

# Contents

Executive summary	7
<b>1. The Bank's role in oversight and prudential supervision of financial market infrastructures, custodians, payment service providers and critical service providers</b>	<b>9</b>
1.1 Critical nodes in the functioning of financial markets and payment services	9
1.2 FMIs, custodians, payment service providers and critical service providers subject to oversight and prudential supervision by the Bank	13
<b>2. Securities clearing, settlement and custody</b>	<b>27</b>
2.1 CCPs	28
2.2 (I)CSDs	31
2.3 Custodians	39
<b>3. Payments</b>	<b>45</b>
3.1 Payment systems	48
3.2 Payment Institutions and Electronic Money Institutions	49
3.3 Processors of payment transactions	58
3.4 Card payment schemes	59
<b>4. SWIFT</b>	<b>63</b>
4.1 Oversight approach	64
4.2 Covered oversight topics in 2020	59
4.3 Oversight priorities in 2021	73
<b>5. Specific thematic articles</b>	<b>75</b>
5.1 Activities of Big Tech companies, international payment card schemes and European initiatives	77
5.2 Markets in Crypto-Assets	81
5.3 Analysing a digital euro – A status update	85
5.4 Digital operational resilience	97
5.5 Threat Intelligence-Based Ethical Red teaming in Belgium (TIBER-BE)	105
5.6 FMI-PSP Inspections	111

<b>Annexes</b>	<b>113</b>
1. Regulatory framework	115
2. FMIs established in Belgium with an international dimension	121
3. Statistics	125
4. List of abbreviations	133

# Executive summary

Belgium hosts a number of significant financial market infrastructures (FMIs), custodians, payment services providers, as well as critical service providers, some of which also have a systemic relevance internationally. This Financial Market Infrastructures and Payment Services Report aims to provide a comprehensive overview of the National Bank of Belgium's oversight and supervision on these systems and institutions headquartered in, or relevant for, Belgium.

## **COVID-19**

One major event that marked 2020 was of course the COVID-19 pandemic, which affected these systems and institutions in various ways. Some institutions, such as central securities depositories (CSDs) and custodians, saw increased transaction volumes thanks to the volatility in the markets, while others, such as money remitters, were negatively affected by government measures such as the lockdown in March 2020. Sometimes, the impact proved to be temporary (e.g. the market volatility in March), while other changes, such as consumer preferences for contactless payments or online shopping, are expected to be more permanent.

Most FMIs, payment service providers and critical service providers were well prepared to deal with extreme scenarios and had business continuity arrangements in place such as large-scale home working for staff. The coronavirus crisis did lead to an increased number of COVID-19 themed cyber attacks overall, leading to an increased vigilance by FMIs.

During the pandemic, authorities adapted their way of working (e.g. working from home, virtual meetings) and continued their oversight and supervision tasks. One notable exception was the third regional SWIFT oversight outreach session, which was planned during the physical 2020 Sibos conference, which was converted into a digital Sibos, which made it impractical to organise the foreseen oversight outreach session.

## **Brexit**

Brexit was another major event that received the authorities' attention. The Bank has assessed the readiness of global custodian BNY Mellon SA/NV with regard to Brexit and the compatibility of the business model set-up with a post-Brexit environment. EU CSDs, payment institutions and electronic money institutions that wish to continue to provide services in the UK, will need to apply for a UK licence. Similarly, UK institutions that wish to continue to operate in the EU, will need an EU licence. Since 2017, seven UK payment/electronic money institutions have been relocated to Belgium, which underlines the importance of Belgium as a location for these institutions. In March 2021, Irish securities have migrated to the Belgian international CSD Euroclear Bank from the UK CSD Euroclear UK & Ireland.

Despite the COVID-19 pandemic and Brexit, the regular oversight and supervision activities have continued in order to address short-term priorities as well as to work on longer-term projects to improve financial stability.

## **Regulatory initiatives**

On the regulatory front, international regulators have issued new guidance with regard to recovery and resolution of central counterparties (CCPs). The EU regulatory framework for CCPs has also been updated (and called EMIR 2.2) in 2020. That year, a targeted review of the EU regulatory framework for CSDs (CSDR) was launched. In response to recent trends, the European Commission has taken two regulatory initiatives that may affect various categories of institutions: the Digital Operational Resilience Act (DORA) and the Regulation on Markets in Crypto Assets (MiCA). The emergence of crypto-currencies (incl. stablecoins) has prompted the central banks of the Eurozone to start investigate a central bank digital currency (CBDC). These topics are further discussed in thematic articles in this Report.

## **Oversight and supervision activities**

In addition to monitoring the impact of the COVID-19 pandemic and the related government measures – which highlighted the importance of operational resilience – and Brexit, the Bank has continued its regular oversight and supervision activities.

Cyber security remains one of the main attention points. The SWIFT Customer Security Control Framework (CSCF), which aims to strengthen the security of the global financial community against cyber threats by providing requirements for users in terms of how they should secure their own local IT infrastructure used for connecting to SWIFT, has been analysed by overseers on the effectiveness of the implementation and reporting processes. This follow-up included monitoring progress of adherence with and raising awareness about the cyber controls of the CSCF and assisting in the promotion of the framework with bank supervisors. The Bank also monitored implementation of the CSCF by institutions under its oversight work in 2020. In addition to the CSCF, the SWIFT overseers also followed up the planned ISO 20022 migration for cross-border payments and cash management among others.

In order to further enhance the cyber resilience of Belgian critical institutions, the Bank implemented the Threat Intelligence Based Ethical Red teaming (TIBER) framework developed by the ECB in Belgium under the name TIBER-BE, on which a thematic article has been dedicated in this Report.

In the field of payments, the Bank monitored the implementation of the strong customer authentication (relevant for the growing e-commerce activities) and secure communication standards (open banking) requirements. Furthermore, the Bank, as lead authority for the card payment scheme Mastercard Europe, has completed an analysis of Mastercard Europe's compliance with the Regulation on interchange fees for card-based payment transactions requirement on the unbundling of scheme and processing activities within the same legal entity.

Finally, in 2020, the Bank as national competent authority has conducted its first annual review and evaluation under the CSDR of Euroclear Belgium, which was authorised in 2019 under the CSDR. The NBB-SSS is operated by the central bank and therefore legally not subject to an annual review and evaluation by the national competent authority. Nevertheless, as the NBB-SSS is eligible for Eurosystem credit operations, the Eurosystem has assessed the NBB-SSS against the CSDR requirements which are relevant from a user perspective (as the Eurosystem is a user of the CSD). Oversight also monitored implementation of the NBB-SSS project to offer delivery-versus-payment (DVP) transactions in foreign currencies, which removes the so-called settlement risk. This is the risk linked to non-DVP transactions, whereby sellers of securities transfer their securities before receiving the cash payment. When the buyer defaults before paying, the sellers lose the entire value of the securities that they transferred. For buyers that pay before they receive the securities, the same settlement risk exists. By linking the exchanges of securities and cash together, the NBB-SSS has eliminated this risk for cash in foreign currencies – for euros this was already the case.

The review and evaluation under the CSDR of Euroclear Bank, which was authorised under the CSDR at the end of 2019, has been initiated at the end of 2020.