### The Bank's role in oversight and prudential supervision of financial market infrastructures, custodians, payment service providers and critical service providers

To give more insight into the systems and institutions providing payment, clearing, settlement, custody and other services, either from a wholesale or a retail market perspective, section 1.1 presents an overview of their structure and mutual interdependencies. Relevant processes and flows are explained in more detail in the subsequent parts of this report (i.e. chapters 2, 3 and 4). Meanwhile, section 1.2 explains the Bank's mandate and its role in the oversight and prudential supervision of this sector, from both a national and an international perspective.

## 1.1 Critical links in the functioning of financial markets and payment services

The systems and institutions covered in this report can be divided into three categories based on the type of services they provide: (1) securities clearing, settlement and custody, (2) payments, and (3) other financial infrastructure service providers. Through their activities or services for the financial industry, these systems and institutions are the critical links in the functioning of financial markets and payment services and of the real economy. When designed safely and managed properly, they can be instrumental in reducing systemic risks and contagion in the event of financial crises. At the same time, they are interlinked with other financial market infrastructures (FMIs), financial intermediaries and other actors such as merchants or retail customers. These interdependencies are briefly presented and illustrated in Figure 1.

#### Securities clearing, settlement and custody

Financial instruments are traded between buyers and sellers at an agreed price and contract terms. Trading in such instruments can take place either on-exchange (i.e. on a centralised platform designed to optimise the price discovery process and to concentrate market liquidity) or on an over-the-counter (OTC) basis (i.e. counterparties make bids and accept offers to conclude contracts directly among themselves). The final investor uses a custodian bank, which may rely on other intermediaries (e.g. brokers) to conduct trades. Exchanges such as Euronext Brussels are supervised by securities regulators and are not covered by this report.

FMIs and financial institutions that provide securities clearing, settlement and custody services are part of the post-trade securities landscape. The clearing of a trade via a central counterparty (CCP) generally means that the CCP becomes the buying counterparty for the seller and the selling counterparty for the buyer. Both original counterparties to the trade then have a claim on the CCP. The CCP's direct participants – usually banks or investment firms – are called clearing members. A clearing member may clear not only its own trades via the

CCP, but also those of its clients. There are no CCPs established in Belgium, but CCPs in other countries may be systemically important due to the clearing activities they provide for the Belgian securities market.

After clearing, the settlement of a trade entails a transfer of cash and/or a financial instrument between the parties on the books of a central securities depository (CSD). When a CCP has intervened to clear a trade, settlement takes place on the books of the CSD between the buyer and the CCP, and between the seller and the CCP. There are three CSDs established in Belgium: Euroclear Bank (an international CSD or ICSD), Euroclear Belgium and NBB-SSS. The settlement of the cash leg of a securities transaction takes place either through payment systems operated by central banks (i.e. central bank money, for example T2)¹ or on the books of an (I)CSD with banking status providing (multicurrency) cash accounts (i.e. commercial bank money, for example Euroclear Bank).

Financial institutions that facilitate their clients' access to securities investment markets are referred to as custodians. In that intermediary capacity, custodians can offer their clients safekeeping and settlement services. A local custodian primarily focuses on serving a single securities market. If a custodian has access to markets worldwide, it is considered a global custodian.

#### **Payments**

The payments landscape covers both wholesale payments (i.e. transactions between banks for institutional investors) and retail payments (i.e. transactions between retail customers) and includes payment systems, payment service providers (PSPs), such as payment institutions (Pls) and electronic money institutions (ELMls), processors for retail payment instruments and card payment schemes.

Payment systems encompass large-value payment systems (LVPS) and retail payment systems (RPS). While LVPS generally exchange payments of very large amounts, mainly between banks and other participants in the financial markets, RPS typically handle a large volume of payments of relatively low value by means of credit transfers and direct debits. In Belgium, most interbank payments are processed by T2, the LVPS connecting Belgian banks with other European banks, and by the Centre for Exchange and Clearing (CEC), the retail payment system for domestic payments.

The role of Pls and ELMls in the retail payments area is multi-faceted and growing. Pls and ELMls have long been active in the card payment business, issuing payment cards to users and/or acquiring the funds for payments on behalf of merchants. The revised Payment Services Directive (PSD2) has further strengthened the role of non-banks in the market since they are now allowed (under certain conditions) to make use of the banking industry's accounting ledger to access and consult online the accounts of users of payment services.

Payment cards remain the most widely used type of payment instrument in Belgium and typically involve a four-party system, i.e. the cardholder (the payer), the card issuer, the merchant and the acquirer. In such a transaction, the card of the purchaser (the cardholder) is issued by an institution (the card issuer), which has traditionally been a bank but can also be a PI or an ELMI. The acquirer is in charge of "acquiring" the transaction on behalf of the merchant (i.e. performing all steps necessary for the purchaser's money to be transferred to the merchant's account). The relevant rules and conditions according to which (credit or debit) card payments can take place are defined by card payment schemes. The Belgian domestic (debit) card payment scheme is Bancontact. Mastercard Europe (MCE), established in Belgium, is the European subsidiary of the Mastercard group, which operates the international (credit) card payment scheme.

For Bancontact, a scheme switch is in place, but a single processor provides the underlying network and services for the majority of card payments, namely equensWorldline SE. For Maestro, the processing network is

<sup>1</sup> On 20 March 2023, the new payments system T2 went live, replacing TARGET2. For more information, see https://www.ecb.europa.eu/press/pr/date/2023/html/ecb.pr230321~f5c7bddf6d.en.html.

provided directly by Mastercard. After processing, card payment transactions are sent to the CEC for clearing and settlement. Pls also play a major role in providing money remittance services (fund transfers), allowing retail customers to transfer funds from Belgium to parties in locations around the world and *vice versa*.

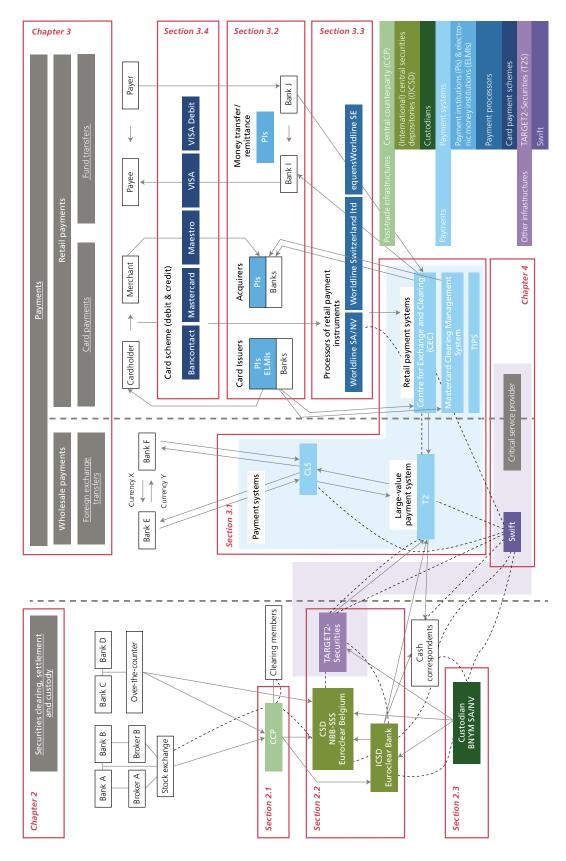
CLS, a settlement system for foreign exchange (FX) transactions, is linked to the LVPS operated by central banks for eighteen currencies (including T2 for the euro), making it possible to settle both legs of an FX transaction at the same time. CLS eliminates FX settlement risk arising for example from time zone differences, such as when a party transfers a currency it sold but does not receive concomitantly from the counterparty the currency it purchased.

#### Other infrastructures and service providers

TARGET2-Securities (T2S) is the common settlement platform for European CSDs. Although the messaging service provider Swift is neither a payment system nor a settlement system, a large number of systemically important systems depend on it for daily financial messaging. It is therefore considered a critical service provider.

Figure 1

Connections between financial market infrastructures, custodians, payment service providers and critical service providers relevant for Belgium



# 1.2 FMIs, custodians, payment service providers and critical service providers subject to oversight and prudential supervision by the Bank

The Bank has responsibilities for both oversight and prudential supervision of FMIs, custodians, PSPs, such as PIs and ELMIs, and critical service providers.

The oversight and prudential supervision of FMIs vary in certain respects, ranging from the object, the competent authority, the areas covered, and the regulatory framework and tools used. However, both oversight and prudential supervision activities, and the framework they rely on, evolve over time.

Central banks have always had a close interest in the safety and efficiency of payment, clearing and settlement systems. One of the principal functions of a central bank is to ensure public confidence in money, which depends crucially on the ability of economic agents to transmit money and financial instruments smoothly and securely through payment, clearing and settlement systems. These systems must therefore be strong and reliable, available even when the markets around them are in crisis, and must never themselves be the source of such turmoil. The central bank's oversight of FMIs pursues these objectives by monitoring and assessing systems and, where necessary, inducing change. This is generally recognised as a core responsibility of central banks.

The Bank's oversight of payment, clearing and settlement systems is based on Article 8 of its Organic Act¹ and focuses on systems established in or relevant for Belgium. Although Swift is not a payment, clearing or settlement system, many such systems use it, effectively making it a critical service provider of systemic importance. Swift is therefore subject to a (cooperative) central bank oversight arrangement, with the Bank as lead overseer.

The Bank is also the prudential supervisory authority for individual financial institutions, as well as custodians and payment service providers. While significant credit institutions, such as The Bank of New York Mellon SA/NV (BNYM SA/NV), are directly supervised by the Single Supervisory Mechanism (SSM), less significant institutions remain under the prudential supervision of the Bank as the national competent authority.

Some FMIs are subject to both oversight and prudential supervision, typically if they have the status of a bank (as is the case for Euroclear Bank). Worldline SA/NV is also subject to both prudential supervision (as a payment institution) and oversight (as a retail payments processor). In such cases, oversight and prudential supervision complement one another: while oversight focuses on the sound functioning of the settlement system (by assessing compliance with oversight standards such as the CPMI-IOSCO Principles for financial market infrastructures or PFMI), prudential supervision focuses on the financial soundness of the operator (by assessing compliance with prudential legislation). As a result, oversight and prudential supervision typically cover different topics or assume different perspectives.

Oversight may focus on areas concerning the functioning of the system and how its organisation and operation minimise or avoid risks not only for itself but – just as importantly – for its participants. Examples include settlement finality rules, which reduce the risks associated with a participant's insolvency (i.e. to prevent the automatic unwinding of other participants' transactions with a bankrupt participant); delivery-versus-payment (DVP) or payment-versus-payment (PVP) mechanisms, which eliminate principal risks in transactions between participants; fair and open access for participants; and the stringent requirements for business continuity plans to ensure the continuity of services for participants. Oversight also takes into account risks related to system interdependencies (via connected systems or participants) that could trigger contagion risks in financial markets.

<sup>1</sup> Article 8 of the Act of 22 February 1998 establishing the organic statute of the National Bank of Belgium, *Moniteur belge/Belgisch Staatsblad* 28 March 1998, 9.377.

Prudential supervision seeks to ensure that financial institutions are sound, thereby helping to maintain trust in these institutions and promote financial stability. Some types of risks are monitored by both FMI overseers and bank supervisors, albeit from a different perspective, as an FMI's business model is based on transferring liquidity (which has an element of time criticality) between – or on behalf of – its participants, whereas a bank's business model tends to be based on maturity transformation (short-term deposits into long-term assets). The regulatory approach to credit, liquidity and operational risk for FMIs therefore differs from that used for banks.

Due to such differences in scope, oversight and prudential supervision rely on different frameworks. For oversight, the PFMI cover payment systems, securities settlement systems, CSDs, CCPs and trade repositories, as well as critical service providers (see Annex F to the PFMI). When it comes to the implementation of these principles, further clarity is provided by guidelines, such as the CPMI-IOSCO Guidance on cyber resilience for FMIs or the Guidance on resilience and recovery of CCPs. In addition, the CPMI has published an analytical framework for distributed ledger technology in payment, clearing and settlement.

The tools used to conduct oversight and prudential supervision may differ, too. Oversight is generally based on principles and guidelines designed at the international level (e.g. the Eurosystem, CPMI, CPMI-IOSCO). The traditional approach to enforcement has been to urge FMIs and other (critical) service providers to adhere to these principles via central bank moral suasion (the so-called "soft law" approach). The requirements for prudential supervision, on the other hand, have been laid down in a legal framework that takes the form of EU directives and regulations and national legislation (the so-called "hard law" approach). However, over time, central bank oversight has become more formal, owing to the expanding role of the private sector in providing payment and settlement systems, as well as the growing criticality of the proper functioning of these systems. In an increasing number of areas, a hard law approach is being applied to oversight, as illustrated, for example, by the ECB Regulation on oversight requirements for systemically important payment systems (SIPSR) and the 2017 Belgian legislation on systemically relevant processors of retail payment instruments. In addition, the EU transposed the oversight framework for CCPs and CSDs (i.e. the PFMIs) into law in 2012 and 2014 (via EMIR¹ and the CSDR²). The Bank has been designated the competent supervisory authority for Belgian (I)CSDs and, as overseer, is also considered the relevant authority under the CSDR³.

In order to pool expertise, reinforce synergies and align approaches between oversight and prudential supervision of FMIs, custodians, PSPs and other (critical) service providers, these two roles have been integrated into the same department within the Bank.

Table 1 below provides an overview of the systems and institutions supervised and/or overseen by the Bank. In addition to classification based on the type of services provided, these systems and institutions have been further grouped according to: (1) the type of role played by the Bank (prudential supervisor, overseer or both) and (2) the system/institution's international dimension (whether the Bank acts as the sole authority, as the lead authority in an international cooperative arrangement, or in another capacity). For systems and institutions governed by Belgian law and which are systemically relevant in the financial markets of other jurisdictions, or for the financial industry as a whole, the Bank cooperates with other authorities. Such cooperation may involve multilateral arrangements in which the Bank acts as lead overseer (e.g. Euroclear, Swift). The Bank also takes part in a number of international cooperative arrangements (e.g. CCPs, BNYM, T2, T2S and CLS) in which another national authority acts as lead overseer/supervisor. Domestically, the Bank cooperates with the FSMA which has responsibilities for the supervision of financial markets with regard to the conduct of business rules. Annex 2 illustrates the organisational structure of FMIs with an international dimension governed by Belgian law.

<sup>1</sup> European Market Infrastructure Regulation (EMIR), Regulation (EU) No 648/2012 of 4 July 2012 on OTC derivatives, CCPs and TRs.

<sup>2</sup> Regulation (EU) No 909/2014 of 23 July 2014 on improving securities settlement in the EU and on CSDs and amending Directives 98/26/EC and 2014/65/EU and Regulation (EU) No 236/2012.

<sup>3</sup> The FSMA has been designated, together with the Bank, as the national competent authority for CCPs under EMIR.

<sup>4</sup> In line with CPMI-IOSCO Responsibility E (Cooperation with Other Authorities). By means of this report, the Bank intends to provide information to other authorities with which it does not engage in formal cooperation but which may be interested in understanding the applicable framework, regulatory approach and main supervisory priorities.

#### Table 1

The Bank's oversight and prudential supervision of financial market infrastructures, custodians, payment service providers and other market infrastructures and critical service providers

(January 2024)

	Interr	International cooperation		NBB acts as the sole authority
	NBB acts as lead authority	NBB takes part, another authority is in the lead		
Prudential supervision		<u>Custodian</u> Bank of New York Mellon SA/NV (BNYM SA/NV)		Payment service providers (PSPs) Payment institutions (PIs) Electronic money institutions (ELMIs)
Prudential supervision and oversight	(CSD)  Euroclear Belgium (ESES) (ICSD)  Euroclear Bank SA/NV Institution providing support to a CSD  Euroclear SA/NV ESA	( <u>CCP)</u> LCH Ltd (UK), ICE Clear Europe (UK) LCH SA (FR), Eurex Clearing AG (DE), EuroCCP (NL), Keler CCP (HU), CC&G (IT)		<u>Payment processors</u> Worldline SA/NV
Oversight	<u>Critical service providers</u> Swift	Other infrastructure TARGET2-Securities (T2S) <sup>1</sup>		<u>CSD</u> NBB-SSS
	<u>Payment systems</u> Mastercard Clearing Management System <sup>2</sup>	<u>Payment systems</u> T2 ¹ CLS		
	<u>Card payment schemes</u> Mastercard Europe <sup>2</sup> Maestro <sup>2</sup>			<u>Card payment schemes</u> Bancontact ¹
				<u>Payment processors</u> ³ equensWorldline Worldline SA/NV Worldline Switzerland Itd
				<u>Payment systems</u> Centre for Exchange and Clearing (CEC) <sup>1</sup>
Post-trade infrastructure		Securities clearing	Payments	Payment systems
		Securities settlement		Payment institutions and electronic money institutions
		Custody		Payment processors
		Custody		Payment processors

Source: NBB.

- 1 Peer review in Eurosystem/ESCB.
- 2 The NBB and the ECB act jointly as lead overseers.
- 3 Only for certain Belgian activities Act of 24 March 2017 on the oversight of payment processors.