

**Payment, clearing and
settlement systems in
Belgium**

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List of abbreviations

ACH	Automated Clearing House
BCC	Bank Card Company
CBFA	Banking, Finance and Insurance Commission – Commission bancaire, financière et des Assurances (CBFA) / Commissie voor het Bank, Financie- en Assurantiewezen (CBFA)
CEC	Centre for Exchange and Clearing – Centre d’Echange et de Compensation (CEC) / Uitwisselingscentrum en Verrekening (UCV)
CVH – TCE – CPCB	Centralised processing of commercial bills – Centrale Verwerking Handelspapier / Traitement Centralisé d’Effets de Commerce
FSMA	Financial Services and Markets Authority – formerly CBFA
ICSD	International Central Securities Depository
NBB	National Bank of Belgium – Banque Nationale de Belgique (BNB) / Nationale Bank van België (NBB)
POS	Point of sale
PPS	Protected payment system
SCT	SEPA Credit Transfer
SDD	SEPA Direct Debit
SEPA	Single Euro Payments Area
TARGET2-BE	The TARGET2 component system of the National Bank of Belgium

Introduction

A number of payment and securities settlement systems are located in Belgium. The National Bank of Belgium (NBB) is involved in the provision of payment and settlement services; ie it manages the interbank settlement systems Centre for Exchange and Clearing (CEC) and TARGET2-BE (the national RTGS system for large-value payments (formerly ELLIPS)).¹ The NBB also operates the NBB-SSS for dematerialised government and corporate bonds.

The NBB oversees, or takes part in, international cooperative oversight arrangements for the following systems:

- SWIFT;
- the securities settlement systems Euroclear Bank, Euroclear SA/NV, Euroclear Belgium, and NBB-SSS;
- the central counterparty LCH.Clearnet;
- the card payment schemes Atos Worldline and Mastercard Europe; and
- the payment systems CEC, TARGET2, and CLS.

Since 1 April 2011, the NBB has been responsible for the prudential supervision of Euroclear Bank, Euroclear SA/NV, and payment institutions (including providers of mobile payments and Atos Wordline).

Payment and securities settlement systems, payment service providers or payment instruments are governed mainly by specific legislation or regulations, most of which implement EU directives.

Following on from the widespread use of credit transfers, direct debits and card payments, internet banking and mobile payments are becoming increasingly popular, as are new electronic payments methods, such as electronic bill presentation and payment. E-invoicing, or the electronic exchange of invoices between businesses and their customers, is also helping to drive the development of electronic payments.

Belgian bank customers have been able to use the Single Euro Payments Area (SEPA) Direct Debit instrument since November 2009, and they also have access to the SEPA Cards Framework. The SEPA instruments allow customers to use standardised payment instruments for payments throughout the SEPA area, making international payments as efficient and easy as domestic ones.

Three different securities settlement systems are established in Belgium: NBB-SSS (for government and corporate bonds), Euroclear Belgium (formerly CIK, see the descriptive Red Book chapter on the euro area) and the ICSD Euroclear Bank (see the descriptive Red Book chapter on the euro area). Euroclear Bank and Euroclear Belgium are part of the Euroclear Group that also includes the CSDs of France (Euroclear France), the Netherlands (Euroclear Nederland), the UK (Euroclear UK & Ireland), Sweden (Euroclear Sweden) and Finland (Euroclear Finland). Following the restructuring of the Euroclear Group in 2005, Euroclear SA/NV, a financial holding company established in Belgium, has become the parent company of the Euroclear Group (I)CSDs providing common services to the group entities. In 2009, the ESES platform was launched integrating the settlement activity of the securities settlement systems of Euroclear Belgium, Euroclear France and Euroclear Nederland (see the descriptive Red Book chapter on the euro area).

¹ ELLIPS was replaced by the Belgian component of TARGET2 in February 2008.

1. Institutional aspects

1.1 The general institutional framework

Oversight / regulatory / supervisory bodies in the field of payment, clearing and settlement

The NBB is responsible for the oversight of payment and securities settlement systems pursuant to Article 8 of the Organic Law of 1998 that established the NBB as a member of the ESCB.

Since 1 April 2011, the NBB has also been the prudential supervisor of electronic money institutions, settlement institutions (organismes de liquidation / vereffeninginstellingen), clearing institutions (organismes de compensation / verrekeningsinstellingen) and of payment institutions pursuant to the new Articles 12*bis* and 36 Section 2 of the NBB Organic Law.

The FSMA is the market authority for settlement and clearing institutions and is responsible for monitoring and approving their operating rules.

Legal framework of payment and settlement infrastructures

Payment and securities settlement systems, payment service providers or payment instruments are governed mainly by specific legislation or regulations, which are often implementations of EU directives. The following legislation is generally applicable to payment and settlement infrastructures and payment service providers:

- The Law on the legal status and supervision of credit institutions (22 March 1993), which aims to protect the savings of the public and to safeguard the smooth functioning of the credit system by laying down rules for the establishment and the operation of the credit institutions as well as for the supervision of the latter. Furthermore, the Law on the legal status and supervision of credit institutions contains a chapter on netting between most financial institutions. The law seeks to guarantee the legal certainty of offsetting agreements for debts between two or more credit institutions, where one of these institutions is involved in bankruptcy or in any other case involving concurrent claims governed by Belgian law.
- Explicit recognition is given, through Article 157 of the Law on the legal status and supervision of credit institutions, to the legal validity of bilateral or multilateral offsetting agreements for claims between credit institutions themselves and between credit institutions and a clearing house, as well as to “close-out” agreements (express termination clauses in the event of bankruptcy or other default situations). These agreements are legally binding and enforceable against third parties (including a liquidator), subject to the conditions defined in this provision. In particular, it is clear that the claims to be offset no longer need to be related.
- The Law on the legal status and supervision of credit institutions (22 March 1993) also contains provisions related to electronic money and the prudential supervision of electronic money institutions. These provisions will remain in force until the new Electronic Money Directive 2009/110/CE is transposed into Belgian law in the course of 2011. The provisions of this new directive will be inserted into a new chapter in Belgian law that regulates the prudential supervision of payment institutions.
- The law relating to the supervision of payment institutions, to the access to the activity of payment service provider and to the access to payment systems (21 December 2009). This law transposes mainly Title II (prudential supervision of payment institutions) of the Payments Services Directive (PSD) into Belgian law.

- The Law on the settlement finality of payments (law on “settlement finality”, 28 April 1999) which implements Directive 98/26/EC and protects the finality of transfer orders and of netting in payment and securities settlement systems. Moreover, Article 9 of this law goes beyond the directive in stating that cash settlement accounts held with an operator or a settlement agent of a securities settlement system may not be blocked by a participant (other than the operator or the settlement agent of the system), a counterparty or a third party.
- Article 8 of the Organic Law of the NBB (22 February 1998), which entrusts the NBB with supervisory powers over clearing, payment and securities settlement systems (see Section 1.2).

The following legislation applies to securities settlement systems:

- (i) The various statutes constituting the Belgian securities legal regime, ie the Laws of 2 January 1991 and 22 July 1991 and Articles 468 and following of the Belgian Company Code for dematerialised securities and the coordinated Royal Decree no 62 for fungible securities. These legislations contain essential provisions ensuring asset protection and access to the securities in case of insolvency of the intermediary (revindication rights).
- (ii) Article 9 of the Law of 28 April 1999 on settlement finality, Article 10 and 12bis of the Law of 2 January 1991, Article 11 of the co-ordinated Royal Decree no 62 and Article 472 of the Belgian Company Code provide for the prohibition of upper tier attachment.
- (iii) The legislation contains a specific prohibition against the use by depositaries of their customers’ assets for own-account transactions (Article 5 of the Law of 2 January 1991 and Article 148 Section 3 of the Law of 6 April 1995) and Article 77 of the Law of 6 April 1995 imposes segregation and identification requirements on credit institutions and stock brokers (beursvennootschappen / sociétés de bourse) established in Belgium.

Regarding payment systems and payment instruments and services, the following legislation is also relevant:

The Law of 10 December 2009 relating to payment services, which transposes Titles I, III, IV and V of the EU Payment Services Directive into Belgian law. This law contains provisions concerning payment services carried out in Belgium (transparency of conditions and information requirements, rights and obligations of payment service providers and payment service users in relation to payment services). The Law of 22 December 2009 modifying the Law of 2 August 2002 also contains provisions relating to infringements to the law on payment services.

The Law of 21 December 2009 also contains rules relating to:

- the types of entity that may provide payment services in Belgium (Article 5, which transposes Article 1 of the PSD);
- access to payment systems in Belgium (Article 49, which transposes Article 28 of the PSD). Most payment instruments used in Belgium are regulated by the provisions of the Law of 10 December 2009 on payment services. Some payment instruments outside its scope are regulated by a specific law (see for example the Law on cheques of 1 March 1961);
- Regulation 924/2009 on cross-border payments in the European Community – which obliges payment service providers to charge the same price for cross-border payments in euros up to EUR 50,000 as for corresponding euro-denominated national payments; and
- Regulation 1781/2006 on information on the payer accompanying transfers of funds.

In addition to this legislation, relations between payment service providers, consumers and retailers are governed mainly by contractual agreements.

1.2 The role of the central bank

1.2.1 Provision of payment and settlement services

The NBB is closely involved in the Belgian interbank clearing mechanisms: it runs and manages the CEC (an ACH for retail payments) and TARGET2-BE (the Belgian component of the TARGET2 RTGS system). Furthermore, the NBB also operates the NBB-SSS for dematerialised government and corporate bonds.

1.2.2 Oversight

In accordance with Article 8 of its Organic Law of February 1998, the NBB is in charge of the oversight that ensures the efficient and sound operation of clearing and payment systems. Article 23 Section 3 of the Law of 2 August 2002 reaffirms the legal basis for NBB's oversight of securities settlement systems.

The NBB oversees or takes part in international cooperative oversight arrangements for the following systems:

- the securities settlement systems (and associated institutions): Euroclear Bank, Euroclear SA/NV, Euroclear Belgium, NBB-SSS;
- CCP: LCH.Clearnet SA;
- card payment schemes: Atos Worldline, Mastercard Europe; and
- payment systems: CEC, TARGET2 and CLS.

For SWIFT a cooperative oversight arrangement exists among the central bank overseers of the G10 and the ECB in which the NBB acts as leading overseer of SWIFT (see the descriptive Red Book chapter on international payment arrangements).

1.2.3 Supervision

With effect from 1 April 2011, the NBB is responsible for prudential supervision of credit institutions, including electronic money institutions, investment firms with the status of stock market investment firms, insurance companies, reinsurance companies, mutual guarantee companies, clearing agencies, settlement agencies and agencies similar to settlement agencies and payment institutions. The new Financial Services and Markets Authority (FSMA), formerly the Belgian Banking Finance and Insurance Commission (CBFA), has responsibility for financial market supervision and consumer protection. This "Twin Peaks" model was established by the Belgian Law of 2 July 2010.

The NBB is also responsible for the prudential supervision of Euroclear Bank, Euroclear SA/NV and payment institutions (including providers of mobile payments and Atos Wordline).

1.3 The role of other private and public sector bodies

Other private and public sector bodies in the field of payment and securities systems are:

- The new Financial Services and Markets Authority (FSMA), formerly the Belgian Banking Finance and Insurance Commission (CBFA) which has responsibility for financial market supervision and consumer protection. As of 1 May 2012, the FSMA took over the responsibilities of the Securities Regulation Fund (SRF) for the supervision of account administration for dematerialised public debt securities.

- The Belgian Bankers' Association, Febelfin. A professional organisation that aims to promote its members' professional interests, mainly through economic research, financial, legal and technical advice, and training.
- ISABEL, a provider of financial infrastructure solutions and services for consumers, businesses and banks. ISABEL was established by a consortium of banks to develop a secure electronic network for banking transactions that also allows business users to send and receive invoices and submit documents to government departments.
- Atos Worldline, a company which operates, inter alia, the national ATMs, the POS network, and the electronic purse scheme PROTON.
- The Brand and Licensing Company (BLC), which owns and operates the Belgian Bancontact/MisterCash scheme.

2. Payment media used by non-banks

2.1 Cash payments

Cash comprises banknotes in denominations of EUR 5, 10, 20, 50, 100, 200, 500 and coins in denominations of EUR 0.01, 0.02, 0.05, 0.10, 0.20, 0.50, 1 and 2. Data on banknote and coin issue outstanding are only available for the euro area in aggregate.

The issue of coins is legally restricted to EUR 1.4 billion (in 2010). Coins are legal tender only up to a specified maximum, which varies for each denomination.

2.2 Non-cash payments

Deposit money comprises sight deposits held by non-financial economic agents with financial intermediaries legally entitled to receive such deposits (credit institutions and the Post).

There is no statutory definition of current accounts. According to the regulation governing the monthly financial data that banks submit to the NBB, current accounts are those on which deposited money can be immediately withdrawn.

Royal Decree no 56 of 10 November 1967 obliges businesses to hold an account to which credit transfers can be made by their customers. These are generally current accounts.

To conform with European legislation, Directive 2007/64/CE (the Payment Services Directive) has been transposed into Belgian law. Thus, the execution times for retail payments in Belgium now follow the European harmonised rules.

2.2.1 Non-cash payment instruments

2.2.1.1 Credit transfers

Credit transfers are a widely used payment instrument and account for about 40% of all retail payments (as of 2009). Customers making a payment instruct their banks either on paper – submitted or posted to a branch – or via an electronic channel (such as self-service banking, telephone and internet banking, magnetic or digital media).

A significant development can be seen in the growing popularity of self-service banking, internet banking, and home banking products and channels. More and more firms are sending their payment orders to banks via electronic channels. The 2009 data show that customers sent about 90% of all credit transfer instructions to banks in paperless form.

2.2.1.2 Direct debits

The Belgian direct debit scheme was set up in 1980. Its purpose, like that of standing orders, is to simplify the execution of regular payments. Direct debits are used mainly to pay utility bills, and account for about 12% of all retail payments (as of 2009).

A direct debit payment arrangement is based on a contract (the mandate) by which payers (i) authorise the payee to initiate the collection and (ii) instruct their payment service provider to debit their accounts for specified claims. From November 2009, the SEPA Direct Debit scheme has been available to all users. Creditors are responsible for migrating from the legacy Belgian system to the SEPA Direct Debit scheme. The SEPA Business-to-Business Direct Debit scheme appears to be reasonably popular, but the migration towards the Core scheme – in which the debited party is a consumer – has been slow (as of early 2012).

2.2.1.3 Cheques

The use of cheques issued by individual credit institutions and postal cheques has been falling by an annual average of 10% since 1995. Cheque payments currently account for less than 1% of total retail payments. This reflects the increasing use of debit and credit cards. Furthermore, the phasing out of the eurocheque and its guarantee at the end of 2001 has accelerated the decline in cheque usage. Most banks no longer provide their clients with chequebooks.

2.2.1.4 Payment cards

Payment cards are the most commonly used means of payment in Belgium. As of 2009, payment cards account for about 44% of all retail payments.

Debit cards

Debit cards, issued by the credit institutions under their own logo together with that of the Bancontact/Mister Cash scheme, can be used at ATM and POS terminals. The debit card function is generally combined with an e-money facility. Such hybrid cards have both an EMV chip and a magnetic stripe (the latter mainly to support the Maestro function in non-EMV countries). The EMV chip supports the use of a PIN for POS payments, cash withdrawals at ATMs, loading an e-purse and other transactions that depend on a PIN code. It is also used for offline operations (eg e-money payments).

Atos Worldline is the major card acquirer in Belgium (next to Europabank and Citibank). Categorised as a payment institution, it manages the ATM-POS network and monitors bank-issued cards and PIN mailer production for the bank cards of most card-issuing banks. Atos Worldline participates indirectly in the ACH CEC (see Section 3.3) and exchanges all ATM and POS operations to be cleared in this system.

Payment procedures are automated in most cases. At the point of sale, authorisation takes place online and details of the transaction are immediately recorded by the issuing bank's computer system.

Debit card users pay an annual fee, which is generally included in the overall charge for current account and other banking services. A small minority of retail outlets charge for POS transactions.

Over the last few years, the use of debit cards has gradually become internationalised. Holders of Atos Worldline cards also have access to ATMs and POS terminals in most European countries, as most debit cards are co-branded with an international scheme such as Maestro or VPay.

Delayed debit cards/credit cards

Delayed debit cards and credit cards (American Express, Diners Club, Mastercard and Visa) are widely accepted in Belgium, where Mastercard holds the largest market share.

Atos Worldline distributes the majority of Visa and Mastercard cards and operates transaction authorisation and processing for these cards.

The liability provisions in case of the loss or theft of a payment card are set out in the Law of 10 December 2009, which transposes Directive 2007/64 into Belgian law.

2.2.1.5 Electronic money

There is no software-based electronic money in Belgium. A multipurpose prepaid card scheme, PROTON, was launched by Atos Worldline in February 1995.

PROTON is a smart card that stores e-money as opposed to tokens or units of service (as a phone card does). It is designed for low-value amounts as a substitute for cash (and small-value cheques) and is typically used to make payments of less than EUR 13 at local retail outlets, vending machines, car parks, ticket machines, payphones and on public transport. It can be loaded with amounts ranging from EUR 5 to EUR 125. Card-to-card payments are not possible.

PROTON is a euro-only system. Card loading and balance enquiries are PIN-protected. The cards can be reloaded at ATMs or at public telephone booths. A smart phone that allows users to reload their cards at home and use them to make payments over the telephone has also been available since the end of 1997.

During a transaction, money is transferred from the PROTON card to the retailer's offline terminal or vending machine. As only small amounts are involved, and for the sake of speed and convenience, these payments are made without PIN protection. The retailer can transfer the money to its bank account simply by making a transfer from its terminal. Cardholders can check the balance on their PROTON card at an ATM, public telephone booth, retailer's terminal or by means of a small personal card reader.

Electronic purses are issued only by credit institutions. Each institution sets the fees (if any) it charges to cardholders. Using or loading the cards must remain free of charge. Atos Worldline is responsible for the tariff policy applied to the retailers. The retailers have to pay a percentage of the amount stored in their terminals plus a fixed fee (depending on the contract) per collection. Although the PROTON technology has been adopted by a number of other countries, its popularity is gradually waning in Belgium, with transaction volumes roughly halving between 2004 and 2009. Meanwhile, banks and mobile phone operators are seeking a replacement for the technology.

Single purpose cards

Some large retailers (petrol companies, retail stores etc) issue single purpose cards for exclusive use in their own outlets or networks. In some cases, however, these transactions are processed via the Atos Worldline network.

2.2.1.6 Postal instruments

Offered by the Belgian Post, the Inpayment transfer is a hybrid payment instrument that allows a payment to be made to any holder of a (bank or postal) current account on the basis of cash paid in at any post office counter. The service allows customers without current accounts to make payments to account holders.

The Post issues a special category of cheque, known as the postal draft. This is a payment order, sent by post, that the recipient can cash in at a post office. This instrument enables a payment to be made to payees who have no current account or whose current account number is unknown to the payer. The draft is drawn on a postal current account. Government

agencies used to make extensive use of the postal draft system to pay social security benefits (eg pensions, family allowances), but such drafts are now gradually being replaced by ordinary credit transfers.

2.2.1.7 *Commercial bills*

Since the end of 1997 the system for the Centralised Processing of Commercial Bills (CPCB), operated and managed by the NBB, has eliminated the physical circulation of commercial bills between banks, replacing it with an automated exchange of data through the CEC retail payment system. To this end, the CPCB system automatically centralises, retains and presents all commercial bills domiciled at financial institutions for cash processing. In the case of non-payment, the CPCB system acts as the authorised central depository for protested bills. It is responsible for publishing a monthly list of protested bills that is sent each month to the registries of the Trade Tribunals. The CPCB system also ensures the distribution to third parties of information concerning published protests.

The use of commercial bills and similar instruments is generally on the decline. Indeed, volumes have fallen so far in recent years that the NBB discontinued centralised processing of commercial bills in September 2011. Commercial bills are now exchanged and settled according to bilateral agreements.

2.2.1.8 *Other payment instruments*

Other payment instruments used in Belgium include:

- Lunch Pass, Eco Pass, Cadeau Pass:

These are vouchers issued by companies such as the catering firms Sodexo and Edenred to companies that distribute them to employees as part of their remuneration. Lunch Passes may only be used for the payment of a restaurant bill or for the purchase of food products. Eco Passes are designed to promote the purchase of ecologically sound consumer products, while Cadeau Passes are often handed out on special occasions such as Christmas or New Year. Some new players in this market have plans to launch luncheon vouchers in electronic form.

- Service Passes:

These passes are issued by Sodexo as part of a campaign by the public authorities to clamp down on the unofficial economy. Users can claim a tax benefit when using this instrument to pay for domestic help, cleaning services etc.

2.2.2 ***Non-cash payment terminals***

POS network

Atos Worldline manages the POS network and online terminals for the card-issuing credit institutions that comprise its shareholders. Transactions via these terminals are protected by chip-based cards and PIN codes.

Each transaction initiates a series of real-time checks, as follows:

- blacklist of card reported stolen etc;
- balance on the current account, either on the basis of the balance at the previous day's close, taking into account the total of the operations effected on that day by means of the card, or on the basis of the actual balance (depending on the card holder's institution); and
- upper limit of daily and weekly transactions caps (mostly set by the customers themselves).

The online authorisation procedure is designed to prevent fraud and unauthorised overdrafts.

POS terminals at petrol stations and large retail outlets are linked via leased lines to the network's computer centres, while those installed at small retail outlets and in other sectors are linked in via ordinary telephone lines.

The interbank network can be accessed not only with bank debit cards but also with credit cards and a range of proprietary cards issued mainly by petrol companies for use only at their petrol stations. These companies make use of the interbank network infrastructure, but offer additional inducements such as discounts, the possibility of using the card abroad etc. These services are aimed at vehicle fleet operators.

ATM networks

Atos Worldline manages the ATM network and terminals online on behalf of the card-issuing credit institutions. ATMs are used mainly for cash withdrawals and are accessed with chip cards and PIN codes.

ATMs allow cash withdrawals, current account balance enquiries, PIN code changes and the loading of PROTON cards. Each transaction initiates various real-time security checks (see the section on POS network above).

In early 2006, the major credit institutions agreed to allow their ATMs to be used by customers of other banks, thus broadening the range of ATMs available to the typical bank customer. Typically, these ATMs provide a cash withdrawal service for all card holders, but other types of transaction, such as initiating credit transfers, transfers from current accounts to savings accounts, printing account statements etc, may be restricted to customers of the bank that operates the ATM.

2.3 Recent developments

2.3.1 Internet

Telephone and, in particular, internet banking are becoming increasingly popular. All banks offer internet banking services that allow users to initiate credit transfers, standing orders and balance enquiries, as well as manage their investments.

Online payments, authenticated by a regular debit or credit card in combination with the authorisation checks of an internet banking application, are becoming widespread. Various new projects are under way in this field with some major developments expected in the next few years.

2.3.2 Standardisation of payment instruments

Efforts continue to standardise payment instruments for automated processing. Under way since 2008, the SEPA project has paved the way for Europe-wide standardisation of payment instruments, including credit transfers, direct debits and card payments. The NBB participates in several related working groups set up by the Belgian Bankers' Association.

Payment methods which still rely on the actual presentation of instruments (as in most types of cheque transaction) are being progressively replaced by automated methods (eg based on scanned documents and automated settlement). The Belgian banking community, in cooperation with the NBB, is one of the European front-runners in the migration towards the SEPA standards.

2.3.3 Security of e-payments

Atos Worldline already offers the option of paying with a card via the internet by means of a plug-in terminal for personal computers (see Section 2.2.1). Working in close cooperation with the credit card companies, Atos Worldline accepts several different types of hardware

for the authentication of online transactions and is now working on an application which will allow end-to-end secure electronic transactions (SETs) from the customer to the supplier via the Atos Worldline infrastructure. This technology is known as 3-D Secure (Visa) or SecureCode (Mastercard).

2.3.4 Development of e-invoicing

ISABEL, a provider of financial infrastructure solutions and services for consumers, businesses and banks, has rolled out the Zoomit e-invoicing tool, by which creditors can send electronic invoices directly to their customers' PC-banking applications. The payment data are then automatically compiled, so that the payer only has to approve the payment.

Zoomit electronic invoices can be received by most Belgian banks, and a growing number of creditors are relying on this paperless invoicing channel. The payer receives an e-mail notification, from which the payment of the invoice can be easily authorised. Payment security is assured by the authorisation system of the payer's internet banking application.

2.3.5 e-SEPA

The Belgian banking community is following market developments in the field of e-SEPA, which will be based on European standards and will further automate payment processes.

2.3.6 Mobile phones as payment devices

New services such as m-banxafe (offered by Atos Worldline) link the payment card to a mobile phone, thus allowing users to reload prepaid cards for mobile phones, check account balances and generate payments.

Belgacom, Belgium's largest telecom company, offers the PingPing system for mobile payments, which can be used for small payments (of up to EUR 25) as well as for payments via SMS message (which are used mainly to pay for parking and public transport).

At the beginning of 2011, the Belgian banking community and the three mobile phone operators active in the country announced that they would work together on a new standardised mobile payment solution.

3. Interbank exchange and settlements systems

3.1 General overview

Two domestic interbank payment systems are operated by the central bank in Belgium: TARGET2-BE and the CEC. TARGET2-BE is the Belgian RTGS system component of TARGET2 designed to process large-value credit transfers. The CEC is the Belgian ACH for retail payments, handling both credit and debit orders.

These systems are the pillars of the interbank payments system in Belgium. Together they process more than 99.5% of interbank payments (99.4% of total value). Both systems operate solely in euros.

3.2 The RTGS system: TARGET2-BE (see the descriptive Red Book chapter on the euro area)

3.2.1 Belgian migration to TARGET2

On 18 February 2008, the Belgian banking community switched to the TARGET2 single shared platform. As a result, the former Belgian real-time gross settlement system, ELLIPS, was shut down on 15 February 2008.

In addition to the mandatory payments module, TARGET2-BE also provides access to the optional reserve management module and standing facilities module.

3.2.2 Participation in the system

The National Bank of Belgium is the operator of TARGET2-BE and has a contractual relationship with the banks that participate directly in TARGET2 and thus remains their counterparty in all matters concerning TARGET2.

The NBB provides a TARGET2-BE helpdesk and a secured website for the TARGET2 user community. A Belgian user group meets regularly to discuss TARGET2 topics and developments.

3.2.3 Ancillary systems settling through TARGET2-BE

The following ancillary systems are linked to the NBB and TARGET2-BE for settlement services: Euroclear Belgium, NBB-SSS (see Chapter 4), OVP (“Openbare Verkoop-Vente Publique” for physical securities on Euronext) and the retail payment system CEC (see Chapter 3.3).

3.3 The retail payment system: CEC

3.3.1 Operating rules

The CEC is a non-profit-making organisation set up in 1974 by the banking sector. Its members are the major banks located in Belgium, and the Post. At board level, NBB acts as a neutral chair without voting power but the central bank has a right of veto if the board were to consider taking a decision that would be prejudicial to NBB’s interests or public duties. Under a contractual regime, NBB is responsible for the day-to-day management of the CEC’s operations.

3.3.2 Participation in the system

According to the CEC’s statutes, all credit institutions and payment institutions legally entitled to operate in Belgium as well as the Post and the NBB may make use of the CEC’s services. Payment institutions may only participate as indirect participants, through another participant. Direct participants must fulfil set operational, technical and legal criteria.

All large and medium-sized banks active in Belgium participate directly in the CEC, while smaller and niche banks are connected indirectly via a direct participant.

3.3.3 Types of transaction handled

The CEC is used for retail payments. Its operations are categorised into credit transfers (of up to EUR 500,000); direct debits; ATM/POS transactions; operations related to e-money; and truncated cheques for up to EUR 50,000 and bills of exchange. Scanned images of large-value cheques (of EUR 50,000–25 million) are sent over an electronic data exchange platform run by an independent service provider.

3.3.4 Daily operation of the system

The exchange of payments is continuous, 24 hours a day, except for 15 minutes at the daily clearing session (15:00–15:15) when the system establishes the netted end-of-day positions for all participants and does not send out bulk payment messages (although participants can continue sending payments to the system during this period).

The system operates non-stop from Monday 00:00 until Friday 20:00. On Saturdays and some bank holidays the system is open from 09:00 until 17:00. These opening hours allow card operators to send in POS- and ATM-related transactions immediately instead of queuing them until Monday morning.

Cut-off times differ per payment instrument and are spread over the day. The timetable is as follows:

CEC time schedule for settlement on T+0	
Operations	Cut-off times
Direct debits and unpaid direct debits	10:30
Credit transfers	13:30
Bills of exchange	13:30
Cheques and unpaid cheques	14:15
Higher-value ¹ or urgent and SEPA credit transfers	15:00
Daily cut-off	15:15

¹ Value between EUR 125,000 and EUR 500,000

At the daily cut-off, clearing is performed in the system and multilateral net settlement positions are sent to the TARGET2 single shared platform.

This means, for example, that credit transfers exchanged from 13:30 on day T until 13:30 on day T+1 are settled at 15:00 on day T+1. Credit transfers exchanged from 13:30 on day T–1 until 13:30 on day T are settled at 15:00 on day T. The settlement of the data exchanged after these deadlines takes place on the next value date.

There is no exchange of paper payment documents as these are retained by the institution that receives them from the customer. Participants receive real-time electronic updates on their settlement positions throughout the day.

Data are transferred electronically to the CEC. In case of serious technical problems or disconnection, participants can move to NBB premises to continue operations using a standby user interface. Other contingency facilities exist both within NBB's head office and in an external backup centre, so that operations can be resumed within two hours even in a worst-case scenario.

3.3.5 Settlement procedures

CEC balances are settled on a net and multilateral basis. The amounts to be cleared are calculated for each member and settled on a settlement account on the TARGET2 shared single platform. This account can be either the member's own settlement account if the member is a TARGET2 settlement bank or the settlement account of another TARGET2 settlement bank. All exchanged payments are settled on the same day, provided they have been remitted before the cut-off time.

3.3.6 Pricing

The NBB operates the CEC on a full-cost recovery basis: all CEC operating costs are recovered from the members. The members share the costs of the CEC system on the basis of transaction volumes. Direct participants pay a joining fee of EUR 200,000 and indirect participants one of EUR 30,000.

4. Systems for post-trade processing, clearing and securities settlement

4.1 General overview

Several securities settlement systems are located in Belgium: (i) NBB-SSS for dematerialised government securities, commercial paper and certificates of deposit as well as dematerialised or fungible corporate bonds; (ii) Euroclear Belgium (formerly CIK), a member of the Euroclear group, for equities, corporate bonds and funds; and (iii) the international depository Euroclear Bank, operator of the Euroclear system (see the descriptive Red Book chapter on international payment agreements). On the clearing side, LCH.Clearnet SA also has a Belgian branch.

4.2 Central counterparties and clearing systems

BXS-Clearing, which used to clear transactions for Euronext Brussels, merged with the other clearing houses of the Euronext exchanges in January 2001 to become a branch of LCH.Clearnet SA. The NBB takes part in the regulatory colleges (CCC and JRA) set up for the coordinated regulation, supervision and oversight of the clearing activities of LCH.Clearnet SA that are related to the Euronext markets. This supervisory activity is coordinated by a permanent secretariat currently located at the Bank of France. It should be noted that the clearing rules require the prior approval of the Belgian Minister for Finance. (For more information about LCH.Clearnet SA, see the descriptive Red Book chapter on the euro area).

4.3 Securities settlement systems

General legal framework

Book-entry securities can be held in Belgium under two legal regimes: either full dematerialisation or fungibility, ie when bearer or registered securities still exist. Dematerialised securities are governed by the Laws of 2 January 1991 and 22 July 1991, Article 468 and following of the Belgian Companies Code and the coordinated Royal Decree no 62, whereas fungible securities are governed by the coordinated Royal Decree no 62.

The finality of settlement of securities transactions is clearly and effectively guaranteed in Belgium by Article 157 of the Law of 22 March 1993 and the Law of 28 April 1999 on settlement finality. Euroclear Bank, Euroclear Belgium (formerly CIK) and NBB-SSS are the SSS designated under the EU Settlement Finality Directive (98/26/EC of 19 May 1998) and the Law of 28 April 1999 implementing that directive.

The holding of customers' securities is protected under Belgian law against the insolvency of custodians and intermediaries by the following legislation:

- the law contains a specific prohibition against the use by depositaries of their customers' assets for own-account transactions (Article 5 of the Law of 2 January 1991 and Article 148 Section 3 of the Law of 6 April 1995).

- if a depository becomes insolvent, the customers can claim their securities against their insolvent depository (Article 8 of the Law of 2 January 1991, Articles 12–13 of the co-ordinated Royal Decree no 62, Article 471 of the Belgian Companies Code). The securities of customers do not form part of the insolvent depository's estate and the liquidator can not exercise claims on them. If the total amount of clients' securities are insufficient to meet the claims of all customers, the latter have recourse against the own securities of their insolvent depository, if it was holding securities for its own account. In doing so, they will have priority over the general bankrupt estate.
- if the depository is holding securities of a customer with another depository, either in its own name or in the name of a third party, the depositor/owner can revindicate those securities against the other depository (Article 9 of the Law of 2 January 1991, Article 13 of the co-ordinated Royal Decree no 62, Article 471 of the Belgian Companies Code).
- both the securities (and rights to such securities) and the cash accounts held in the books of SSS are immune against attachment (Article 9 of the Law of 28 April 1999 on settlement finality, Article 10 and 12bis of the Law of 2 January 1991 and Article 11 of the co-ordinated Royal Decree no 62, Article 472 of the Belgian Companies Code).
- Article 77 of the Law of 6 April 1995 imposes segregation and identification requirements on credit institutions and stockbrokers (beursvennootschappen/sociétés de bourse) established in Belgium. Also, these institutions should make sure that similar procedures are in place at the level of their intermediary in case of a sub-deposit of financial instruments (Article 66 of the Royal Decree of 3 June 2007 implementing the MIFID directive). The reason for this segregation is that it facilitates the above-mentioned revindications and the supervision of the custody activity. Foreign participants have to apply the asset protection rules of their home member state.

For all these reasons, customers' assets are adequately protected under Belgian law, particularly against the insolvency of custodians and intermediaries.

4.3.1 NBB-SSS

4.3.1.1 Institutional framework

NBB-SSS was created by the Law of 2 January 1991 on the market for government debt and monetary policy instruments. This legislation brought into being an active secondary market in government debt securities. Its product scope was extended by the Law of 22 July 1991 on commercial paper. NBB-SSS is the Central Securities Depository (CSD) for government securities and dematerialised fixed income securities in Belgium and enables the book-entry transfer of such securities between the system's participants. As to the corporate bonds referred to in Article 485 of the Companies Code, the National Bank, pursuant to the Royal Decree of 12 January 2006 (Art. 6), was designated, together with Euroclear Belgium (formerly CIK), as the settlement body.

Owners of securities held on account with the NBB-CSD/SSS have a co-ownership right to a notional pool of securities. According to the Law of 2 January 1991, the owners of dematerialised public debt securities and dematerialised commercial paper have a special right to recover the securities they own (right of revindication) in the case of insolvency of a participant or sub-participant of the NBB-SSS. The book-entry securities held on such a system do not form part of the estate of the depository and the liquidator cannot exercise claims on them.

The coordinated Royal Decree 62 and the Company Code provide owners of, respectively, fungible securities and dematerialised corporate bonds held on account with the NBB-SSS with a similar right. Such a right also exists in the hypothetical event of the insolvency of the NBB-SSS. Settlement finality in the NBB-SSS is clearly and effectively guaranteed by Belgian law. The NBB-SSS has been officially designated as a system under the Settlement Finality Law (see *General legal framework* above).

The Law of 6 August 1993, governing transactions on certain securities, introduces a specific tax system for fixed income securities deposited in a settlement system; it also makes the Treasury responsible for the collection and payment of the withholding tax due from certain beneficiaries of securities income.

As of 1 May 2012, the FSMA is responsible for the supervision of account administration for dematerialised public debt securities.

4.3.1.2 Participation

The NBB-SSS's direct participants (its only membership category) include credit institutions established in the EU, stockbroking firms established in the EU, the Treasury administration, the NBB, Clearstream Luxembourg, Euroclear Bank, and other CSDs and CCPs.

Each participant joining the system has different accounts for the securities held on its own account, those held on behalf of third parties and those pledged as collateral.

4.3.1.3 Types of transactions

The system enables the processing of transactions on both the primary and the secondary market (including buy/sell, repo and Euronext transactions). The total outstanding amount held on account comprises mainly securities issued by the Belgian government, such as *treasury certificates* (short-term securities), *linear bonds* (OLOs) and *strips*. It also comprises short- and long-term securities issued by other government bodies or by the private sector. For securities denominated in euros, the SSS ensures the payment of interest and the redemption of capital.

4.3.1.4 Operation of the system

The NBB-SSS operates on an *integrated model*, by which the NBB manages accounts for both securities and cash. NBB-SSS is linked to the SSP (single shared platform) of TARGET2 via the TARGET2 ASI (ancillary systems interface).

About 20 batches a day are run throughout the working hours. Each batch performs gross settlement of eligible transactions, meaning that each transaction results in the simultaneous settlement of one cash and one securities movement (on a DVP1 basis). In other words, the process checks the effective provision of cash (for the buyer) and of securities (for the seller) before settling the relevant transaction.

The batches are run between 08:00 and 16:30 for free-of-payment (FOP) and DVP transactions; additional batches may occur between 16:30 and 18:00, but only on a FOP basis and for collateral transactions involving one Eurosystem national central bank.

Each of these batches starts at a predetermined time with the aim of settling the selected transactions, provided there is sufficient cash and security provision. Those transactions not selected (owing to a lack of securities or cash or to other selection criteria) remain in the queue and are taken up again when the next batch is run.

The selection parameters for each successive batch are progressively widened through the day.

4.3.1.5 Risk management

When both notifications to a transaction have been entered into the system by the counterparties, and after registration of such notifications, they are subject to matching prior to settlement.

The bulk of the notifications, sent to the system via the SWIFT network, are automatically authenticated, subject to an exchange of SWIFT keys between the NBB and the participant involved.

Participants located in Belgium can also use a secured communications network (developed by the Belgian banking community) to send their orders to the settlement system. The NBB-SSS participants have also access to the WIROW interface, which allows them to monitor the status of their transactions among other information.

To reduce the risks arising from counterparty errors or omissions, the system regularly updates the status details of participants' notifications. Participants can verify the status of their notifications online and respond to any unmatched notifications.

NBB-SSS offers an automatic securities lending facility to its participants. The borrowed securities are covered by a pledge of securities taken by the system from the borrower's own holdings (on a fully collateralised basis). These loans are granted without the direct intervention of the lenders and borrowers. The automatic securities lending process is undertaken at the end of the last DVP settlement batch of the day, scheduled for completion at 16:30. The repayment procedure is also automated.

The system operates according to the pooling principle whereby a number of lenders make securities available to participants which need them to settle their planned transactions. This process is fully confidential, with the identity of the lenders not being revealed to the borrowers and vice versa. The automatic securities lending works in such a way as to guarantee fair distribution of the loans in the long run in terms of amounts offered by each potential lender.

4.3.1.6 Links to other systems

NBB-SSS has no outbound links to other systems.

4.3.1.7 Pricing

The fee structure includes a monthly flat-rate fee as well as a monthly custody fee per participant identification number in the system. There is also a fee per query launched in the WIROW application.

4.3.2 Euroclear Belgium

Euroclear Belgium (formerly CIK²) has merged with the French and Dutch CSDs to form the Euroclear Settlement of Euronext-zone Securities (ESES) system, launched in January 2009. Although Euroclear Belgium remains legally a separate SSS, its settlement activity is integrated within the ESES platform. For ESES, see the descriptive Red Book chapter on the euro area.

4.4 Use of securities infrastructure by the central bank

Generally speaking, the NBB makes use of the SSS located in Belgium for two main purposes: the holding and management of its own securities portfolio, and the management of the collateral provided by counterparties for monetary policy operations or to cover intraday credit facilities.

² Caisse Interprofessionnelle de Dépôts et de Virements de Titres SA / Interprofessionele Effectendeposito- en Girokas NV.