised (or detailed) information on all outstanding operations on their accounts and even request account balances at any time.
- **Notifications:** whenever an outward payment is debited on its account, the customer can receive a debit advice. The same applies to inward payments, when a credit advice is sent. Owing to incorrect formatting, the EPM might reject payment instructions from its

customers, in which case a specific message is sent for information (payment rejection message). Finally, for the notification of settlement through TARGET, for each outward TARGET payment, the customer receives a confirmation of settlement on the receiving side (beneficiary institution account credited). If, for some reason, the payment is not settled on the receiving side, the notification will state the reason for the default.

- **Reports:** besides the normal end-of-day statement (including the start-of-day balance, transactions performed during the day and closing balance), customers may ask the EPM to send balance or interim transaction reports at any time during the day. Together, these enquiry and control facilities provide extremely valuable and accurate information on the status of customer accounts and payments, especially compared with the information supplied via traditional correspondent banking channels.

f Additional features

Payment instructions may be submitted to the EPM for settlement up to six business days before the indicated value date. These payments will be warehoused and processed only on the requested value date.

Depending on the configuration of the account, the EPM may queue payments for which insufficient funds are available on the indicated value date.

There is no requirement for a minimum balance on the EPM's accounts and overnight credit balances may, in some special cases, be remunerated.

Although our focus is on euro payments, we should be pleased to consider any requests from our customers for additional services. As our range of services develops over time, we shall inform our customers of any changes. The ECB is a relatively new organisation. As a result, our current range of services and facilities may be considered to be limited. However, by offering a highly professional service with regard to our core functionalities, we have successfully been able to serve our limited, but very specialised, customer base since the start of live operations on 4 January 1999.

How to become an EPM customer

► The TARGET and Payment Processing Division will be pleased to provide you with more detailed information and answer any questions you may have in relation to opening and operating an account with the EPM. One of the best ways of doing this is to talk directly to the EPM Helpdesk. We could also supply you with more detailed information to meet your specific needs.

► The EPM Helpdesk is available on TARGET business days from 7 a.m. to 7 p.m. (C.E.T.). Experienced staff will be able to assist EPM customers and to intervene where needed.

► The EPM customer relationship is governed by two legal documents: the EPM Terms and Conditions (which govern all customer accounts in the EPM) and the Customer Agreement (which covers the details specific to an individual account). The first includes more general information, such as the Customer Business Specifications and the Pricing Rules. The Customer Agreement, on the other hand, includes more specific information, such as the expected account operations (average number of payments per day, average value of daily payments, peak expectations in terms of volume and value), as well as any special requirements for the account.

We are, of course, willing to meet our future customers or, if the distance is a problem, we should be pleased to communicate using any of the following channels:

Telephone: + 49 69 1344 6444
E-mail: EPM.Helpdesk@ecb.int
Fax: + 49 69 1344 7498
ECB's website: <http://www.ecb.int>

EPM.Helpdesk@ecb.int

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