# **Annexes**

## Annex 1: Regulatory framework

### **FMIs**

CPMI-IOSCO Principles for Financial Market Infrastructures (PFMIs) (April 2012): International standards for payment systems (PS), central securities depositories (CSDs), securities settlement systems (SSSs) and central counterparties (CCPs). They also incorporate additional guidance for over-the-counter (OTC) derivatives CCPs and trade repositories (TRs)

http://www.bis.org/cpmi/publ/d101a.pdf

CPMI-IOSCO Principles for Financial Market Infrastructures, Disclosure framework and assessment methodology (December 2012): Framework prescribing the form and content of the disclosures expected of FMIs, while the assessment methodology provides guidance to assessors for evaluating observance of the principles and responsibilities set forth in the PFMI.

http://www.bis.org/cpmi/publ/d106.pdf

**CPMI-IOSCO** Recovery of financial market infrastructures (October 2014): Guidance for FMIs and authorities on the development of comprehensive and effective recovery plans.

http://www.bis.org/cpmi/publ/d121.pdf

CPMI-IOSCO Guidance on cyber resilience for financial market infrastructures (June 2016): Requires FMIs to instil a culture of cyber risk awareness and to demonstrate ongoing re-evaluation and improvement of their cyber resilience posture at every level within the organisation.

http://www.bis.org/cpmi/publ/d146.pdf

ECB Cyber Resilience Oversight Expectations for FMIs (CROE, December 2018): The CROE provides overseers with a framework to assess the cyber resilience of systems under their responsibility and to enable FMIs to enhance their cyber resilience.

 $\frac{\text{https://www.ecb.europa.eu/paym/pdf/cons/cyberresilience/Cyber\_resilience\_oversight\_expectations\_for\_financial\_market\_infrastructures.pdf}$ 

### **CCPs**

European Market Infrastructure Regulation (EMIR): Regulation (EU) No 648/2012 of 4 July 2012 on OTC derivatives, CCPs and TRs: EMIR sets a clearing obligation for standardised OTC derivatives and strict CCP risk management requirements, and requires the recognition and ongoing supervision of CCPs.

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32012R0648&from=EN

### **CCPs**

**EMIR Refit: Regulation (EU) 2019/834 of 20 May 2019:** mainly simplifies the derivatives' reporting and clearing obligation requirements, but also imposes CCPs to provide information on their initial margin models, including simulation tools, to their clearing members. Further, the European Commission gets the power to suspend the clearing obligation for selected derivatives contracts e.g. where markets become disrupted.

https://eur-lex.europa.eu/eli/reg/2019/834/oj

EMIR 2.2: Regulation (EU) 2019/2099 of 23 October 2019: it improves consistency of supervisory arrangements for CCPs established in the EU, and enhances the EU's ability to monitor, identify and mitigate third-country CCP risks.

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32019R2099

CPMI-IOSCO Public quantitative disclosure standards for CCPs (February 2015): Public quantitative disclosure standards that CCPs are expected to meet. These standards complement the Disclosure framework published by CPMI-IOSCO in December 2012. <a href="http://www.bis.org/cpmi/publ/d125.pdf">http://www.bis.org/cpmi/publ/d125.pdf</a>

**EMIR Regulatory Technical Standards (August 2015):** Regulation (EU) 2015/2205 of 6 August 2015 supplementing Regulation (EU) No. 648/2012 with regard to regulatory technical standards on the clearing obligation.

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R2205&from=EN

CPMI-IOSCO Resilience of CCPs: Further guidance on the PFMI (July 2017): Guidance providing further clarity and granularity on several key aspects of the PFMI to further improve CCP resilience.

https://www.bis.org/cpmi/publ/d163.pdf

Regulation on CCP recovery and resolution: Regulation (EU) 2021/23 of the European Parliament and of the Council of 16 December 2020 on a framework for the recovery and resolution of central counterparties and amending Regulations (EU) No 1095/2010, (EU) No 648/2012, (EU) No 600/2014, (EU) No 806/2014 and (EU) 2015/2365 and Directives 2002/47/EC, 2004/25/EC, 2007/36/EC, 2014/59/EU and (EU) 2017/1132, available at:

https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2021:022:TOC

### **CSDs**

CSD Regulation (CSDR): 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: Prudential requirements on the operation of (I)CSDs, as well as specific prudential requirements for (I)CSDs and designated credit institutions offering banking-type ancillary services.

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0909&from=en

Regulation (EU) 2017/389 of 11 November 2016 supplementing Regulation (EU) No 909/2014 as regards the parameters for the calculation of cash penalties for settlement fails and the operations of CSDs in host Member States

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0389&from=EN

Regulation (EU) 2017/390 of 11 November 2016 supplementing Regulation (EU) No 909/2014 with regard to regulatory technical standards on certain prudential requirements for CSDs and designated credit institutions offering banking-type ancillary services

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0390&from=EN

Regulation (EU) 2017/392 of 11 November 2016 supplementing Regulation (EU) No 909/2014 with regard to regulatory technical standards on authorisation, supervisory and operational requirements for CSDs

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0392&from=EN

### **Custodians**

Regulation (EU) 2017/391 of 11 November 2016 supplementing Regulation (EU) No 909/2014 with regard to regulatory technical standards further specifying the content of the reporting on internalised settlements: Reporting obligation for settlement internalisers when settlement instructions are executed in their own books, outside securities settlement systems.

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32017R0391&from=EN

Belgian law of 31 July 2017: Law introducing a new category of credit institutions with activities exclusively in the area of custody, bookkeeping and settlement services in financial instruments, as well as non-banking services relating thereto, in addition to receiving deposits or other repayable funds from the public and granting credit for own account where such activities are ancillary or linked to the above-mentioned services.

https://www.ejustice.just.fgov.be/cgi\_loi/

change\_lg.pl?language=nl&la=N&cn=2017073111&table\_name=wet

ESMA Guidelines on Internalised Settlement Reporting under Article 9 of CSDR (March 2018)

https://www.esma.europa.eu/press-news/esma-news/esma-finalises-guidelines-how-report-internalised-settlement

# Payment Systems

ECB Regulation (EU) No 795/2014 on oversight requirements for systemically important payment systems (July 2014): Regulation, based on the CPMI-IOSCO PFMIs, covering systemically important payment systems in the eurozone, large-value and retail payment systems.

https://www.ecb.europa.eu/ecb/legal/pdf/oj\_jol\_2014\_217\_r\_0006\_en\_txt.pdf

Revised oversight framework for retail payment systems (RPS) (February 2016): Revised framework (replacing the one from 2003) identifying RPS categories and clarifying the oversight standards applicable to each category. It also provides guidance on the organisation of oversight activities for systems of relevance to more than one central bank.

https://www.ecb.europa.eu/pub/pdf/other/revisedoversightframeworkretailpayment systems201602.en.pdf?bc332d9a718f5336b68bb904a68d29b0

### PIs & ELMIs

**EMD2** (September 2009): Directive 2009/110/EC of 16 September 2009 on the taking up, pursuit and prudential supervision of the business of ELMIs amending Directives 2005/60/EC and 2006/48/EC and repealing Directive 2000/46/EC, OJ. 10 October 2009, L. 267, 7-17.

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32009L0110&from=EN

**PSD2 (November 2015):** Directive (EU) 2015/2366 of 25 November 2015 on payment services in the internal market, amending Directives 2002/65/EC, 2009/110/EC and 2013/36/EU and Regulation (EU) No 1093/2010, and repealing Directive 2007/64/EC. http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32015L2366

**Belgian Law of 11 March 2018 transposing the PSD2,** Belgian Official Gazette 26 March 2018.

https://www.ejustice.just.fgov.be/cgi\_loi/change\_

lg.pl?language=nl&la=N&cn=2018031107&table\_name=wet/

language=fr&la=F&cn=2018031107&table\_name=loi

### Payement Processors

Belgian Law of 24 March 2017 on supervision of payment transactions processors, *Belgian Official Gazette* 24 April 2017.

https://www.nbb.be/doc/cp/moniteur/2017/20170424 opp wet loi.pdf

Royal Decree of 8 February 2019 on the requirements for processors of retail payments instruments and card payments schemes (CPS) having established a relation with them on the due diligence that CPS must have in place when using the services of systemically relevant payment processors, the identification and management of the risks by those processors, the continuity of their services and the practical modalities of the communication in case of an incident.

http://www.ejustice.just.fgov.be/eli/arrete/2019/01/25/2019030120/moniteur (FR) or http://www.ejustice.just.fgov.be/eli/besluit/2019/01/25/2019030120/staatsblad (NL)

### Card Payment Schemes

Eurosystem Oversight Framework for Card Payment Schemes (CPSs) – Standards (January 2008): Common oversight policy to promote the reliability of CPSs operating in the euro area, public confidence in card payments and a level playing field across the euro area in a unified market.

https://www.ecb.europa.eu/pub/pdf/other/oversightfwcardpaymentsss200801en.pdf

Guide for the assessment of CPS against the oversight standards (February 2015): Assessment guide based on the Eurosystem Oversight Framework for CPSs targeting both governance authorities responsible for ensuring compliance and overseers of CPSs It has been updated by taking into account the January 2013 "Recommendations for the security of internet payments", as well as the February 2014 "Assessment guide for the security of internet payments".

https://www.ecb.europa.eu/pub/pdf/other/guideassessmentcpsagainstoversightstandards 201502.en.pdf?499089f7f3aab273925ef6d80767b4a5

Regulation (EU) 2015/751 of 29 April 2015 on interchange fees for card-based payment transactions (OJ. 19 May 2015, L. 123, 1-15): This regulation contains (i) the definition of a cap for the interchange fees applicable to payment transactions by means of debit or credit cards, (ii) the separation to be put in place between payment card scheme governance activities and processing activities, (iii) measures granting more autonomy to merchants regarding the choice of payment instruments for their clients. http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32015R0751&from=EN

Belgian Law of 1 December 2016 transposing the EU Regulation 2015/751 of 29 April 2015, entitled "Interchange fees for card based payment transactions" (December 2016): *Belgian Official Gazette* 15 December 2016, 86.578.

https://www.ejustice.just.fgov.be/cgi\_loi/change\_ lg.pl?language=nl&la=N&cn=2016120112&table\_name=wet/ language=fr&la=F&cn=2016120112&table\_name=loi

Regulation (EU) 2018/72 of 4 October 2017 supplementing Regulation (EU) 2015/751 on interchange fees for card-based payment transactions with regard to regulatory technical standards establishing the requirements to be complied with by payment card schemes and processing entities to ensure the application of independence requirements in terms of accounting, organisation and decision-making process OJ. 18 January 2018, L. 13/1-7.

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32018R0072&rid=3

### **SWIFT**

High level expectations (HLE) for the oversight of SWIFT (June 2007): The SWIFT Cooperative Oversight Group developed a specific set of principles that apply to SWIFT. <a href="https://www.nbb.be/en/financial-oversight/oversight/">https://www.nbb.be/en/financial-oversight/oversight/</a> critical-service-providers#oversight-of-swift-

PFMIs, Annex F: Oversight expectations applicable to critical service providers (April 2012): Expectations for an FMI's critical service providers in order to support the FMI's overall safety and efficiency.

https://www.bis.org/cpmi/publ/d101a.pdf

Assessment methodology for the oversight expectations applicable to critical service providers (December 2014): Assessment methodology and guidance for regulators, supervisors and overseers in assessing an FMI's critical service providers against the oversight expectations in Annex F.

https://www.bis.org/cpmi/publ/d123.pdf

# Annex 2: FMIs established in Belgium with an international dimension

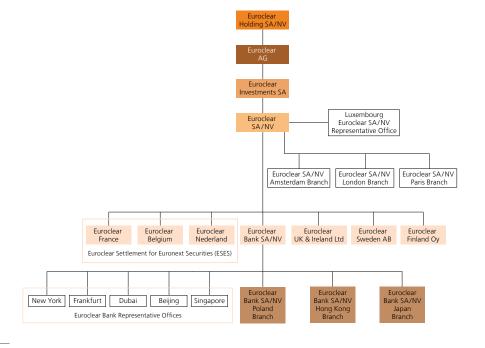
### **Euroclear**

Euroclear Holding SA/NV, the top financial holding of Euroclear, is incorporated under Belgian law. Euroclear. Holding SA/NV owns 100% of Euroclear AG, a Swiss financial holding company. Euroclear Investments SA is the group's financial investment holding company, incorporated in Luxembourg.

Euroclear SA/NV (ESA), a Belgian financial holding company, is the parent company of the Euroclear Group (I) SDs; i.e. the three ESES CSDs (Euroclear France, Euroclear Nederland, Euroclear Belgium), Euroclear UK & Ireland Ltd, Euroclear Sweden AB, Euroclear Finland Oy and Euroclear Bank SA/NV. The latter has branches in Poland, Hong Kong and Japan. Euroclear Group (I)CSDs have outsourced the IT production and development to ESA. ESA also delivers common services, such as risk management, internal audit, and legal and human resources services to the Group (I)CSDs.

Chart 1 Euroclear Group Corporate Structure

(simplified diagram)

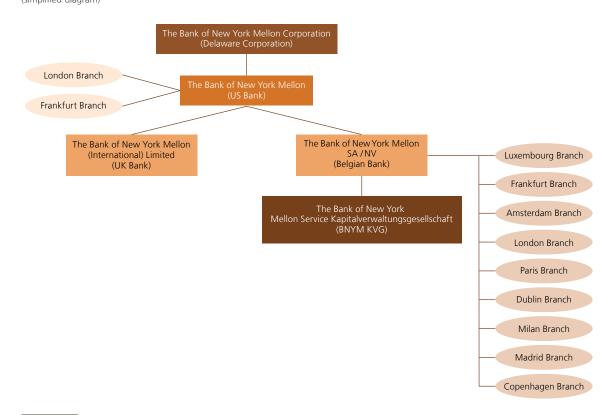


Source: Euroclear.

### The Bank of New York Mellon

The Bank of New York Mellon SA/NV (BNYM SA/NV), established in Belgium, is the European subsidiary of BNY Mellon, a US based global systemic bank, which in turn is a subsidiary of the US holding company BNY Mellon Corporation. BNYM SA/NV is the custodian of the group for European clients and its European gateway to the euro area markets and payment infrastructures. BNYM SA/NV has a subsidiary in Germany and branches in Luxembourg, Germany, the Netherlands, the UK, France, Ireland, Italy, Spain and Denmark through which it operates in the local markets. This is the result of the BNYM Group's strategy to consolidate its legal entity structure into the so-called "Three Bank Model" (i.e. US/UK/EU).

Chart 2
BNYM Group structure and BNYM SA/NV position
(simplified diagram)



Source: BNY Mellon.

### Worldline

Worldline is a French group providing electronic payment and transactional services in Europe and beyond. It used to be a division and full subsidiary of the European IT services corporation Atos. Since 2014 Worldline SA (France) is listed on European Paris.

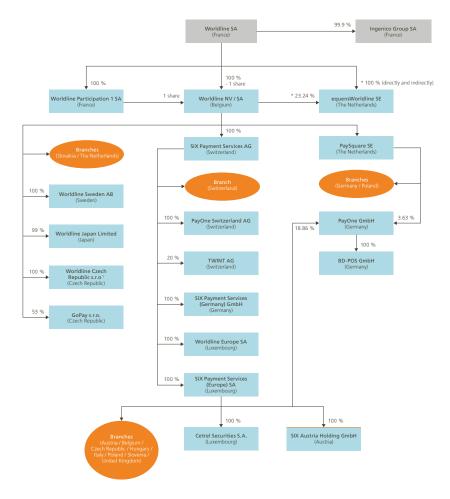
In 2016, Worldline SA/NV, the Belgian entity of the group merged with the Dutch company Equens. The processing activities were carved out in a new entity called equensWorldline SE. equensWorldline SE is now a full subsidiary of Worldline SA (France).

In 2018, Worldline acquired Six Payment Services, the payment division of the Swiss company SIX, which is now the main shareholders of Worldline SA (France) with more than 16.32 % of the shares. Since 2019 more than 75 % of Worldline's outstanding shares are owned by public investors (free float). After the acquisition of Ingenico, Worldline became the largest European provider of payment services.

Chart 3

#### Structure of Worldline

(as of 1 April 2021 – after absorption of Worldline BV, simplified diagram, part of the group relevant for Belgium)



Source: Worldline.

The remaining 1 % is held by Komercni Banka. The voting rights held by Worldline NV/SA amount to 60 %. The remaining voting rights are held by Komercni Banka.

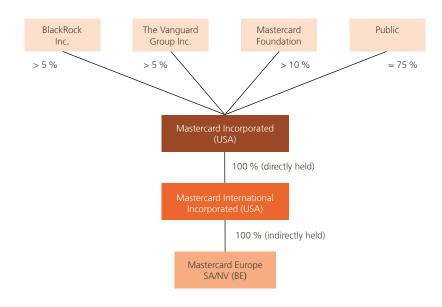
### **Mastercard Europe**

Mastercard is a payment services company with a global reach. Mastercard Europe SA/NV (MCE) incorporated in Belgium, a subsidiary of Mastercard Incorporated (USA, listed on the New York Stock Exchange), runs the company's business in the European region.

Chart 4

### **Mastercard Group Structure**

(simplified diagram, as of January 2021)



Source: Mastercard Europe.

## Annex 3: Statistics

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Table 1

Securities Clearing, Settlement and Custody

(notional value cleared, yearly total in € billion equivalent)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
A. Central Counterparties (CCPs) (selected)										
LCH Ltd (UK)										
Repos (all currencies combined)	93 331	84 108	79 245	78 118	79 300	77 039	87 553	89 822	44 795	
LCH SA (FR)										
Credit Default Swaps (all currencies combined)	62	16	336	123	346	868	1 098	1 225	1 517	
Repos (Belgium, all currencies combined)	701	985	1 341	1 567	1 345	1 259	890	1 128	2 503	
Eurex Clearing AG (DE)										
Repos (all currencies combined)	20 2 1 0	16 838	20 858	28 953	22 251	12 084	9 025	11 299	14 722	
Source: ECB Central Counterparty Clearing Statistics.										

Table 1 (continued)

Securities Clearing, Settlement and Custody

(yearly total in € billion equivalent, unless otherwise stated)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
B. Euroclear Bank										
Value of securities deposits (end of period)	10 766.3	10 837.2	10 834.2	11 765.3	12 393.7	12 698.4	12 834.2	13 451.5	14.823.6	15.292.4
Number of transactions (in millions)	59.4	64.2	69.5	75.2	83.3	84.1	95.4	107.0	116.4	128.8
Value of transactions	328 475.9	307 109.8	336 784.6	394 569.3	442 563.0	451 698.3	498 181.0	525 692.4	544.564.8	575.991.9
Source: Euroclear.										
C. NBB-SSS										
Value of securities deposits (end of period)	513.3	531.2	541.7	557.3	575.4	612.5	625.3	632.6	646.65	99.869
Number of transactions (in millions)	0.5	9.0	9.0	9.0	0.5	0.5	0.5	0.5	0.5	0.5
Value of transactions¹	14 133.9	10 250.1	8 428.0	8 209.0	8 766.5	8 714.5	8.6906	11 164.8	8 693.1	9 220.7
Source: NBB. 1 Secondary market turnover.										
D. Euroclear Belgium										
Value of securities deposits (end of period)	130.4	156.8	202.7	222.1	269.4	235.1	237.7	178.0	220.2	194.9
Number of transactions (in millions)	1.9	1.9	1.9	2.1	2.5	2.4	2.5	2.7	5.6	2.9
Value of transactions	588.0	563.6	799.8	714.8	944.6	963.8	946.0	964.1	783.9	704.9
Source: Euroclear.										
E. TARGET2-Securities <sup>1</sup>										
Number of transactions (in millions)	nap	nap	nap	nap	7.6	36.3	125.6	145.9	154.8	176.7
Value of transactions	nap	nap	nap	nap	43 706.8	112 066.0	192 175.0	236 050.8	282 063.7	172 840.9
Source: ECB. T2S was launched in 2015.	) CT vi 0 000 i 400 000 000 000 000 000 000 00		33	;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;						
I As of 2020, the values III this table excludes technic	al transactions in 123	and inquidity tre	ansiers morn und	IIIC Statistics.						
F. BNYM SA/NV										
Value of assets held under custody (end of period)	od) 2 667.8	2 861.9	2 905.2	3 454.0	3 216.4	3 476.5	3 608.8	2 373.1	2 873.5	2 903.5
Source: BNYM.										

Table 2

 $\label{eq:payments} \textbf{Payments}$  (yearly total in  $\varepsilon$  billion equivalent, unless otherwise stated)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
A. TARGET2										
Value of payments	651 274.9	711 025.8	559 696.0	498 726.5	508 982.3	485 811.8	432 780.7	432 508.1	441 281.1	465 793.7
of which: TARGET2-BE	22 163.2	18 712.6	16 177.3	16 247.9	15 627.4	16 957.9	19 732.4	22 594.7	24 935.5	28 570.6
Number of payments (in millions)	89.0	9.68	91.3	87.8	88.6	89.0	89.3	88.4	87.8	88.7
of which: TARGET2-BE	2.6	2.5	2.3	2.5	2.3	2.2	2.3	2.3	2.5	3.1
Source: ECB Payment Statistics. RTGS related payments, excluding TARGET2 transactions on Dedicated Cash Accounts.  Last year's figures from https://www.ecb.europa.eu/stats/payment_statistics/large_value_payment_systems/html/index.en.html.	ding TARGET2 t its/payment_sta	ransactions on tistics/large_valu	(GET2 transactions on Dedicated Cash Accounts. ent_statistics/large_value_payment_systems/html/	Accounts. tems/html/index	en.html.					
B. CLS										
Value of payments (in € trillion)	893 590.4	878 469.0	897 145.6	1 042 062.3	1 118 933.9	1 162 359.8	1 193 728.3	1 282 149.3	1 362 882.2	1 335 152.0
of which: EUR payments	182 482.0	185 881.3	182 305.8	191 170.5	208 555.8	204 370.7	219 924.6	241 067.1	249 090.1	244 744.0
Number of payments (in millions)	206.9	176.6	205.0	204.7	219.1	209.5	198.5	226.6	257.1	273.5
of which: EUR payments	45.5	37.4	36.9	34.4	40.9	34.3	34.0	39.1	42.2	45.4
Sources: ECB Payment Statistics, CLS.										
C. Centre for Exchange and Clearing (CEC)										
Value of payments (exclusive Instant Payments since 2020 ¹) (in $\in$ billion)	886.7	909.1	911.6	870.7	883.4	920.6	941.8	1 122.9	1 204.7	1 198.8
Value of Instant Payments (in $\in$ billion)	nap	nap	nap	nap	nap	nap	nap	nap	nap	57.2
Number of payments (exclusive Instant Payments since 2020¹) (in millions)	1 224.9	1 295.1	1 365.6	1 272.2	1 402.2	1 387.1	1 312.0	1 456.7	1 512.7	1 396.9
Number of Instant Payments (in millions)										9.66
Sources: ECB Payment Statistics, CEC. 1 As of 2020, data on Instant Payments is reported separately.										

Table 2 (continued 1)

**Payments** 

(end of period, in cumulative number, unless otherwise stated)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
D. Payment Institutions (Pls) – Electronic Money Institutions (ELMIs)										
PIs										
Belgian Pls	0	0	11	15	17	21	24	22	26	30
Account information services providers									_	m
Foreign Pls with Belgian branch	0	2	2	m	M	M	2	Μ	4	2
Passport notifications for cross-border services										
Belgian Pls towards other EEA countries	19	19	26	41	9	162	218	248	440	435
Foreign EEA Pls towards Belgium	104	133	184	262	273	379	421	435	511	266
ELMIS										
Belgian ELMIs	9	9	10	10	10	∞	∞	7	7	7
Foreign ELMIs with Belgian branch	0	0	0	_	-	-	-	2	_	_
Passport notifications for cross-border services										
Belgian ELMIs towards other EEA countries	18	19	43	45	69	70	72	72	104	104
Foreign EEA ELMIs towards Belgium	14	28	40	54	53	102	156	188	240	278
Institutions offering services within a limited network (new under PSD2)								-	4	5
Transactions by Belgian Pls and ELMIs (in millions)										
Number of transactions (yearly total)	nav	nav	1 665	1 874	1 968	2 155	2 006	2 044	1 949	2 106
Value of transactions in euro (yearly total)	nav	nav	105 989	133 513	136 567	137 144	124 388	124 485	113 639	121 751
Average outstanding E-Money of Belgian ELMIs	nav	nav	15.2	21.8	35.8	45.5	73.9	116.6	405.2	494.3
Source : NBB.										
E. Processors of payment transactions										
Worldline SA/NV										
Number of transactions (yearly total, in millions)¹	1 387.6	1 473.7	1 553.9	1 665.8	1 800.0	1 960.0	2 150.0 1 746	1774	1 940	1 972

Source: Worldline.
1 Since 2017, as a consequence of the transfer of some processing activities to equensWorldline SE, volumes reported in this table only refer to acquiring activities of Worldline SA/NV.

Table 2 (continued 2)

Payments

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
E. Card transactions										
Number of cards issued by resident payment service providers – Cards with a cash function										
Number of cards (in thousands, end of period)				21 396.5	21 875.0	22 593.1	22 537.8	23 904.7	35 186.9	nav
Number of cards per capita (end of period)				1.9	1.9	2.0	2.0	2.1	3.1	nav
POS transactions at terminals provided by resident PSPs										
Number of payment transactions per card – With cards issued by resident PSPs (yearly total)				49.8	49.8	55.4	78.2	73.7	44.3	nav
Value of payment transactions per card – With cards issued by resident PSPs (yearly total, in $\in$ )				2 391.7	2 697.3	2 759.1	3 739.6	3 189.8	1 848.9	nav
Transactions per capita										
Number of card payments – With cards isssued by resident PSPs¹ (yearly total)				135.2	130.9	149.5	158.5	183.0	204.1	nav
Value of card payments — With cards issued by resident PSPs¹ (yearly total, in € thousands)				7.2	7.4	8.	8.2	8.5	1.6	nav
Source: ECB Payment Statistics. 1 Except cards with an e-money function only.										
G. Card schemes										
Bancontact – Number of transactions (yearly total, in millions)	1 076.4	1 136.4	1 180.4	1 241.8	1 306.7	1 389.5	1 441.6	1 480.2	1 593.4	1 706.1
of which:										
Retail payments	973.4	1 028.9	1 068.4	1 125.9	1 190.9	1 272.8	1 325.2	1 336.0	1 488.8	1 637.5
ATM	103.0	107.5	111.9	115.9	115.9	116.8	116.3	114.2	104.6	9.89
Source : Bancontact.										

Table 3

SWIFT
(yearly total, in millions)

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Number of messages	4 433.9	4 589.1	5 065.7	5 612.7	6 106.6	6 525.8	7 076.5	7 873.6	8 454.4	9 526.5
of which:										
Payment messages	2 157.5	2 314.4	2 524.5	2 737.2	2 930.2	3 139.3	3 485.2	3 840.0	4 053.4	4 313.0
Securities messages	1 945.9	1 975.3	2 215.6	2 545.2	2 829.1	3 019.1	3 232.3	3 635.5	3 968.9	4 709.8
Other messages	330.5	299.4	325.6	330.3	347.3	367.3	359.0	398.1	432.1	503.8
Source : SWIFT.										

### List of abbreviations

AISP Account information service provider

AML/CTF Anti-Money Laundering / Combating the Financing of Terrorism

API Application programming interface

ART Asset-referenced token

ASPSP Account servicing payment service provider

BCBS Basel Committee on Banking Supervision

BCP Business Continuity Plan
BNYM Bank of New York Mellon

BRRD Bank Recovery and Resolution Directive

CBDC Central bank digital currency

CCP Central counterparty

CEC Centre for Exchange and Clearing
CLS Continuous Linked Settlement
CMG Crisis Management Group

CPMI Committee on Payments and Market Infrastructures

CPS Card Payment Scheme

CROE Cyber Resilience Oversight Expectations for FMIs

CSC Common and Secure Communication

CSDR CSD Regulation

CSD Central Securities Depository
CSP Customer Security Programme

D-SIFI Domestic systemically important financial institution

DLT Distributed Ledger Technology

DORA Digital Operational Resilience Act

DTCC Depository Trust & Clearing Corporation

DVP Delivery versus payment

EBA European Banking Authority
EC European Commission
ECB European Central Bank
EEA European Economic Area
ELMI Electronic money institution
EMD Electronic Money Directive
EMEA Europe, Middle East and Africa

EMIR European Market Infrastructure Regulation

EMT Electronic money token
EPC European Payments Council

ESA Euroclear SA/NV

ESCB European System of Central Banks

ESES Euroclear Settlement of Euronext-zone Securities
ESMA European Securities and Markets Authority

EU European Union

FCA Financial Conduct Authority
FMI Financial market infrastructure
FSB Financial Stability Board

FSMA Financial Services and Markets Authority

FX Foreign exchange

G-SIB Global systemically important bank

G-SIFI Global systemically important financial institution

HLE High Level Expectation

IBAN International Bank Account Number ICSD International central securities depository

IFR Regulation on interchange fees for card-based payment transactions

IOSCO International Organisation of Securities Commissions

IP Instant Payments

ISAC Information sharing and analysis centre

LSI Less significant institution
LVPS Large-Value Payment Systems

MCE Mastercard Europe

MCMS Mastercard Clearing Management System

MiCA Markets in Crypto-Assets

MoU Memorandum of Understanding

NCA National competent authority

NCB National central bank

ORPS Other retail payment system

O-SII Other systemically important institution

OTC Over the counter

PFMIs CPMI-IOSCO Principles for FMIs

PI Payment institution

PIRPS Prominently important retail payment system
PISA Payment instruments, schemes, and arrangements

PISP Payment initiation service provider

POS Point of sale

PSD Payment Services Directive
PSP Payment Service Provider
PSU Payment Service User
PVP Payment versus payment

RPS Retail payment system

RRP Recovery and resolution planning RTS Regulatory Technical Standard SCA Strong Customer Authentication
SCT Inst SEPA instant credit transfer
SEPA Single European Payments Area
SI Systemically-relevant credit institution
SIPS Systemically important payment system
SIRPS Systemically important retail payment system

SSM Single supervisory mechanism SSS Securities settlement system

SWIFT Society for Worldwide Interbank Financial Telecommunication

T2 TARGET2

T2S TARGET2-Securities
TTP Third-party provider