

THE BANK OF NEW YORK MELLON S.A./N.V.

# Pillar 3 Disclosure June 30, 2018

## **Contents**

1	Introduction	6□
1.1	Purpose of Pillar 3	7□
1.2	Disclosure Policy	7□
1.3	Confidential and Non Material Information	8□
1.4	Board Approval	8□
1.5	Scope of Application	8□
1.6	Organisational Structure	9□
1.7	Footprint	10□
1.8	Core Business Lines	11 □
1.9	Key Metrics	12□
2	Own Funds	16□
3	Capital Requirements	20□
3.1	Calculating Capital Requirements	
4	Risk Management Objectives and Policies	22□
4.1	Risk Objectives	
4.2	Risk Governance	
4.3	Risk Management Framework	
4.4	Risk Register	
4.5	Risk Appetite	
4.6	Risk Assessment Methodology and Reporting Systems	32□
4.7	Escalation of Risks and Issues	
4.8	Recovery and Resolution Planning (RRP)	
5	Credit Risk	36□
5.1	Definition and Identification	37□
5.2	Credit Risk Management Framework	37□
5.3	Credit Risk Management	37□
5.4	Monitoring and Reporting	38□
5.5	Analysis of Credit Risk	38□
5.6	Analysis of Past Due and Impaired Exposures	38□
6	Credit Risk Mitigation	<b>43</b> 🗆
6.1	Netting	43□
6.2	Collateral Valuation and Management	43□
6.3	Collateral Types	43□
6.4	Guarantors and Credit Derivative Counterparty	44□
6.5	Wrong-way Risk	44□
6.6	Credit Concentration Risk	44□



7	External Credit Rating Assessment Institutions (ECAIs)	<b>46</b>
<b>8</b> 8.1	Counterparty Credit Risk Credit Valuation Adjustment	<b>48</b>
9	Market Risk	<b>51</b> 🗆
10	Operational Risk	<b>52</b>
10.1	Operational Risk Management Framework	52□
10.2	Capital Resource Requirement	57□
11	Leverage	<b>58</b>



## **Index of Tables**

Table	1:	Capital ratios	14□
Table	2:	Own fund, full reconciliation	16□
Table	3:	Composition of regulatory capital	17□
Table	4:	Own funds disclosure template	17□
Table	5:	Capital instruments	19□
Table	6:	Capital requirements	21□
Table	7:	Credit quality of exposures by counterparty type	39□
Table	8:	Credit quality of exposures by industry	40□
Table	9:	Credit quality of exposures by country	41□
Table	10:	Aging of past-due exposures	41□
Table	11:	Credit risk mitigation techniques - overview	45□
Table	12:	Credit risk exposure and Credit Risk Mitigation (CRM) effects	46□
Table	13:	Credit risk exposure by asset class and risk weight post CCF and CRM	47□
Table	14:	Analysis of the counterparty credit risk (CCR) exposure by approach	49□
Table	15:	Credit valuation adjustment capital charge	49□
Table	16:	CCR exposures by exposure class and risk weight	50□
Table	17:	Impact of netting and collateral held on exposure values	50□
Table	18:	Leverage ratio summary	59□
Table	19:	Leverage ratio common disclosure	59□
Table	20:	Composition of on-balance sheet exposures	60□

Any discrepancies between the totals and sums of components within the tables and graphs within this report are as a result of roundings.



# **Appendices**

Appendix 1 Other Risks	<b>61</b>
Liquidity Risk	61□
Business and Financial Risk	61□
Concentration Risk	63
Group Risk	63
Model Risk	64
Strategic Risk	64
Country Risk	64
Pension Obligation Risk	64
Appendix 2 Glossary of Terms	<b>65</b>
Appendix 3 CRD IV Reference	<b>68</b>
Appendix 4 Capital instruments terms and conditions	<b>74</b>



#### 1 Introduction

These Pillar 3 disclosures are published for The Bank of New York Mellon SA/NV ('BNYM SA/NV' or the 'Company'), in line with the disclosure principles of the National Bank of Belgium<sup>1</sup> ('NBB'), the Capital Requirements Directive<sup>2</sup> ('CRD IV') and the Capital Requirements Regulation<sup>3</sup> ('CRR'), complementing the annual disclosures of the financial statements.

These disclosures cover The Bank of New York Mellon SA/NV, its subsidiary undertaking and branches as at 30 June 2018.

These disclosures were approved by the BNYM SA/NV Executive Committee ('ExCo') on 24 September 2018.

The following risk metrics present BNYM SA/NV's key risk components as at 30 June 2018. Please see page 14 for the full comprehensive list of capital ratios.

**Common Equity Tier 1 ratio** 

54.9%

31-Mar-18: 61.3%

**Common Equity Tier 1 capital** 

€2,737m

31-Mar-18: €2,748m

**Total Risk Weighted Assets** 

€4,983m

31-Mar-18: €4.485m

Basel III leverage ratio

7.0%

(This ratio is for information only. BNYM SA/NV is not subject to a binding leverage requirement)

31-Mar-18: 6.9%



<sup>&</sup>lt;sup>1□</sup>NBB Circular 2015\_25: Orientations relatives à la publication d'informations (Pilier III, CRD IV), 3 September 2015.

<sup>&</sup>lt;sup>2□</sup>Directive 2013/36/EU on access to the activity of credit institutions and the prudential supervision of credit institutions and investment firms, amending Directive 2002/87/EC and repealing Directives 2006/48/EC and 2006/49/EC, 26 June 2013.

<sup>&</sup>lt;sup>3□</sup>Regulation (EU) No 575/2013 on prudential requirements for credit institutions and investment firms and amending Regulation (EU) No 648/2012, 26 June 2013.

#### 1.1 Purpose of Pillar 3

The aim of the Pillar 3 disclosures is to provide market participants with accurate and comprehensive information regarding the risk profile of BNYM SA/NV, including key information around on the scope of application, capital, risk exposures, risk assessment processes, enabling users to better understand and compare its business, its risks and capital adequacy.

To that end, Pillar 3 principles require disclosure of risk management objectives and policies for each of the following categories of risk and relevant quantitative risk assessment disclosures:

- Credit risk
- · Counterparty credit risk
- Market risk
- Credit valuation adjustment
- Securitisation
- Operational risk
- Interest rate risk in the banking book

These disclosures focus only on those risk categories that are relevant to BNYM SA/NV.

Where appropriate, the disclosures also include comparatives for the prior year and an analysis of the more significant movements to provide greater insight into the risk management practices of BNYM SA/NV and its risk profile.

In addition, Pillar III disclosures include detailed information on remuneration policies and practices for members of staff whose activities have a material impact on BNYM SA/NV's risk profile.

#### 1.2 Disclosure Policy

Pillar 3 disclosures for BNYM SA/NV and its only subsidiary, Frankfurter Service Kapitalverwaltungs-Gesellschaft mbH ('BNYMSKVG'), are published at a fully consolidated level.

Pillar 3 disclosures are approved by The Bank of New York Mellon SA/NV's Executive Committee ('ExCo'), that has verified that they are consistent with formal policies adopted regarding production and validation.

Wherever possible and relevant, the Board will ensure consistency between Pillar 3 disclosures, Pillar 1 reporting and Pillar 2 ICAAP content, e.g., disclosure about risk management practices and capital resources at year end. Unless indicated otherwise, information contained within the Pillar 3 disclosure has not been subject to external audit.

Disclosure will be made annually and will be published in conjunction with the date of publication of the financial statements. Following publication of the EBA guidelines on disclosure requirements under Part Eight of Regulation (EU) No 575/2013 of December 2016, BNYM SA/NV will also publish quarterly and semi-annual disclosures effective from 1 January 2018. BNYM SA/NV will reassess the need to publish some or all of the disclosures more frequently in light of any significant change to the relevant characteristics of its business including disclosures about capital resources and adequacy, information about risk exposure and other items prone to rapid change.

Disclosures will be published on The Bank of New York Mellon Group website (bnymellon.com - Pillar3), see section investor relations, financial reports, other regulatory filings on the Company's website.

Pillar 3 disclosures are prepared solely to meet Pillar 3 disclosure requirements and for no other purpose. These disclosures do not constitute any form of financial statement on the business nor do they constitute any form of contemporary or forward looking record or opinion about the business.



BNYM SA/NV undertakes no obligation to revise or to update any forward looking or other statement contained within this report regardless of whether or not those statements are affected as a result of new information or future events.

#### 1.3 Confidential and Non Material Information

The Board may omit one or more disclosures if the information provided is not regarded as material. The criterion for materiality used in these disclosures is that BNYM SA/NV will regard as material any information where omission or misstatement could change or influence the assessment or decision of a user relying on that information for the purpose of making economic decisions.

Furthermore, the Board may omit one or more disclosures if the information provided is regarded as proprietary or confidential. Information is regarded as proprietary if disclosing it publicly would undermine BNYM SA/NV's competitive position or the competitive position of the BNY Mellon group. It may include information on products or systems which, if shared with competitors, would render investment in BNYM SA/NV or the BNY Mellon group less valuable. In such circumstance, the Board will state in its disclosures the fact that specific items of information are not disclosed and the reason for non-disclosure. In addition, it will publish more general information about the subject matter of the disclosure requirement except where this is classified as proprietary or confidential.

#### 1.4 Board Approval

The established comprehensive controls and procedures in the form of templates, reviews, sign-offs and cross checking of data to ensure accuracy, consistency and completeness of the disclosures have been adhered to with approval by the Chief Finance Officer and Chief Risk Officer. The disclosure was also approved for publication by the ExCo on 24 September 2018. The ExCo approved the adequacy of BNYM SA/ NV's risk management arrangements, providing assurance that the risk management systems put in place are adequate with regard to BNYM SA/NV's profile and strategy.

#### 1.5 Scope of Application

The Pillar III disclosures have been produced for BNYM SA/NV on a consolidated basis, including its branches and (fully) consolidated subsidiary. BNYM SA/NV is a credit institution incorporated in Belgium. It is a subsidiary of The Bank of New York Mellon, a New York banking corporation with trust powers, having its principal office in New York, which is itself a subsidiary of The Bank of New York Mellon Corporation (BNY Mellon), the ultimate parent company of the BNY Mellon Group.

BNYM SA/NV is subject to dual supervision in Belgium: for market conduct matters, supervision is exercised by the Financial Services and Markets Authority (the 'FSMA') while for prudential matters, supervision is exercised by the European Central Bank (the 'ECB') together with the National Bank of Belgium (the 'NBB'), acting as National Competent Authority, as BNYM SA/NV has been identified as a significant bank within the Single Supervisory Mechanism. BNYM SA/NV also qualifies as a Belgian assimilated settlement institution and is directly supervised by the NBB in this respect. Its seven branches and consolidated subsidiary ('BNYMSKVG') are also subject to local supervision by the following national regulators:

Name	Туре	Regulator
Amsterdam Branch	Branch	De Nederlandsche Bank (DNB)
Dublin Branch	Branch	Central Bank of Ireland (CBI)
Frankfurt Branch	Branch	Deutsche Bundesbank (DB) & Federal Financial Supervisory Authority / Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)



Name	Туре	Regulator□
London Branch	Branch	Prudential Regulatory Authority (PRA) Financial Conduct Authority (FCA)
Luxembourg Branch□	Branch	Commission de Surveillance du Secteur Financier (CSSF)
Paris Branch	Branch	Autorité Du Contrôle Prudentiel (ACPR), Banque De France (BD)□
Milan Branch	Branch	Banca D'Italia (BI)□
BNYMSKVG	Subsidiary	Bundesanstalt für Finanzdienstleistungsaufsicht (BaFin)□

### 1.6 Organisational Structure

BNYM SA/NV is a Belgian credit institution and is also recognized as a Belgian assimilated settlement institution. BNYM SA/NV has its registered office in Brussels and is a wholly owned subsidiary of The Bank of New York Mellon (99.9999% of share capital - BNY International Financing Corporation holds one share in BNYM SA/NV).

BNYM SA/NV provides services on a passported basis through its headquarters in Brussels and its branches in Amsterdam, Dublin, Frankfurt, London, Luxembourg, Milan and Paris. BNYM SA/NV has also a subsidiary in Frankfurt, BNYMSKVG, and a representative office in Copenhagen. Pursuant to the EU single market directives, BNYM SA/NV's operations are passported in the following 11 territories: Iceland, Finland, Sweden, Denmark, Norway, Spain, Greece, Cyprus, Austria, Portugal and Italy. Some of those countries apply restrictions to passporting rights, in accordance with the local transpositions of the EU directives. BNYM SA/NV complies with these restrictions and adapts its operations accordingly.

BNYM SA/NV was established in 2008 with the aim of becoming BNY Mellon's main banking subsidiary in Continental Europe. During 2009, part of the business of the Brussels Branch of BNY Mellon was integrated into BNYM SA/NV, forming the current Brussels Head Office. As part of BNY Mellon's strategy to consolidate its legal entity structure in Europe, BNYM SA/NV acquired branches in Amsterdam, London, Frankfurt and Luxembourg further to the merger with BNY Mellon GSS Acquisition Co. (Netherlands) BV on October 1, 2009. On June 1, 2011, further to the merger with The Bank of New York Mellon's acquired German subsidiary, BNY Mellon Asset Servicing GmbH, BNYM SA/NV significantly expanded the activities of its Frankfurt branch and Frankfurter Service KapitalverwaltungsGesellschaft mbh became BNYM SA/NV's fully owned subsidiary under the name of BNY Mellon Service KapitalverwaltungsGesellschaft (BNYMSKVG). On December 1, 2011, BNYM SA/NV opened a branch in Paris. On February 1, 2013, BNYM SA/NV opened a new branch in Dublin as a result of the cross-border merger with The Bank of New York Mellon (Ireland) Limited. An additional branch in Milan was created on April 1, 2017 as a result of the merger of The Bank of New York Mellon (Luxembourg) S.A. into BNYM SA/NV and the Luxembourg Branch of BNYM SA/NV significantly expanded its activities as a result of this merger.

Effective November 4, 2014, the ECB as part of Single Supervisory Mechanism (SSM) became the principal regulator for BNYM SA/NV along with the NBB, acting as National Competent Authority. BNYM SA/NV is also supervised by the FSMA which is responsible for the integrity of the financial markets and fair treatment of financial consumers in Belgium pursuant to the Act of 2 August 2002 on the supervision of the financial sector and on financial services.

On November 20, 2015, BNYM SA/NV was designated as a domestic systemically important institution (referred to in the CRD IV as an "other systemically important institution" or "O-SII") in Belgium.

The entity structure of BNYM SA/NV is set out below.



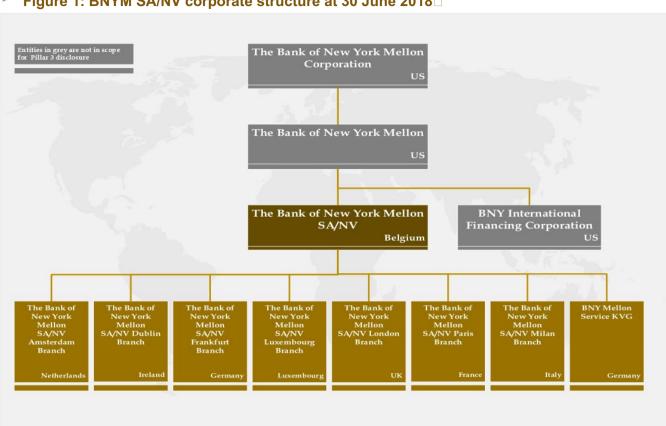


Figure 1: BNYM SA/NV corporate structure at 30 June 2018□

#### Basis of consolidation for Pillar 3 Disclosure

Entity name	Consolidation basis	Services provided
The Bank of New York Mellon SA/NV	Fully consolidated	Belgian credit institution and is also recognized as a Belgian assimilated settlement institution who's services include; Asset servicing, Issuer services, Clearing, Markets and Client Management
BNY Mellon Service KVG	Fully consolidated	A capital investment company KVG is an independent provider of fund administration services

#### 1.7 Footprint

Within BNY Mellon, BNYM SA/NV is usually referred to as 'The European Bank' and remains strategically important for BNY Mellon as the primary contracting entity for Investment Servicing in Europe. BNYM SA/NV is a global custodian for BNY Mellon. Assets are held worldwide on behalf of other BNY Mellon entities through relationships with third-party sub-custodians or with central securities depositories.

BNYM SA/NV manages a network of approximately 100 sub-custodian relationships utilised by BNY Mellon and facilitates the expansion of BNY Mellon into other EU countries through the establishment of a network of branches or passporting of services.

To create a more efficient operating model and respond to increasing demands from regulators in the US, UK and EMEA, the BNY Mellon EMEA Operating Model proposed to re-align the EMEA activities of BNY Mellon around Three Banking Entities in EMEA. To facilitate the proposed model, a new global booking principle and a Dual Custody model will be implemented within BNY Mellon over the next few years. This



rationalized, more efficient and simple structure will give BNYM SA/NV flexibility for growth by freeing up capital, allowing more room for new products and services and focusing its business on EU clients.

The rationales behind the Three Bank Model initiative include:

- ■ Reduction of complexity in Legal Entity structure as well as respective contractual framework;
- Improvement of resolvability by removing duplication, potential conflicts and improving transparency on risks:
- Viability of businesses with appropriate client base, operations / balance sheet size, capital and management;
- □ Appropriate alignment to client needs and improvement of client experience through more efficient service delivery;
- Delivery of shareholders value through more efficient use of resources, liquidity and capital and improved client growth and retention.

The **outcome** of the Three Bank Model is illustrated in figure 2 below:

#### SA/NV 'European Bank' To be the 'European Bank' for the Group, providing access to T2S and European markets To be the global custodian and fund servicing bank for EU Institutional Bank 'US Bank' clients (excl. UK, incl. Switzerland) NY Head Office: Preferred client booking To be the contracting entity for other business lines within location for global custody and operation of BNYM (e.g. Corporate Trust) the primary global custody network · Brussels Head Office: Preferred booking location London Branch: Primary booking location Frankfurt Branch: Liquidity access point for Euros on T2 for EMEA clients that do not need a European Bank, not requiring UK Trustee and Depositary services · Brussels Branch: Legacy business in continental Europe BNYMIL 'UK Bank' **BNYM EMEA** Three Bank Model Frankfurt Branch: Liquidity access point for . To be the Bank for UK clients and Trustee Euros on T2 and Depositary for UK funds and Luxembourg funds of UK clients Institutional bank · London Head Office: Preferred booking 'US Bank' location BNYMIL Appoints US Bank as global sub-custodian and the SA/NV for access to T2S and

Figure 2: Three Bank Model

#### 1.8 Core Business Lines

BNYM SA/NV has a number of core business lines including Asset Servicing, Corporate Trust, Foreign Exchange, Collateral Management and Segregation and Liquidity Services.



European markets

#### **Description**

Asset Servicing primarily comprises Global and Local Custody services but also includes Depositary Services, Institutional Accounting, Fund Accounting, Transfer Agency services, Capital Markets Trading Desk, Derivatives 360° - Middle Office and Derivatives Margin Management, Middle Office Operations Services and Depositary Receipts.

Global Custody is the main service provided by BNY Mellon SA/NV. It provides custodial services for clients including services selected and utilized by owners of securities (or their advisors) to assist in providing instruction capture, settlement, corporate actions and income and tax services related to their securities. Global Custody collects all revenues on behalf of its clients and alerts clients to take all required actions as owners.

BNY Mellon SA/NV is providing global custodian services to international clients and BNYM SA/NV is a global custodian for BNY Mellon. Assets are held worldwide on behalf of other BNY Mellon entities through relationships with third-party sub-custodians or with central securities depositories.

As of 31 December 2017, BNY Mellon SA/NV had €3.6 trillion in Assets under Custody.

#### Issuer Services □ BNYM SA/NV offers Corporate Trust services, acting in a broad range of agency roles including, but not limited to: trustee, registrar, issuing and paying agent, common depository, Corporate Trust□ (CT)□ exchange agent, custodian and collateral / portfolio administration. BNY Mellon SA/NV Dublin Branch performs certain operational activities relating to Depository **Depository** Receipts -Receipts, predominantly issuance and cancellation. Depository Receipts facilitate crossborder investment solutions for companies and investors. They are negotiable financial securities issued by a bank to represent foreign companies' publicly traded securities, allowing them to have their stocks traded in foreign markets. Clearing, Markets and Client Management BNYM SA/NV provides foreign exchange services that enable clients to achieve their Foreign Exchange

(I A)	
Collateral	
Management and	
Segregation	

investment, financing and cross-border objectives.

BNYM SA/NV acts solely as a servicing entity providing services contracted by BNYM acting as tri-party agent for transactions related to securities lending and repurchase ("repo" agreements, or acting as an administrator, providing segregation services for any type of transaction requiring segregation of collateral.

**Liquidity Services** and Segregation **Broker-Dealer** 

Services

BNYM SA/NV provides sales and client service to clients enabling clients to view, transact and generate reporting for their daily liquidity activities via an on-line platform.

Broker-Dealer Global Clearing provides Settlement and Custody services for fixed-income and equity securities.

BNY Mellon SA/NV provides most of these products to its international client base. BNY Mellon SA/NV clients contract with BNY Mellon SA/NV for all of the above services except Depositary Receipt Services. and, Collateral Management and Segregation. BNY Mellon SA/NV only provides the latter services to other legal entities within The Bank of New York Mellon (BNY Mellon) group. BNY Mellon SA/NV's main service is Global Custody (part of Asset Servicing).

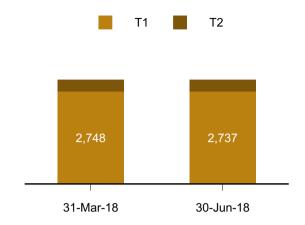
#### 1.9 **Key Metrics**

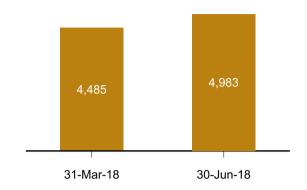
The following risk metrics reflect BNYM SA/NV's risk profile:





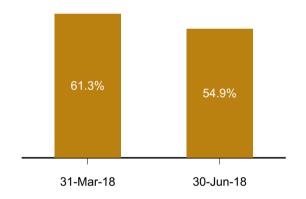
## Risk Weighted Assets (€m)

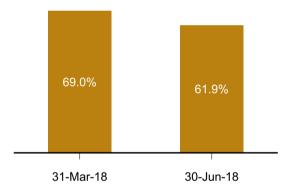




## CET1 ratio trend

## Total capital ratio trend

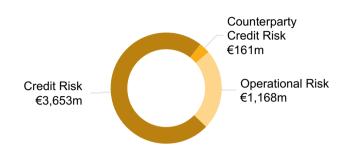


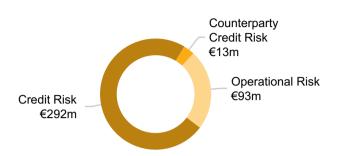


Risk exposure by counterparty

(€4,983m) 30-Jun-18

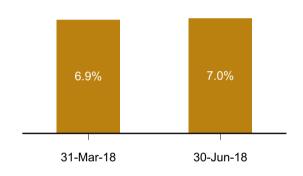
# Capital requirements by counterparty (€399m) 30-Jun-18

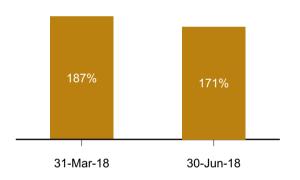




## Leverage ratio trend

## NSFR trend





## Table 1: Capital ratios

Own Funds	30-Jun-18	31-Mar-18	31-Dec-17□
Available capital (€m)			
Common Equity Tier 1 (CET1)	2,737	2,748	2,774
Tier 1 capital	2,737	2,748	2,774
Tier 2 capital	346	346	346
Total capital	3,082	3,094	3,120
Risk-weighted assets (€m)			
Total risk-weighted assets (RWA)	4,983	4,485	3,740
Risk-based capital ratios as a percentage of RWA			
CET1 ratio	54.9%	61.3%	74.2%
Tier 1 ratio	54.9%	61.3%	74.2%□
Total capital ratio	61.9%	69.0%	83.4%□

Own Funds□	30-Jun-18	31-Mar-18	31-Dec-17□
Additional CET1 buffers requirements as a percentage of RWA			
Capital conservation buffer requirement	1.875%	1.875%	1.250%
Countercyclical buffer requirement	0.076%	0.035%	0.044%
Other systemically important institution buffer	0.750%	0.750%	0.500%
Basel III leverage ratio			
Total Basel III leverage ratio exposure measure (€m)□	39,220	39,966	38,559□
Basel III leverage ratio	7.0%	6.9%	7.2%
Liquidity Coverage Ratio (LCR)			
Total HQLA (€m)	21,304	22,121	23,186
Total Net Cash Outflow (€m)	13,422	12,946	15,459
LCR	158.7%	170.9%	150.0%
Net Stable Funding Ratio (NSFR)			
Total Available Stable Funding (€m)	10,185	10,697	9,548
Total Required Stable Funding (€m)	5,957	5,717	5,303
NSFR	171.0%	187.1%	180.0%

Note: 31 December 2017 capital and leverage ratios include yearly P/L.

#### Key highlights and post balance sheet date events

The following took place in the second quarter of 2018 and are considered as important events that impacted BNYM SA/NV:

- •□ Continued transfer of clients from BNYM SA/NV Head office to BNYMIL UK Head office during the quarter as part of BNYM EMEA Operating model. The transfer resulted in a decrease of Third Party Deposits partially offset by higher Intercompany Deposits
- •□ 2Q 2018 Spot Balance Sheet stands at €36.9 Bn under IFRS, down by -€1.3 Bn (-3%) compared to 1Q 2018. This is largely explained by lower Third Party Deposits (-€2.3 Bn) partially offset by higher Intercompany Deposits (+€0.9 Bn). On the Assets side, the decrease is reflected in lower Intercompany Nostro & Placements (-€1.4 Bn) and lower Securities (-€0.5 Bn), partially offset by higher Third Party Nostro and Placement (+€0.5 Bn)



#### 2 **Own Funds**

The following risk metrics present BNYM SA/NV's risk components as at 30 June 2018.

€2,737m **Common Equity Tier 1 capital** 

31-Mar-18: €2,748m

**Total own funds** 

€3,082m

31-Mar-18: €3.094m

**Total Risk Weighted Assets** 

€4,983m

31-Mar-18: €4,485m

This section provides an overview of the balance sheet items used to calculate own funds and the composition of BNYM SA/NV's regulatory capital. The scope of consolidation and the method for consolidation used for the balance sheet in accordance with International Financial Reporting Standards (IFRS) are identical to the scope of consolidation and the method for consolidation used in the prudential framework. The major difference between the consolidated own funds as published in the financial statements and the regulatory own funds, comes from the regulatory adjustments required by the prudential Regulation No 575/2013 (CRR). The Pillar 3 disclosures are published in accordance with prudential requirements.

## Table 2: Own fund, full reconciliation

This table shows a reconciliation of BNYM SA/NV's balance sheet equity prepared in accordance with International Financial Reporting Standards (IFRS) and the regulatory balance sheet equity calculated under prudential rules. As mentioned above, there is no difference between the scope and method for consolidation between the financial statements and prudential rules. Hence, the only differences are stemming from the prudential regulatory adjustments in accordance with CRR.

At 30 June 2018 (€m)	30 June 2018	30 March 2018	31 December 2017
Consolidated equity	3,260	3,211	3,206
Paid up capital	1,723	1,723	1,723
Share premium	33	33	33
Other equity	20	20	19
Retained earnings and other reserves	1,401	1,401	1,312
Accumulated other comprehensive income	(16)	(3)	28
Profit and loss account	97	36	91
Regulatory adjustments	(523)	(463)	(433)

At 30 June 2018 (€m)	30 June 2018	30 March 2018	31 December 2017
Value adjustments due to the requirements for prudent valuation	(13)	(14)	(11)
Goodwill and other intangible assets (net of related tax liability)	(412)	(413)	(414)
Interim P&L	(97)	(36)	_
Adjustments due to transitional provisions	_	_	(8)
Common Equity Tier 1 (CET1) capital	2,737	2,748	2,774
Tier 2 capital	346	346	346
Total capital	3,082	3,094	3,120

## Table 3: Composition of regulatory capital

This table summarizes the composition of BNYM SA/NV's regulatory capital including all regulatory adjustments.

Own Funds (€m)□	30-Jun-18	31-Mar-18	31-Dec-17□
Common Equity Tier 1 (CET1)			
Capital instruments	1,757	1,757	1,757
Retained earnings	1,401	1,401	1,403
Reserves and other comprehensive income	4	17	47
CET1 Adjustments	(425)	(427)	(432)
Total CET1 capital	2,737	2,748	2,774
Additional Tier 1 (AT1) capital			
Total AT1 capital	_	_	_
Total Tier 1 capital	2,737	2,748	2,774
Tier 2 (T2) capital			
Capital instruments and subordinated loans	346	346	346
Total T2 capital	346	346	346
Total Own Funds	3,082	3,094	3,120

#### Regulatory adjustments:

In accordance with articles 36 and 37 of CRR, amounts of goodwill and other intangible assets, net of their related deferred tax liabilities, are deducted from the CET1. Also, in accordance with article 62 of CRR, subordinated loans meeting conditions of article 63 are considered as Tier 2 capital. BNYM SA/NV's regulatory capital is defined by CRD IV and includes:

- Common equity tier 1 capital which is the highest quality form of regulatory capital under CRD IV comprising common shares issued and related share premium, retained earnings and other reserves, less specified regulatory adjustments.
- Tier 2 capital which is a component of regulatory capital under CRD IV, comprising qualifying subordinated loan capital.

## Table 4: Own funds disclosure template

The table below shows the own funds disclosure at 30 June 2018.



Equity instruments, reserves and regulatory adjustments (€m)	Amount at disclosure date
CET1 capital: Instruments and reserves	
Capital instruments and the related share premium accounts	1,757
of which: ordinary shares	1,757
Retained earnings	1,499
Accumulated other comprehensive income (and other reserves, to include unrealised gains and losses under the applicable accounting standards)	4
Amount of qualifying items referred to in Article 484(3) and the related share premium accounts subject to phase out from CET1	_
CET1 capital before regulatory adjustments	3,260
CET1 capital: regulatory adjustments	
Goodwill and intangible asset deductions	(412)
Additional value adjustments (prudent valuation)	(13)
Regulatory adjustments applied to Common Equity Tier 1 in respect of amounts subject to pre-CRR treatment □	_
Year-end non eligible earning adjustments	(97)□
Total regulatory adjustments to CET1	(523)
CET1 capital	2,737
AT1 capital	_
Tier 1 (T1) capital	2,737
Tier 2 (T2) capital: Instruments and provisions	
Total regulatory adjustments to T2 capital	_
T2 capital	346
Total capital	3,082□
Total risk weighted assets	4,983
Capital ratios and buffers	
CET1 (as a percentage of risk exposure amount)	54.9%
T1 (as a percentage of risk exposure amount)	54.9%
Total capital (as a percentage of risk exposure amount)	61.9%
Capital conservation buffer requirement	1.875%
Countercyclical capital buffer requirement	0.076%
Other Systemically Important Institution (0-SII) buffer	0.750%
Amounts below the thresholds for deduction (before risk weighting)	
Deferred tax assets arising from temporary differences(amount below 10% threshold, net of related tax liability where the conditions in Article 38(3) are met)	1

In accordance with article 48 and following the respect of all conditions laid down in this article, deferred tax assets arising from temporary differences that are equal to or less than 10% of the CET1 are exempted from deduction from CET1. BNYM SA/NV deferred tax assets amount of € 0.9 M is below the thresholds for deduction and is subject to 250% RW. Deferred tax assets arising from temporary differences are the only items exempted from own funds deduction at BNYM SA/NV.





## **Table 5: Capital instruments**

This table provides a description of the main features of regulatory instruments issued and included as tier 2 capital in table 3 at 30 June 2018.

Capital instruments main features (1)	Loan 1	Loan 2
Legal entity issuer	The Bank of New York Mellon SA/NV	The Bank of New York Mellon SA/NV
Governing law(s) of the instrument	Belgian law	Belgian law
Regulatory treatment		
Capital classification	Tier 2	Tier 2
Туре	Subordinated debt	Subordinated debt
Capital amount (€)	92,500,000	253,000,000
Issue price (€)	92,500,000	253,000,000
Accounting classification	Other financial liabilities	Other financial liabilities
Original date of issuance	October 1st, 2009	July 23rd, 2010
Perpetual or dated	Perpetual	Dated
Maturity date	No maturity	July 22nd, 2040
Coupons / dividends		
Fixed or floating dividend/coupon	Fixed	Fixed□

Note (1): this table is based on Annex II of ITS Regulation (EU) No. 1423/2013, not applicable lines are omitted.

#### **Subordinated liabilities**

Both loans are considered as tier 2 capital for regulatory purposes and each contract allows the NBB to request the suspension of the repayment of the loan if BNYM SA/NV does not comply with the applicable requirements on own funds or based on the financial situation and the solvability of BNYM SA/NV.

There is no collateral required as per loan agreements for the two loans. The full terms and conditions of all capital instruments can be found in appendix 4 of this disclosure.

## 3 Capital Requirements

The following risk metrics present BNYM SA/NV's risk components as at 30 June 2018.  $\square$ 

Total risk exposure amount

€4,983m

31-Mar-18: €4,485m

**Total capital requirement** 

€399m

31-Mar-18: €359m

BNYM SA/NV's capital plan aims to ensure that it holds an appropriate amount of capital to support its business model, allowing for prudent management of the business, given a range of plausible but severe stress scenarios. Potential capital shortfalls are identified over a 3 year period and capital plans adjusted accordingly. The plan is reflective of BNYM SA/NV's risk appetite, which details a commitment to a strong balance sheet characterised by strong liquidity, superior asset quality and a capital structure which supports the risk taking activities and has the ability to absorb losses.

The plan is developed with input from Finance, Risk, Treasury and the business lines.

Incorporating the projected earnings based on its business plan, BNYM SA/NV generates a 3 year forecast which forms the base foundation for financial modelling and stress testing used as part of the ICAAP process.

The capital plan effectively incorporates a view of BNYM SA/NV's current business model, the risks associated with that model, and an assessment of how those risks contribute to the amount of capital required, as per internal and external regulatory criteria. The capital plan is subject to Executive Committee ('ExCo') and Board approval (upon recommendation of the Risk Committee of the Board) and the performance metrics are reviewed by the Belgium Asset and Liability Committee ('Belgium ALCO').

#### 3.1 Calculating Capital Requirements

CRD IV allows for different approaches for calculating capital requirements. BNYM SA/NV applies the standardised approach under Pillar 1 where risk weights are based on the exposure class to which the exposure is assigned and its credit quality. These risk weights are used to assess the requirements against credit exposures are consistent across the industry. The standardised approach is used for calculating the risk weights assigned to each risk component including credit risk, counterparty credit risk, market risk and operational risk.



## Table 6: Capital requirements

This table shows the risk weighted assets using the standardised approach and their respective capital requirements.

	Risk expos	ure amount	Capital requirements		
Type of risk	30-Jun-18	31-Mar-18	30-Jun-18	31-Mar-18	
Credit risk SA*	3,651	3,203	292	256	
Counterparty credit risk	161	112	13	9	
of which: Mark to market	124	88	10	7	
of which: Credit Valuation Adjustment	37	24	3	2	
Market risk SA*	_	_	_	_	
of which: Foreign exchange position risk	_	_	_	_	
Operational risk	1,168	1,168	93	93	
of which: Standardised approach	1,168	1,168	93	93	
Amounts below the thresholds for deduction (subject to 250% risk weight)	2	2	_	_	
Total	4,983	4,485	399	359	
Total capital			3,082	3,094	
Surplus capital			2,684	2,735	

<sup>\*</sup> SA = Standardised Approach

BNYM SA/NV largely exceeds the minimum capital ratios required to maintain a well-capitalised status and to ensure compliance with regulatory requirements at all times. BNYM SA/NV sets the internal capital target levels higher than the minimum regulatory requirements to ensure there is a buffer which reflects balance sheet volatility. These ratios have been determined to be appropriate, sustainable and consistent with the capital objectives, business model, risk appetite and capital plan.

## 4 Risk Management Objectives and Policies

Given the critical role that BNY Mellon plays supporting clients and its status as a Global Systemically Important Financial Institution (G-SIFI), the financial stability of all of its constituent legal entities, throughout market cycles and especially during periods of market turbulence, is recognised at a BNY Mellon group level as an imperative. Clients and market participants need to have confidence that all of the BNY Mellon's legal entities will remain strong, continue to deliver operational excellence and maintain an uninterrupted service. Therefore BNYM SA/NV and the BNY Mellon group as a whole are committed to maintaining a strong balance sheet and, as a strategic position, assume less risk than many financial services companies.

Whilst BNY Mellon assumes less balance sheet risk than most financial services companies, it does assume a significant amount of operational risk as a result of its business model. As a consequence, BNY Mellon has developed an enterprise risk management program that is designed to ensure that:

- Risk tolerances (limits) are in place to govern its risk-taking activities across all businesses and risk types
- •□ Risk appetite principles are incorporated into its strategic decision making processes
- •□ Monitoring and reporting of key risk metrics to senior management and the board takes place
- There is a capital planning process which incorporates both economic capital modelling and a stress testing programme

The Board has adopted for BNYM SA/NV a conservative risk appetite to maintain a strong capital position and balance sheet throughout all market cycles with strong liquidity, superior asset quality, readily access to external funding sources at competitive rates, and a strong capital structure whilst delivering operational excellence to meet stakeholders' expectations.

#### Risk statement

In accordance with the CSRSFI Circular 2010-1<sup>1</sup> Committee for Systemic Risks and System-relevant Financial Institutions (NBB), Circular to SIFIs, CSRFSI, 26 October 2010, BNYM SA/NV has been identified as a Systemically Important Financial Institution (SIFI) in Belgium and making it a high priority to manage risks appropriately to that significant status.

BNYM SA/NV has adopted a conservative capital risk appetite to maintain a strong capital position and balance sheet throughout all market cycles with strong liquidity, superior asset quality, ready access to external funding sources at competitive rates, and a strong capital structure whilst delivering operational excellence to meet stakeholders' expectations. Any changes to the risk profile are typically due to new business and growth with risks mitigated through the internal governance, controls and risk management practices.

BNYM SA/NV is mainly exposed to credit, market and operational risks, from its investment servicing and custodian services as well as its investment portfolio; these risks are managed through a risk management framework consistent with BNYM Group framework through BNYM SA/NV's own risk management function, organization and governance. Any capital requirements allocated for these risks have been assessed through modeling, stress testing, and sensitivity analysis or through qualitative assessment.

BNYM SA/NV monitors its capital adequacy in accordance with Basel Framework on the basis of Pillar 1 requirements as well as Pillar 2 (Economic Capital). Both concepts are subject to risk appetite metrics.



<sup>&</sup>lt;sup>1</sup> Committee for Systemic Risks and System-relevant Financial Institutions (NBB), Circular to SIFIs, CSRFSI, 26 October 2010

Pillar 1 capital requirement is calculated according to the Basel standardized approach for credit, market and operational risks, and for credit value adjustment. The standard formula is based on weighting factors applied to the balance sheet and profit and loss components. Pillar 1 capital requirement is compared to the own funds and in particular the CET1, Tier 1 and Total Capital, and monitored (daily) against regulatory thresholds triggered by the SREP review and risk appetite. BNYM SA/NV ensures to have sufficient capital to cover Capital requirements and all necessary buffers. The risk appetite sets a 20% buffer on top of the regulatory requirements.

The Economic Capital uses BNYM SA/NV methodologies (most being BNY Mellon methodologies) which follow an approval process including yearly independent validation by BNY Mellon's Model Risk Management Group (MRMG). These methodologies are presented to and approved by BNYM SA/NV Capital and Stress Testing Committee (CSTC), a committee assisting the Executive Committee for the Economic Capital Adequacy related subjects. The Economic Capital calculated for all the material risks are summed (to form the total Economic Capital) and added to the applicable Pillar 1 Regulatory Buffers.

Materiality is based on both quantitative and qualitative criteria. The qualitative criteria rely on a number of factors and the risk register plays there a key role. The risk register is a management tool that provides a high level view of an entity's risk landscape. It is instrumental in forming the risk strategy of the entity and defining risk appetite in the context of the broader organization. Applied to BNYM SA/NV, the risk register enables management to focus on the key risks to which the brand is exposed. The materiality and significance of risks in the Risk Register are based on an assessment of expected frequency and impact magnitude for each risk, both from an inherent (before controls) perspective and from a residual (after controls) perspective. The materiality and significance of risks in the ICAAP on the other hand is based on tail losses.

Given the capital adequacy ratios and capital surplus, BNYM SA/NV concludes that the capital is sufficient at March 31, 2018 to face the risks of the entity. At March 31, 2018:

- •□ The Pillar 1 capital requirement was €359 million, CET1 was €2,748 million; as a result, the CET1 ratio was 61.3%
- •□ The Pillar 2 capital requirement was €1,383 million, compared to available resources of €3,091 million (comprised of AFR and fraction of Tier 2 allowed in the ratio); this results in a capital ratio of 16.5% and a capital surplus of €1,289 million

Internal capital adequacy is calculated quarterly, and approximations are applied in order to estimate the capital needs on a monthly basis. The three-year base case financial forecast is then used in order to project the capital requirements. The base case financial forecast includes projections of the balance sheet and profit and loss elements. The evolution of the balances and profitability, combined with a macroeconomic assessment of the evolution of the risk profile were used in order to determine the evolution of the capital ratios. The macroeconomic assessment was performed in baseline and stressed conditions, whereby the impact on the accounting elements (balances and profitability) were deducted and combined with the deterioration of the risk profile.

BNYM SA/NV internal capital assessment covers risks to its current business as well as known planned activities. The strategic initiatives are included in the financial plan, and so, assessed by capital assessment and stress testing.

BNYM SA/NV conducts stress tests and capital planning analysis. This provides an avenue for macro-economic scenarios, new activities or strategic plans to be assessed. The stress tests results show the resilience of BNYM SA/NV to macro- and micro-economic adverse circumstances. Available mitigant actions were activated to prove the resilience of BNYM SA/NV to severe stress scenarios combining different shocks, including a strategic risk.

BNYM SA/NV's business model implies that its revenues are mainly driven by the fees and commissions it perceives, and less on the net interest income, and this ensures more stability in case of a macro-economic



event. In addition, BNYM SA/NV is usually perceived as a safe haven which will limit the deposits outflow and as such keep the balance sheet liquid. The strategy has a favorable impact on the capital adequacy by its effect on reducing the balance sheet, including the securities portfolio.

#### 4.1 Risk Objectives

The identification, measurement, monitoring and management of risk are essential elements for the success of operations undertaken by BNYM SA/NV, specifically:

- The Board recognises that defining a risk appetite must consider the views of a number of different stakeholders while accounting for business strategy and risk profile
- ☐ The Board sees embedding the risk appetite into the business strategy as essential
- The Board recognises that it cannot mitigate all risks. The risk framework includes standard risk management self-assessment tools that take into account loss history and stress testing to measure and monitor whether or not risk controls in place continue to remain effective
- •□ The Board will seek input from its own and group wide risk committees on a regular basis in its reassessment of appetite and sources of major risks

The Board adopts a prudent appetite to all elements of risk to which BNYM SA/NV is exposed.

#### 4.2 Risk Governance

Risk oversight and management are structured to cover regional level, legal entity and lines of business ('LOB'). A formal governance hierarchy is in place to ensure that all areas of the business can effectively escalate issues through the regional and global structure.

#### 4.2.1 Board of Directors

The Board is composed of a majority of non-executive directors, some of whom are representatives of The Bank of New York Mellon senior management. At least two of the non-executive directors are independent directors (as defined in the Belgian Companies Code). All members of the ExCo also sit on the Board in compliance with Article 24 of the Banking Act. All directors are natural persons.

The Board meets formally once a quarter or more frequently if deemed appropriate. Board meetings can be called whenever the specific needs of the business require it.

The principal responsibilities of the Board, as defined in the Terms of Reference for the Board of Directors include, but are not limited to:

- •□ defining the general business strategy, objectives and values of the Company in line with those of The Bank of New York Mellon
- □ planning and monitoring the implementation of the general business strategy, objectives and values within the Company
- fixing the Company's risk tolerance level and regularly reviewing and approving the strategies and policies relating to the taking, management, follow-up and mitigation of risks
- •□ supervising the management of the Company's significant risks and ensuring adequate resources are allocated to it
- □ approving the capital adequacy position and ensuring changes in the Company consider capital impacts
- □ approving the recovery plan
- □ approving the liquidity recovery plan



- •□ supervising effectively the Executive Committee and the decisions taken by the Executive Committee
- □ drawing up annual and interim reports and accounts
- assessing regularly (at least once per year) the efficiency of the internal organization and system of internal control of the Company and its compliance with applicable laws and regulations
- assessing the proper functioning of the Company's independent control functions (risk, internal audit and compliance); ensuring the integrity of the accounting and financial reporting systems and assessing regularly (at least once per year) the efficiency of the internal control structure, in particular regarding the financial reporting process
- ensuring that the Company's internal governance as translated into its Internal Governance Memorandum is appropriate to its business, size and organization
- □ approving the Internal Governance Memorandum and ensuring it is kept up-to-date and submitted to the supervisory authority
- approving and reviewing regularly (at least once per year) the Company's remuneration policy, and supervising its implementation
- selecting and evaluating the members of the Executive Committee and reviewing the process for the selection, evaluation, and development of other key managers (in particular the Chief Risk Officer, Chief Compliance Officer, Chief Internal Auditor)
- •□ ensuring the succession planning for key managers
- •□ reviewing the Company's processes for protecting the Company's assets and reputation
- •□ approving policies and procedures as may be required by law or otherwise appropriate
- reviewing the Company's processes for compliance with applicable laws, regulations and the internal policies including the Code of Conduct
- overseeing the process of external disclosure and communications

The table below shows the members of the Board and its committees as of 30 June 2018.

Board member	Function at BNYM SA/NV	Name of the other company in which an external function is exercised	Location (country)	Type of activities	Listed company (Y/N)	External mandate (title)	Capital connection with SA/NV (Y/N)
Olivier Lefebvre	Independent Chair of the Board of Directors, Independent Member of the Audit Committee, Independent Member of the Nomination Committee and Independent Member of the Remuneration Committee	Climact sa	Belgium	Environmental consultancy	N	Chairman of the Board	N
		Société Régionale d'Investissement de Wallonie sa (SRIW)	Belgium	Regional Investment Companies	N	Non- executive Director	N
		Ginkgo Management sarl Ginkgo Management sarl II	Luxembourg	Real Estate Fund Management	N	Independent Director	N



		Name of the					
Board member	Function at BNYM SA/NV	Name of the other company in which an external function is exercised	Location (country)	Type of activities	Listed company (Y/N)	External mandate (title)	Capital connection with SA/NV (Y/N)
Marie-Hélène	Independent Chair of the Audit Committee, Independent member of the	CoDiese & GRC & PREF-X SAS	France	Finance consultancy	N	Director	N
Cretu	Remuneration Committee and Independent Member of the Risk Committee	Montpensier Finance	France	Assets Management Company	N	Independent Director	N
Peter Johnston	Member of the Audit Committee						
Hani Kablawi	Member of the Remuneration Committee	Arab Bankers Association London, UK	United Kingdom	Financial services	N	Vice Chairman and Board Member	N
Carol Sergeant	Independent Chair of the Risk Committee, Independent Member of the Audit Committee and Independent	Danske Bank A/S	Denmark	Financial services	Y	Vice Chairman	N
	Member of the Nomination Committee	TP ICAP plc	United Kingdom	Financial services	Υ	Independent director	N
Hedi Ben Mahmoud	Chief Risk Officer Member of the Executive Committee						
Annik Bosschaerts	Chief Operations Officer Member of the Executive Committee						
Eric Pulinx	Deputy Chief Executive Officer Chief Financial Officer	Febelfin Academy - Banking Association	Belgium	Trade association	N	Non- executive Director	N
	Member of the Executive Committee	Delen Private Bank	Belgium	Credit institution	N	Independent director	N
	Member of the	Foreign Bankers'Associati on (FBA)	The Netherlands	Trade association	N	Non- executive Chair	N
Leonique van Houwelingen	Executive Committee	Nederlandse Vereniging van Banken / Dutch Association of Banks (NVB)	The Netherlands	Trade association	N	Non- executive Director	N

Note: Effective from 1 April 2018 Laura Ahto resigned as a Board member and as Chief Executive Officer (CEO) being replaced by Leonique van Houwelingen as CEO.

BNYM SA/NV is committed to diversity and inclusion. This commitment is not only important to BNYM SA/NV's culture and to each director as individuals, it is also critical to BNYM SA/NV's ability to serve its clients and grow its business. BNYM SA/NV recognises the benefits of having individuals with diverse backgrounds, experience and viewpoints on the Board for the different perspective and unique contributions they provide. Board appointments are based on an individual's skill, ability, experience, training, performance, and other



valid role-related requirements. The Terms and Reference of the Board state that at least one third of each gender shall be represented on the Board and on the ExCo and that such distribution should be reached by 2020. As long as this target is not reached, female candidates with proven qualifications shall be preferred over male candidates for any new appointment on the Board.

The Nomination Committee (the "NoCo") is responsible for reviewing the structure, size and composition of the Board (including its skills, knowledge, experience and diversity) and making recommendations to the Board with respect to any Board member's appointment. In identifying suitable candidates for a particular appointment, the NoCo considers candidates on merit and against objective criteria and with due regard for the benefits of diversity on the Board, including gender.

#### 4.2.2 Legal Entity Risk Management

The ExCo has been established by the Board in accordance with Article 24 of the Banking Act and Article 524bis of the Belgian Companies Code and has been entrusted with the general management of BNYM SA/NV with the exception of (i) the determination of the strategy and general policy of BNYM SA/NV and (ii) the powers reserved to the Board by law or the articles of association. The ExCo meets formally at least once a month, and reports to the Board.

The ExCo is responsible for running the general management of BNYM SA/NV within the strategy and the general policy as defined by the Board and for ensuring that the culture across BNYM SA/NV facilitates the performance of business activities with integrity, efficiency and effectiveness.

The ExCo reviews corporate initiatives including strategic initiatives, financial performance, new business initiatives, policy changes, controls and organisational development. The ExCo has responsibility across all Lines of Business conducted by or impacting BNYM SA/NV, its branches or subsidiary.

As described in detail in the ExCo Terms of Reference, the responsibilities of the ExCo in carrying out the general management of the Company mainly relate to corporate responsibilities, control environment, regulatory, stress testing and ICAAP (Internal Capital Adequacy Assessment Process).

The ExCo reports its activities, advises, and makes recommendations to the Board regularly. At least annually, the ExCo assesses the efficiency of the Company's internal organisation and internal controls together with the measures taken to remediate to any identified deficiencies, and reports the same to the Board, the NBB and the external auditor.

The ExCo has established the following committees to assist it in the performance of its duties:

- The Risk Management Committee (RMC)
- The Belgium Asset and Liability Committee (Belgium ALCO)
- The Capital and Stress Test Committee (CSTC)
- The Credit Risk Oversight Committee (CROC)

The ExCo has also delegated authority to Business Acceptance Committees and is also assisted by two councils.

#### Risk Management Committee (RMC)

The key purpose of the RMC is to provide oversight of the risk management process for the underlying businesses, subsidiary and branches of BNYM SA/NV, to ensure that risks are identified, monitored and reported and to ensure that appropriate actions and activities are in place to manage the identified risks. The RMC also plays a central role in ensuring that material change that has the potential to affect BNYM SA/NV is identified in a timely manner and managed in an appropriate fashion.

The aim of the RMC is to establish and maintain a capable, effective forward looking risk organization that is well placed to identify and manage emerging risks for the legal entity including its branches and subsidiary.



The RMC provides risk-based challenge to the Business (first line of defense), establishes and maintains the risk culture, and advises the ExCo as second line of defense on risk matters.

The RMC is responsible for ensuring that risk and compliance activities undertaken by BNYM SA/NV and its underlying branches and subsidiary and businesses are executed in accordance with internal policies and all relevant regulations.

#### Capital and Stress Testing Committee (CSTC)

The purpose of the CSTC is to ensure adequate governance, ownership and understanding of the processes and documentation pertaining to BNYM SA/NV's capital requirements (economic, regulatory, adequacy and allocation), risk model methodologies and stress testing in accordance with the ICAAP governance, BNYM SA/NV Stress Testing policies and Framework whilst taking into consideration the Group's overarching capital, profit and strategic plans.

The CSTC is an empowered decision making body under authority delegated by the ExCo and subject to corporate policy, legislation and external regulation.

#### Belgium Asset and Liability Committee (Belgium ALCO)

The Belgium ALCO is responsible for overseeing the asset and liability management activities on the balance sheet of BNYM SA/NV and its branches and subsidiary and for ensuring compliance with all liquidity, interest rate risk and capital related regulatory requirements.

The Belgium ALCO holds meetings on regular (primarily monthly) basis but ad hoc meetings can also be called at the discretion of the Chair.

#### **Credit Risk Oversight Committee (CROC)**

The key purpose of the CROC is to oversee all forms of credit risk, to oversee controls of credit risk associated with BNYM SA/NV banking business and to ensure compliance with BNYM SA/NV credit policies. The activities of the CROC are reported to the ExCo as well as to the RMC where relevant.

#### **Business Acceptance Committees (BAC)**

A BAC is responsible for the acceptance, oversight and guidance of new and existing businesses and clients for each of the following business lines for all BNY Mellon legal entities across EMEA: Asset Servicing & AIS, Corporate Trust, Depositary Receipts, Markets and Broker-Dealer & Advisory Services.

#### Councils assisting the ExCo

In addition to the above committees, the ExCo has mandated two councils to assist them:

- •□ The Technology and Information Risk Council (TIRC) derives its authority and mandate from the ExCo through the RMC. The purpose of the TIRC is to provide a detailed review of all key Client Technology Solutions (CTS) services and emerging risk for reporting to the RMC
- •□ The Belgium Management Council (BEMCO), with the purpose to provide leadership for BNY Mellon employees in Belgium, regardless of legal entity, functional, or business affiliation. The BEMCO is responsible for overseeing, informing, supporting and involving other local bodies, as well as ensuring employee engagement within the Brussels location and the company in Belgium. It shall also decide or escalate matters discussed with the employee relations bodies

#### 4.2.3 Regional Risk Governance

A regional level risk governance structure is in place to oversee all business and legal entities' risk. Various BNYM SA/NV risk committees and risk management processes feed into the structure below.

Oversight and escalation is provided through the following key committees:



**EMEA Executive Committee (EEC)** is the senior regional management committee. The EEC's main role is to drive actions relating to the region's revenue generation, strategy, governance and control objectives. It is also a platform for regional senior managers to agree common positions on issues relevant to all businesses operating within EMEA.

The EEC is a challenge and advisory committee, though it will not typically have decision-making authority over individual businesses and legal entities. The chair can escalate concerns raised at the EEC to the Corporate Executive Committee of which (s)he is a member.

However it should be noted that the primary responsibility for the oversight of individual businesses / entities rests with the senior management of those businesses / entities and those managers performing "governing" functions under the PRA's Approved Person's regime.

**EMEA Senior Risk Management Committee (ESRMC)** exercises responsibility and provides independent oversight for policies, processes and controls relating to all aspects of risk and compliance for the EMEA region. This includes the following EMEA subcommittees:

- ☐ EMEA Anti-Money Laundering Oversight Committee
- ☐ EMEA Asset and Liability Committee
- ☐ EMEA Controls Committee
- ■ EMEA Investment Management Risk & Compliance Committee

The ESRMC is an empowered decision-making body under authority delegated by the EEC, but subject to constraints of both corporate policy and legislation and regulation as appropriate.

**EMEA Investment Services and Markets Committee** is an oversight and advisory body whose purpose is to:

- •□ Align the different parts of the EMEA Investment Services and Markets (EMEA ISM) businesses to form a collective view on matters affecting EMEA ISM legal entities and their respective businesses
- □ Opine on the effectiveness of the EMEA ISM constituent businesses and business partner groups within the global, regional and legal entity context
- ☐ Guide and monitor the development of the EMEA ISM businesses
- □ Safeguard the operational resilience of the EMEA ISM businesses
- Act as the guardian of the EMEA ISM strategy

#### 4.2.4 Business Unit Risk Management

The oversight of risk management within business units at a regional level is governed via two risk management committees, namely:

**EMEA Asset Servicing Business Acceptance Committee** which is responsible for channeling new/ renewal business into lines of business and subsequently legal entities, including BNYM SA/NV, approving all new clients prior to commencing a relationship with them and approving new business arrangements with existing clients. Risk is assessed and reviewed as part of the approval process.

**EMEA Asset Servicing Business Risk Committee** which is responsible for ensuring that the risk profile of EMEA Asset Servicing is well understood and effectively managed. This is achieved by carrying out the review of current and emerging key risk and control issues and related initiatives, escalation of material risks and issues to the Head of BNY Mellon Asset Servicing and other regional committees and boards as appropriate, approval of new or materially modified products, review of potential off-boarding of non-systemically significant products and review of significant regulatory requirements.



#### 4.3 Risk Management Framework

As a global and systemically important financial institution, BNYM SA/NV holds itself to an industry leading standard of risk management. Effective management of risk is at the core of everything BNYM SA/NV does.

From the perspective of BNYM SA/NV, as with other regulated banking entities, a strong risk governance and a robust risk culture are achieved through close and continuous co-operation between business lines, risk and compliance teams and internal audit. Taken together, these enable BNYM SA/NV to effectively identify, assess, manage and report the risks that are inherent to operating its business.

BNYM SA/NV Risk Management Framework is organized around the three lines of defense and BNYM SA/NV has, in accordance with the Banking Act requirements, put in place the following independent control functions: internal audit, compliance and risk management.

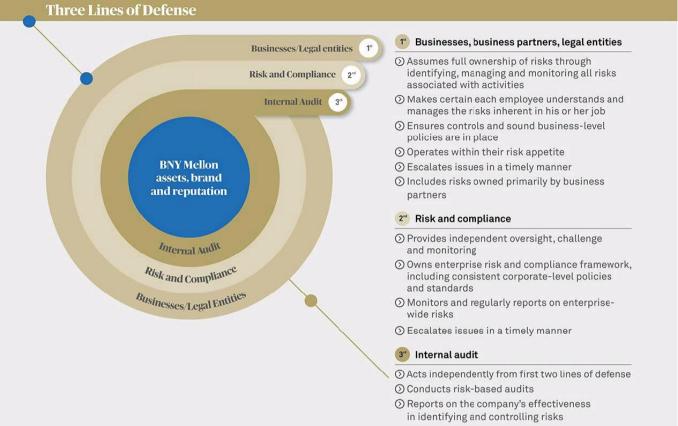
The ExCo is responsible for the implementation of these independent control functions. Annually, it reports to the NBB, the statutory auditor and the Board on the compliance with this requirement and on the measures taken in this respect. These functions are considered as independent as they operate independently from the other business functions.

The Heads of the independent control functions must be fit and proper for carrying out such a role and approved by the NBB.

BNYM SA/NV has adopted a 'three lines of defense' model as part of the risk management framework. The First Line of Defense ('1LOD') consists of managers and employees at the business or, in some cases, business partner level. They own the risk associated with the business activities, and they manage the risks and the related control processes and procedures on an operational basis. The Risk Management and Compliance functions are the Second Line of Defense ('2LOD'); and own the enterprise-wide risk management framework and provide independent oversight of the 1LOD. This also includes Corporate Security, Business Continuity, Financial Management and Analysis within finance. The Third Line of Defense ('3LOD') is Internal Audit, which independently provides the Board and senior management with the assurance that the governance structures, risk management and internal controls in place are effective.



# Figure 3: Managing Three Lines of Defence



BNY Mellon Risk and Compliance policies and guidelines provide the framework for BNYM SA/NV's internal controls, risk identification, monitoring, reporting and escalation. Risks are managed within specialist risk teams (e.g. credit, liquidity) or via line of business risk teams (operational, market).

#### 4.4 Risk Register

A Risk Register is a management tool that provides a high level view of an entity's risk landscape. It is instrumental in forming the risk strategy of the entity and defining risk appetite in the context of the broader organization. Applied to BNYM SA/NV, the Risk Register enables management to focus on the key risks to which BNYM SA/NV is exposed. The BNYM SA/NV Risk Register, which is governed by the Policy "Legal Entity Risk Register", should be read in conjunction with, and be complementary to, BNYM SA/NV ICAAP and ILAAP, the business-level risk and control self-assessments ('RCSA's') and other Risk MI including the specific BNYM SA/NV Risk Dashboard.

The BNYM SA/NV's Risk Register is prepared and owned by the appointed Legal Entity Risk Officer ('LERO'). Senior Risk Officers of each Line of Business ('LOB SROs'), risk function heads (e.g. credit risk) and key representatives from the Lines of Business/Legal Entities will be consulted as part of the assessment process. The Risk Register, which is approved by the ExCo, is a living document and will be updated regularly, and at least annually.

#### 4.5 Risk Appetite

BNYM SA/NV is committed to ensure that, in executing on its strategic and operational plans, it operates within its own risk appetite at all times. In order to achieve this, BNYM SA/NV is also committed to operating within its defined risk appetite statement at all times.



Furthermore, BNYM SA/NV is committed to ensure that forward looking controls over the individual components of Risk Appetite are embedded into the terms of reference of the governance committees that both directly and indirectly have the ability to influence the risk profile of BNYM SA/NV.

#### 4.6 Risk Assessment Methodology and Reporting Systems

Monitoring and controlling risks is primarily performed based on limits established by BNYM SA/NV. These limits reflect the business strategy and market environment of BNYM SA/NV as well as the level of risk that BNYM SA/NV is willing to accept. In addition, BNYM SA/NV's policy is to measure and monitor the overall risk bearing capacity in relation to the aggregate risk exposure across all risk types and activities.

Information compiled from all the businesses is examined and processed in order to analyze, control and identify risks on a timely basis. This information is presented and explained to the RMC, the ExCo and the Board.

#### Internal Capital Adequacy Assessment Process (ICAAP)

BNYM SA/NV monitors its capital adequacy in accordance with Basel Framework on the basis of Pillar 1 requirements as well as Pillar 2 (Economic Capital).

The Internal Capital Adequacy Assessment Process and related Economic Capital ('ECAP') under Pillar II relies on series of internal models, calculating the capital requirement to be set aside for each risk deemed material of BNYM SA/NV and for which capital is considered as an appropriate mitigant. The ICAAP also relies on stress testing performed on the capital planning. The ICAAP report is submitted on a yearly basis and follows the Belgian and European regulations in that respect.

Pillar 2 capital requirement is based on an internal risk assessment of the components of the balance sheet and of the business activities; it uses BNYM SA/NV's methodologies which follow an approval process including independent validation by the BNY Mellon's model validation team. These methodologies are presented to and approved by the Board. The Economic Capital framework is based on appropriate, forward-looking and plausible estimates of capital needs over a one-year horizon, and at a high confidence level, 99.9%, that reflects the overall capital management objectives of BNYM SA/NV.

The purposes of the ICAAP are to:

- Inform and seek approval from BNYM SA/NV's senior management and Board of the ongoing assessment of the Company's risks and the approaches used to mitigate those risks, such that they remain within the risk appetite established by the Board
- determine the amount of capital that is likely to be necessary to support those risks at the point when the assessment is made and also over BNYM SA/NV's three-year planning horizon, both under baseline and stressed conditions
- document the capital adequacy assessment process both for internal stakeholders and for prudential supervisors
- •□ provide the necessary information so that senior management and the Board can make decisions about the amount of capital that is required and the approach to risk management that should be adopted

In addition to ensuring that there is sufficient capital to cover economic risk and to meet regulatory capital requirements under stressed conditions, the Company's objective is also to maintain sufficient capital to be a preferred service provider and counterparty.

Credit Risk, Credit Value Adjustment, Market Risk, Operational Risk, Interest Rate Risk, Credit Spread Risk, Business Risk, Restitution Risk, Pension Risk and Model Risk are all covered by Economic Capital. Different types of quantification procedures are used as part of the ECAP framework, including scenario analysis and Pillar 1-style models as well as statistical models that deliver a full probability distribution of



economic losses. This is in particular the case for Credit Risk as well as Operational Risk, where BNYM SA/NV uses a hybrid model combining losses and forward looking scenarios information. BNYM SA/NV applies stress tests in order to assess capital adequacy in a forward looking manner.

BNYM SA/NV has adopted an Available Financial Resources (AFR) definition in order to satisfy the three following principles:

- Permanence of the resources
- · Loss absorption capacity of resources
- Availability of resources

#### New and modified businesses / products assessment process

New or modified products or business need to be reviewed and approved by the corresponding Business Acceptance Committee (Line of Business). In addition to the BAC acceptance and in order to ensure full compliance towards Legal Entity specific concerns, the RMC must approve the business or product.

#### Significant new client process

Significant new clients are reviewed and approved by the corresponding Business Acceptance Committee (Line of Business).

The BAC uses a checklist in order to assess the potential impact the new client will have on the Pillar 2 capital requirement. If the impact is deemed potentially material, the BNYM SA/NV BAC delegate will be responsible to contact BNYM SA/NV Risk Management in order to obtain a Pillar 2 assessment.

#### Risk and Control Self-Assessment

The Risk and Control Self Assessment ('RCSA') is a tool used by the business to identify risks associated with their key processes. High or Moderate to high residual risks form part of a regular risk management report to the RMC. This ensures that although the RCSA process is owned by the line of business in conjunction with the business risk managers, the RMC has oversight of the key exception items relating to BNYM SA/NV on an ongoing basis.

#### Operational risk events

All operational losses and fortuitous gains exceeding US\$10k are captured in the Risk Management platform with completeness being verified by reconciliation to the General Ledger. Risk events are categorized by causal category. Operational Loss Events reporting form part of the standard risk management report to the RMC.

#### Credit risk monitoring process

All counterparties leading to credit risk exposures are assessed and allocated a borrower rating in accordance with the BNY Mellon's credit rating system. Monitoring & Control is conducted via a number of real-time systems to ensure that approved exposure levels are not exceeded, or are pre-approved by a suitable credit officer in the light of individual circumstances. Post event monitoring is also conducted by both Client Service areas and the Credit function as well as the Large Exposure function. Issues arising from these are reported to the RMC and the CROC.

#### Large exposure process

Compliance with the large exposure (including Shadow Banking) regulatory requirements is controlled daily by the Large Exposure function in BNYM SA/NV. Mitigants are applied as needed.

#### Market risk monitoring process

The FX and FX derivative positions are monitored against a limit discussed at the Belgium ALCO.

#### Interest Rate risk monitoring process



The interest rate sensitivities (DV01) are monitored against the risk appetite limit, as well as the compliance with the investment guidelines.

#### Liquidity risk management process

BNYM SA/NV's overall approach to liquidity management is to ensure that sources of liquidity are sufficient in amount and diversity, such that changes in funding requirements can be accommodated routinely without material adverse impact on earnings, daily operations, or on the financial condition of BNYM SA/NV. In this context, BNYM SA/NV has set certain practices, metrics, and limits to measure and manage liquidity risk. Through these measures, it seeks to ensure that the overall liquidity risk undertaken stays within its risk tolerance.

#### Top risk process

The RMC maintains the list of top risks for BNYM SA/NV. The RMC also receives the list of top risks from EMEA and Group level. The RMC holds monthly discussions around the top risks for BNYM SA/NV that are reviewed on a quarterly basis, and discuss the progress to mitigate them.

#### Risk dashboard

The BNYM SA/NV Risk dashboard aims at providing a high-level view on the different risk appetite metrics and their evolution over a given period and a high-level view over a given period of time on the evolution and status at consolidated level of the main risk categories. It is produced on a monthly basis.

#### **Key Risk Indicators**

Key Risk Indicators (KRIs) are used by business lines to evaluate control effectiveness and residual risk within a business process. Material risks are monitored by appropriate KRIs. The business lines utilise the corporate-wide KRI process to monitor the extent to which the probability of the high inherent risks materialising is changing and to ensure that appropriate actions are being taken. KRI reporting and monitoring is performed monthly at a minimum using a Red/Amber/Green rating.

#### Stress testing

Stress testing is undertaken by BNYM SA/NV to monitor and quantify risk and capital and ascertain that sufficient capital resources are held against risks on a forward-looking basis. The process reflects stressed scenarios that identify an appropriate range of adverse circumstances of varying nature, severity and duration relevant to BNYM SA/NV's risk profile. BNYM SA/NV's stress testing process conclusion is a statement of the future risk(s) that the business faces, control improvements to mitigate the impact should the risk arise and where appropriate, a recommendation for capital to be held against each risk type.

Scenarios are derived from current, emerging and plausible future risks and strategy, and reviewed, discussed and agreed by the CSTC, ExCo and Board.

#### 4.7 Escalation of Risks and Issues

A robust framework exists for monitoring and escalation of issues and risks. If a material risk issue occurs, the EMEA Governance Guide for reporting and escalation of material issues and risks is followed. Business management is required to notify senior management, which includes BNYM SA/NV Board members, soon after determination. Risk management is responsible for supporting the business lines in achieving the following:

- •□ Identifying and documenting all material risks, assessing the effectiveness of control design, and ensuring that control gaps are closed
- □ Developing and implementing standards and policies appropriate for the business that conform to the principles and guidelines established by Risk
- Elevating, reporting and investigating operating errors, losses and near misses, identifying the root causes and implementing corrective actions



- Reviewing key indicators for coverage and effectiveness, identifying root causes for red and amber conditions and ensuring implementation of corrective actions
- •□ Approving the process to accept new business, including 'Request for Proposal' preparation, contract acceptance and compliance, and challenging whether BNYM SA/NV is being compensated appropriately for the assumption of risk
- Reviewing the impact of changes in business processes on inherent risks and controls such as reorganisations, new products or processes, system conversions and acquisitions, etc.
- •□ Ensuring that processes, risks and controls are continually reassessed for appropriateness and completeness

Management information is used to monitor the performance of the transaction processing and support services including specific risk exposures (e.g. cash and securities reconciliation breaks) and red/amber/green ratings in respect of the health of the operational functions.

#### 4.8 Recovery and Resolution Planning (RRP)

In 2017, the recovery plan for BNYM SA/NV was prepared for submission to the Joint Supervisory Team (composed of representatives of the ECB and the NBB) in accordance with the Banking Recovery and Resolution Directive 2014/59/EU as transposed in the Belgian Banking Law. The recovery plan is designed to ensure that BNYM SA/NV has credible and executable options to meet the challenges that may arise from potential future financial and/or operational crises.



### 5 Credit Risk

The following risk metrics present BNYM SA/NV's risk components as at 30 June 2018.  $\square$ 

Total net credit exposure amount

€31,651m

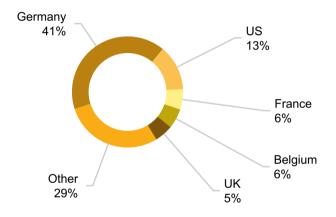
31-Dec-17: €29,945m

Total on and off-balance sheet exposures

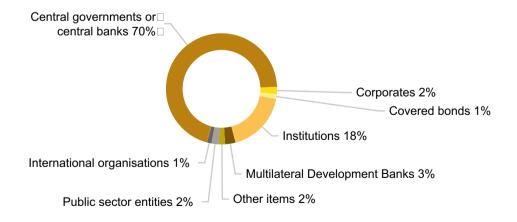
€39,127m

31-Dec-17: €38,411m

Standardised credit exposure by country



Standardised credit exposure by class



#### 5.1 Definition and Identification

Credit risk is the risk arising from obligor or counterparty failure to pay an extension of credit whether contractual or otherwise. Credit risk is found in all activities in which settlement or repayment depends on counterparty, issuer, or borrower performance. It exists any time bank funds are extended, committed, invested, or otherwise exposed through actual or implied contractual agreements, whether reflected on or off the balance sheet.

BNYM SA/NV has a liability driven balance sheet. The credit exposures arise primarily through the placement of deposits as:

- •□ Investment in securities (Government bonds, Corporate bonds and Covered bonds): BNYM SA/NV has a large securities portfolio. The portfolio increased during 2014 in the context of the negative interest rate environment, where BNYM SA/NV took actions in order to reduce the cost of placements in Central Banks
- •□ Banks placement: BNYM SA/NV utilises a number of banks around the world to maintain accounts to enable it to transfer monies cross-border. These accounts are maintained at the minimum possible level and within large exposures limits commensurate with smooth operation of client and own fund's needs. The banks used are all major well rated banks in the relevant country
- •□ Placement to Central Bank and in Money Market: the majority of credit risk assumed by BNYM SA/ NV is in placing funds with banks for fixed terms or overnight. This may be by way of cash placement or by purchase of certificates of deposits issued by these banks
- •□ Intercompany placement (although mitigated by a Master Netting Agreement)
- •□ Derivatives in the banking book: FX swaps used to manage liquidity and FX swaps coming from the FX client activity

BNYM SA/NV is also exposed to credit risk through the risk of payments against uncollected funds which may cause overdrafts.

#### 5.2 Credit Risk Management Framework

The Credit Risk Management Framework ('CRMF') defines roles and responsibilities using the three lines of defense. The CRMF within BNYM SA/NV relies on awareness, well defined policies, procedures and reporting, a clear governance structure and suitable tools for reporting and monitoring; these are used to effectively identify, manage, mitigate, monitor and report the risks in an organized way to the appropriate governance body.

Credit risk is an outsourced service provided under service level descriptions ('SLDs') to the various global BNYM legal entities. Each legal entity Board of Directors will approve both an appropriate risk appetite statement and a legal entity specific Credit Risk Policy which details the roles and responsibilities and levels of delegated authority for each type of activity.

#### 5.3 Credit Risk Management

Credit risk is managed and monitored by several teams globally, including officers in Brussels and is reported to the CROC, a sub-committee of the ExCo.

Monitoring and control is conducted via a number of systems to ensure that approved exposure levels are not exceeded, or are pre-approved by an appropriate Credit Officer in the light of individual circumstances.

Post event monitoring is conducted by both client service areas and the credit risk function.



Each counterparty is associated with an internal rating indicating its credit quality. In that respect, Group standards are applied uniformly within the Group.

The measurement of impairment loss allowances are based on an IFRS 9 expected credit loss ('ECL') accounting model. The definition of default is a central concept for ECL. Aloan is considered non-performing with regard to a particular obligor when the obligor is unlikely to pay its credit obligations to the institution, the parent undertaking or any of its subsidiaries, in full, without recourse by BNYM to actions such as realising collateral, or the obligor is past due more than 90 days on any material credit obligation to the institution, the parent undertaking or any of its subsidiaries.

Nostro accounts are maintained at the minimum possible level and within large exposures limits commensurate with smooth operation of client and own funds' needs. The banks used are all major well rated banks in the relevant country.

Regarding intraday overdrafts, limits are set for each client as a percentage of a client's assets under custody (subject to certain maximum levels, as per policy); all cash payments are checked against this limit. Any excesses are referred to a credit officer for approval. Occasionally business requirements are such that a manual fixed limit is required. In these situations, specific credit approval is provided by the credit risk manager. Again all cash payments are checked against this limit, prior to payment. These arrangements allow clients to access proceeds of sales, or other expected funds, even though in many markets the proceeds are not formally received until late in the day.

Formal overdraft facilities have been agreed for selected clients where business and credit risk evaluations are satisfactory. Leverage is required to be moderate. The portfolio composition is required to be adequately diversified and of sufficient quality to merit credit approval by a dedicated credit risk specialist. Overdrafts are restricted to 35% of asset value.

Risk appetite metrics have been defined for credit risk and these are reported to the RMC. The Belgium ALCO monitors the balance sheet of BNYM SA/NV for the purposes of liquidity management.

### 5.4 Monitoring and Reporting

Credit Risk is monitored and controlled in real time through the Global Funds Control Platform and its interaction with both transactions' systems: the Global Securities Processing ('GSP') system for securities settlement activity and electronic payment handling ('EPH'), the bank's money transfer processing hub. Real-time balance information is input via the International Money Management System ('IMMS'), which is BNY Mellon's proprietary Demand Deposit Account platform.

Post-event monitoring is conducted by the client service area, with secondary oversight form the Credit Risk function.

#### 5.5 Analysis of Credit Risk

Credit exposure is computed under the standardised approach for Pillar 1. This method for calculating credit risk capital requirement uses supervisory risk weights in accordance with credit quality assessments supplied by external credit assessment agencies.

#### 5.6 Analysis of Past Due and Impaired Exposures

An aspect of credit risk management relates to problem debt management, which entails early problem identification through litigation and recovery of cash where there is no realistic potential for rehabilitation.

The following tables provide an analysis of past due and impaired exposures using the following definitions:

Past due exposure is when a counterparty has failed to make a payment when contractually due



- Impaired exposure is when BNYM SA/NV does not expect to collect all the contractual cash flows when they are due
- Impairment provision is where there is objective evidence that events have detrimentally affected the expected cash flows of an asset or a portfolio of assets. The impairment loss is the difference between the carrying value of the asset and the present value of its estimated future cash flows and recorded as a charge to the profit and loss account and against the carrying amount of the impaired asset. An impairment provision may be either specific or generally assessed. As at 30 June 2018, BNYM SA/NV had no material financial assets that could have been subject to specific or general provision. There were no material assets past due greater than 90 days. Please see the table 10 below for the details of past due exposures. BNYM SA/NV did not incur any material write-offs of bad debts or make any recovery of amounts previously written off during the year to 30 June 2018

# Table 7: Credit quality of exposures by counterparty type

This table provides a comprehensive picture of the credit quality of on- and off-balance sheet exposures pre CRM.

	Gross ex	Credit risk Gross exposures adjustments				Credit risk adjustment	
Counterparty type at 30 June 2018 (€m)	Defaulted	Non- defaulted	Specific	General	Accumulated write-offs	charges of the period	Net values
General governments	_	20,802	_	_	_	_	20,802
Credit institutions	_	12,656		_	_	_	12,656
Other financial corporations	_	5,104	2	_	_	2	5,102
Various balance sheet items	_	565	_		_	_	565
Total	_	39,127	2	_	_	2	39,125

Counterparty type at	Gross exposures		Credit adjustr			Credit risk adjustment	
31 December 2017 (€m)	Defaulted	Non- defaulted	Specific	General	Accumulated write-offs	charges of the period	Net values
General governments	_	23,308	_	_	_	_	23,308
Credit institutions	_	11,634	_		_	_	11,634
Other financial corporations	_	2,883	_	_	_	_	2,883
Various balance sheet items	_	586	_	_	_	_	586
Total	_	38,411	_	_	_	_	38,411

As at 30 June 2018, there are no past due exposures on investment securities, cash or cash balances with Central Banks. BNYM SA/NV has not recorded any impairment provision for financial assets in 2018 (2017: € nil).





# Table 8: Credit quality of exposures by industry

This table shows the credit quality of BNYM SA/NV's on-balance-sheet and off-balance sheet exposures pre CRM by industry type.

Exposures		Credit adjustn			Credit risk adjustment		
Industry type at 30 June 2018 (€m)	Defaulted	Non- defaulted	Specific	General	Accumulated write-offs	charges of the period	Net values
Manufacturing		324	_	_	_	_	324
Public administration and defence, compulsory social security		9,289					9,289
Financial and insurance	_	9,209	_	_	_	_	3,203
activities	_	29,003	2	_	_	2	29,002
Other services	_	510	_	_	_	_	510
Total	_	39,127	2	_	_	2	39,125
Of which: Loans Of which: Off-balance		38,914	2	_	_	2	38,913
sheet exposures		212		_	_		212

Industry type at	Exposures		Credit risk adjustments			Credit risk adjustment	
31 December 2017 (€m)	Defaulted	Non- defaulted	Specific	General	Accumulated write-offs	charges of the period	Net values
Manufacturing	_	1	_	_	_	_	1
Public administration and defence, compulsory social							
security		10,806	_	_	_	_	10,806
Financial and insurance activities	_	27,547	_	_	_	_	27,547
Other services	_	57	_		_	_	57
Total	_	38,411	_	_	_	_	38,411
Of which: Loans	_	38,399	_	_	_	_	38,399
Of which: Off-balance sheet exposures	_	12	_	_	_	_	12



# Table 9: Credit quality of exposures by country

This table shows an analysis of past due, impaired exposures and allowances pre CRM by geographic area using the IFRS methodology.

	Exposures			Credit risk justments		Credit risk adjustment	
Counterparty type at 30 June 2018 (€m)	Defaulted	Non- defaulted	Specific	General	Accumulated write-offs	charges of the period	Net values
Germany		12,934		_	_	_	12,934
US	_	7,321			_	_	7,321
UK	_	3,979		_	_	_	3,979
The Netherlands	_	2,979	_	_	_	_	2,979
France	_	1,587		_			1,587
Other	_	10,326	2	_	_	2	10,324
Total	_	39,127	2	_	_	2	39,125

Counterparty type at	Exposures		Credit risk adjustments			Credit risk adjustment	
31 December 2017 (€m)	Defaulted	Non- defaulted	Specific	Accecific General		charges of the period	Net values
Germany	_	13,185	_	_	_		13,185
US	_	8,093	_	_	_		8,093
UK	_	3,228	_	_	_	_	3,228
The Netherlands	_	2,507	_	_	_	_	
	_	9,532	_	_	_	_	9,532
Total	_	38,411	_	_	_	_	38,411



# Table 10: Aging of past-due exposures

This table shows the aging analysis of accounting on-balance sheet past-due exposures regardless of their impairment status using the IFRS methodology at 30 June 2018.

Gross carrying values (€000s)	≤ 30 days	> 30 days ≤ 60 days	> 60 days ≤ 90 days	> 90 days ≤ 180 days	> 180 days ≤ 1year	> 1year
Loans	_	_	_	_	_	<b>—</b>
Total standardised approach	_	_	_	_	_	—

Non-performing and forborne exposures: BNYM SA/NV did not incur any material non-performing or forborne exposures during the year to 30 June 2018.



Changes in the stock of general and specific credit risk adjustments for credit impaired assets: BNYM SA/NV did not incur any impaired exposures during the year to 30 June 2018 and, therefore, no general or specific credit risk adjustments were noted

Changes in the stock of defaulted loans and debt securities: BNYM SA/NV did not incur any defaulted loans or debt securities during the year to 30 June 2018.



## 6 Credit Risk Mitigation

The following risk metrics present BNYM SA/NV's risk components as at 30 June 2018. □

**Exposures unsecured: carrying amount** 

€32,214m

31-Dec-17: €38,411m

**Total exposures secured** 

€6,911m

31-Dec-17: €6,917m

BNYM SA/NV manages credit risk through a variety of credit risk mitigation strategies including collateral and master agreements and netting arrangements.

### 6.1 Netting

BNYM SA/NV does not offset any financial assets and financial liabilities except for intragroup exposures where a master netting agreement (MNA) exists. In addition, netting is applied on financial assets and financial liabilities that are subject to legal agreements similar to enforceable master netting arrangements, which cover similar financial instruments.

The similar agreements include global master repurchase agreements and global master securities lending agreements. Similar financial instruments include derivatives, sales and repurchase agreements, reverse sale and repurchase agreements, and securities borrowing and lending agreements. Financial instruments such as loans and deposits are not disclosed in the tables below unless they are offset in the statement of financial position.

During 2018, BNYM SA/NV's sale and repurchase, and reverse sale and repurchase transactions, and securities borrowing and lending were covered by master agreements with netting terms similar to those of ISDA Master Netting Agreements. As of 30 June 2018, no such transactions existed within BNYM SA/NV.

#### 6.2 Collateral Valuation and Management

BNYM SA/NV can receive collateral from a counterparty which can include guarantees, cash and both equity and debt securities. When a right of pledge exists, BNYM SA/NV has the ability to call on this collateral in the event of a default by the counterparty.

Collateral amounts are adjusted on a daily basis to reflect market activity to ensure they continue to achieve an appropriate mitigation of risk value. Securities are marked-to-market daily and haircuts are applied to protect BNYM SA/NV in the event of the value of the collateral suddenly reduces in value due to adverse market conditions. Customer agreements can include requirements for the provision of additional collateral should valuations decline.

#### 6.3 Collateral Types

The most important type of collateral is the coverage of nostro balances with one group of connected counterparties by a pool of collateral consisting of EU sovereign debt of AA- credit quality or better.

### 6.4 Guarantors and Credit Derivative Counterparty

See section 6.6 on credit concentration risk.

### 6.5 Wrong-way Risk

BNYM SA/NV takes particular care to ensure that wrong-way risk between collateral and exposures does not exist. Wrong-way risk results when the exposure to the counterparty increases when the counterparty's credit quality deteriorates.

#### 6.6 Credit Concentration Risk

Credit concentration risk results from concentration of exposures to a single counterparty, borrower or group of connected counterparties or borrowers. This includes on- and off-balance sheet exposures. In addition, industry, country and collateral concentration bear additional credit risk as a systemic credit issue in a sector could create losses for the whole sector.

The risk of credit concentrations is controlled and managed according to client/counterparty as opposed to industry or geography. Country limits (in particular for the BNYM SA/NV securities portfolio) are approved by the CROC.

Under European and Belgian bank regulations, all large external exposures at connected group of counterparties level have to stay below a 25% threshold of the bank's own funds. Shadow banking exposure follows the same rule.

The largest exposure is to The Bank of New York Mellon and is spread across multiple branches, subsidiaries and locations which also provide some mitigation in case of default or rating downgrade of a related party. The remaining placements (including central bank placements) are diversified across a number of banks and geographic locations. In March 2014, a Master Netting Agreement (MNA) was signed between BNYM SA/NV and BNY Mellon. This agreement has a significant positive impact on the credit risk capital requirement and thereby on BNYM SA/NV solvency ratio. An additional MNA was signed with BNYM International Limited in July 2015. These MNA are still in place as of 30 June 2018.

In addition, an Unfunded Credit Risk Mitigation Agreement (UCRMA) is used for day-to-day management of the concentration risk on some specific Financial Institutions, but is not taken into account for regulatory reporting purposes at the end of the reporting period. The UCRMA is not taken into account for statutory and consolidation reporting.

BNYM SA/NV has carried out extensive work in connection with the remediation of large exposure and concentration risk concerns. The Concentration Risk System is used at BNYM SA/NV to calculate, manage and report (counterparty and country) Credit Concentration Risk on a day-to-day basis, addressing the requirements of the business and the risk function, and to report Large Exposures to the NBB in line with applicable Large Exposures regulatory reporting requirements. This reporting tool has been in place since July 2014.

There has been no regulatory breach in 2018, neither towards external counterparties nor towards intragroup exposures.





# Table 11: Credit risk mitigation techniques - overview

This table shows the total exposure that is covered by financial and other eligible collateral by each exposure class.

	E		Exposures	s secured by	
At 30 June 2018 (€m)	unsecured carrying amount	total secured	collateral	financial guarantees	credit derivatives
Total cash and cash balances with central banks	13,702	4,182	4,016	167	_
Total loans and advances to customers	3,501	2,729	2,729	_	_
Total investment securities	14,234	_	_	_	_
Total Off-balance sheet exposures	212	_	_	_	_
Total other assets	565	_	_	_	_
Total exposures	32,214	6,911	6,744	167	_
Of which defaulted	_	_	_	_	_

Financial and other eligible collateral can include cash, debt securities, equities or gold, and their values are taken into account for the purposes of calculating the risk weighted exposure amount of the underlying exposure.

Using guarantees has the effect of replacing the risk weight of the underling exposure with that of the institution providing the credit protection. Guarantors are primarily rated as investment grade (sovereign).

# 7 External Credit Rating Assessment Institutions (ECAIs)

The following risk metrics present BNYM SA/NV's risk components as at 30 June 2018.  $\square$ 

**Risk Weighted Asset density** 

11%

31-Dec-17: 8%

Total credit risk exposure post CCF and CRM

€32,386m

31-Dec-17: €31,651m

The standardised approach uses credit ratings supplied by External Credit Assessment Institutions (ECAIs) to determine the risk weightings to apply on exposures. BNYM SA/NV uses S&P Global Rating, Moody's and Fitch Ratings as its chosen ECAIs. There has been no change to these ECAIs during the year.

# Table 12: Credit risk exposure and Credit Risk Mitigation (CRM) effects

This table shows the effect of the standardised approach on the calculation of capital requirements. Risk weighted exposure amount (RWA) density provides a synthetic metric on the riskiness of each portfolio.

	Exposures b	efore CCF and CRM				
Exposure class at 30 June 2018 (€m)	On-balance sheet amount	Off-balance sheet amount	On-balance sheet amount	Off-balance sheet amount	RWA	RWA □ density □
Central governments and central banks	19,449	_	19,449	_	_	%
Corporates	4,892	212	2,261	42	1,512	66%
Covered bonds	659	_	659	_	66	10%
Institutions	11,119	_	7,179	_	1,505	21%
Multilateral Development Banks	878	_	878	_	_	%
Other items	565	_	565	_	566	100%
Public sector entities	825	_	825	_	4	%
International organisations	399	_	399	_		%
Regional governments or local authorities	128	_	128	_	_	%
Total	38,914	212	32,344	42	3,653	11%



# Table 13: Credit risk exposure by asset class and risk weight post CCF and CRM

This table shows the breakdown of on- and off-balance sheet exposures for BNYM SA/NV after the application of both conversion factors and risk mitigation techniques.

Eveneure class of				R	lisk We	ight po	st CCF a	nd CRM	
Exposure class at 30 June 2018 (€m)	-%	10%	20%	50%	100%	150%	250%	Others	Total
Central governments or central banks	19,449	_	_	_	_	_	_	_	19,449
Corporates	_	_	309	1,142	800	53	_	_	2,303
Covered bonds	_	659	_	_			_	_	659
Institutions	_	_	6,948	231			_	_	7,179
Multilateral Development Banks	878	_	_	_	_	_	_	_	878
Other items	_	_	_	_	564	_	1	1	565
Public sector entities	805		21			_	_	_	825
International organisations	399	_	_	_		_		_	399
Regional governments or local authorities	128	_	_	_	_		_	_	128
Total	21,659	659	7,277	1,374	1,364	53	1	_	32,387

European along at						Risk we	eight po	ost CCF a	nd CRM
Exposure class at 31 December 2017 (€m)	—%	10%	20%	50%	100%	150%	250%	Others	Total
Central governments or central banks	22,155		_			_	_	_	22,155
Corporates	_	_	7	47	558	40	_	_	652
Covered bonds	_	456	_	_	_	_	_	_	456
Institutions	_	_	5,355	345	_	_	_	_	5,700
Multilateral Development Banks	948	_	_	_	_	_	_	_	948
Other items	_	_	_	_	585	_	1	1	586
Public sector entities	658	_	12			_	_	_	671
International organisations	399	_	_	_	_	_	_	_	399
Regional governments or local authorities	83	_	_		_		_	_	83
Total	24,244	456	5,375	392	1,144	40	1	_	31,651

# 8 Counterparty Credit Risk

The following risk metrics present BNYM SA/NV's risk components as at 30 June 2018.

Counterparty credit risk exposure

€261m

31-Dec-17: €170m

Risk weighted assets

€124m

31-Dec-17: €82m

Counterparty credit risk is the risk of loss arising from a counterparty to a contract recorded in either the trading book or non-trading book where the client defaults before fulfillment of cash-flow obligations. The size of the potential loss could be reduced by the application of netting or collateral agreements with the counterparty.

BNYM SANV engages in a variety of risk management activities to control and limit the degree of counterparty risk assumed by its businesses including managing credit risk at the counterparty, portfolio and country level. These risk management activities include:

- Limit management of various counterparty-level exposure metrics
- Netting agreements and collateral exchange terms with counterparties
- Approval and monitoring of collateral exchanges
- Monitoring of wrong-way risk reports
- Monitoring of settlement failures
- Calculation and review of stress and sensitivity metrics
- Other ad hoc analyses

Additionally, BNYM SANV has executed legal agreements with many of its counterparties aiming at reducing counterparty risk inherent in FX and derivative trading activity. The most common legal agreement used by market participants is a master netting agreement that can significantly reduce exposure by permitting effective offsets to "negatively valued" trades existing with the counterparty. Master netting agreements used in connection with BNYM SANV FX and derivative trading activity are usually based on the ISDA Master Agreement developed by the International Swaps and Derivatives Association ('ISDA').

Within a master netting agreement, collateral exchange terms can be defined in a Credit Support Annex ('CSA') to establish rules by which the trading counterparties are required to post collateral to each other against the market value of open trades covered by the agreement.

In certain cases, BNYM SANV will establish collateral exchange terms outside a CSA on a contract by contract basis. This is known as trade-specific collateral, and can take the form of an initial cash or security posting to cover the potential future exposure of a particular trade.

Internal capital for Counterparty credit exposures relate to:

- •□ Credit risk, calculated on the basis of a "value at risk" model. This model takes into account internal ratings and loss given default, as well as diversification and concentration between countries and sectors of the exposures;
- •□ Credit Valuation adjustment ("CVA"), calculated on the basis of the standardised formula

As at 30 June 2018, BNYM SA/NV has derivative positions in the form of FX swaps used to manage liquidity and FX swaps coming from the FX client activity.

# Table 14: Analysis of the counterparty credit risk (CCR) exposure by approach

This table shows the risk mitigating impact of netting and collaterisation on counterparty credit risk relating solely to foreign currency derivative contracts under the mark-to-market method.

Counterparty credit risk (€m)□		
Derivatives - Mark to Market method □	30 June 2018	31 December 2017
Gross positive fair value of contracts	_	<del>-</del> -
Potential future credit exposure	237	233□
Netting benefits □	(68)	(163)
Net current credit exposure	278	176
Collateral held notional value	18	6
Exposure and Collateral Adjustments	(1)	_
Net Derivatives Credit Exposure	261	170
Risk weighted assets	124	82
SFT - under financial collateral comprehensive method	30 June 2018	31 December 2017
Net current credit exposure	_	_
Net SFT credit exposure	_	_
Risk weighted assets	_	_
Total counterparty credit risk exposure □	261	170

Note: SFT (Securities Financing Transactions)

#### 8.1 Credit Valuation Adjustment

The credit valuation adjustment is the capital charge for potential mark-to-market losses due to the credit quality deterioration of a counterparty. The standardised approach uses the external credit rating of each counterparty and includes the effective maturity and exposure at default.



# Table 15: Credit valuation adjustment capital charge

This table shows the credit valuation adjustment using the standardised approach.

At 30 June 2018 (€m)□	Exposure value	RWA□
All portfolios subject to the standardised approach□	251	37
Total subject to the CVA capital charge □	251	37



# Table 16: CCR exposures by exposure class and risk weight

This table shows the breakdown of counterparty credit risk exposures by exposure class and risk weight attributed according to standardised approach.

Exposure class at 30 June 2018 (€m)	<b>-</b> %	20%	50%	100%	150%	Others	Total U	Inrated
Central governments and central banks	14	_	_	_	_	_	14	_
Corporates		4	1	93	_	_	98	_
Covered bonds		_	_	_	_	_	_	_
Institutions		148	1	_	_	_	149	_
Multilateral Development Banks	_	_			_	_	_	_
Other items								
					_			
Total	14	152	1	93	_	_	261	_
Exposure class at 31 December 2017 (€m)	<b>—</b> %	20%	50%	100%	150%	Others	Total U	nrated
Central governments and central banks	9	_	_	_	2	_	11	_
Corporates	_	3	_	58	_	_	61	_
Covered bonds	_	_	_	_	_	_	_	_
Institutions	_	96		1	_	_	97	_
Multilateral Development Banks	_	_		_	_	_	_	
Other items	_	_		_	_	_	_	
Other items	_	_	_	_	<u>—</u>	_	<u>-</u>	_



# Table 17: Impact of netting and collateral held on exposure values

This table provides an overview of the collateral held on exposures.

At 30 June 2018 (€m)	Gross positive fair value or net carrying amount		Netted current credit exposure	Collateral held	Net credit exposure
Derivatives by underlying	346	(68)	278	18	260
Securities Financing Transactions	_		_	_	
Cross-product netting	_		_	_	
Total	346		278	18	260

Composition of collateral for exposures to counterparty credit risk: BNYM SA/NV held €18m collateral relating to CCR as at 30 June 2018.

### 9 Market Risk

As from Q3 2017 BNYM SA/NV applied article 351 of the CRR on foreign-exchanged risk which meant that it was no longer required to calculate this as the own funds requirement for foreign-exchange risk does not exceed 2% of the total own funds.

Market risk is defined as the risk arising from adverse change in financial markets due to factors such as prices, rates, implied vitalities, or correlation of other market factors. Market risk factors include, but are not limited to, interest rates, foreign exchange rates, market liquidity, equity prices, credit spreads, prepayment rates, commodity prices and issuer risk associated with the Company's trading and investment portfolios.

Market risk is a systemic risk. Movements in markets are beyond the control of BNYM SA/NV. Market risk to BNYM SA/NV is reviewed below in two contexts: impact on balance sheet and impact on revenues and consequently its profitability.

BNYM SA/NV does not run a trading book. The Corporate Treasury FX swap activity is classified as held for trading from an accounting perspective. The Markets FX trading and sales activity is fully back-to-back (on a trade by trade basis) with BNY Mellon London Branch, hence no market risk resides in the trading book of BNYM SA/NV.

BNYM SA/NV is currently exposed to four types of market risk: (a) currency risk, (b) Credit Valuation Adjustment (CVA), (c) interest rate risk and (d) credit spread risk.

- a) BNYM SA/NV revenues are denominated in a mix of currencies whereas a high proportion of BNYM SA/NV's costs are denominated in Euro. Apart from the risk of currency mismatch between revenues and cost, BNYM SA/NV is not significantly exposed to this risk
- b) CVA risk relates to the FX swaps used in the context of Treasury management and FX swaps client activity
- c) BNYM SA/NV interest rate income is subject to the risk that as market interest rates tend toward zero or below, BNYM SA/NV cannot pass all of the interest rates reduction to its client. Interest rate risk in the banking book will also arise from maturity or re-pricing mismatches and from products that include embedded optionality; the risk could crystallize with changes in interest rate risk/the shape of the yield curve
- d) The securities portfolio bears additional credit spread risk

Daily limits are monitored by a dedicated market risk officer who ensures that BNYM SA/NV operates in accordance with the limits set down in the BNYM SA/NV risk appetite and reported on a regular basis to senior management.

As from Q3 2017 BNYM SA/NV applied article 351 of the CRR on foreign-exchanged risk which meant that it was no longer required to calculate this as the own funds requirement for foreign-exchange risk does not exceed 2% of the total own funds.



#### 10 **Operational Risk**

The following risk metrics present BNYM SA/NV's risk components as at 30 June 2018. □

Operational Risk exposure amount €1,168m

31-Mar-18: €1,168m

**Operational Risk capital requirements** 

31-Mar-18: €93m

Operational Risk arises from inadequate or failed internal processes, people and systems, or from external events (including legal risk but excluding strategic and reputation risk). Operational risk may arise from errors in transaction processing, breaches of internal control systems and compliance requirements, internal or external fraud, damage to physical assets, and/or business disruption due to systems failures or other events. Operational risk can also arise from potential legal or regulatory actions as a consequence of noncompliance with regulatory requirements, prudent ethical standards or contractual obligations.

Key operational risks for BNYM SA/NV include:

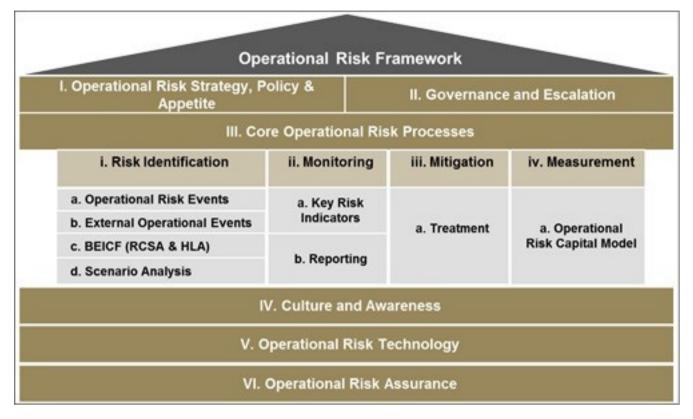
- Internal and external fraud
- **Business Disruption & System Failures**
- Damage to Physical Assets
- **Employment Practices & Workplace Safety**
- Clients, Products & Business Practices

Given BNYM SA/NV's role as a major custodian, processing and fiduciary service provider, BNYM SA/NV considers that operational risk is an important risk. Indeed, this risk materializes the biggest loss events.

### **Operational Risk Management Framework**

BNYM SA/NV has implemented an Operational Risk Management Framework (ORMF) consistent with the BNY Mellon Group framework.

# Figure 4: Operational Risk Management Framework



The ORMF provides the processes and tools necessary to fulfill a strategy of managing risk through a culture of risk awareness, a clear governance structure, well defined policies, procedures and reporting and suitable tools for reporting and monitoring to effectively identify, manage, mitigate, monitor and report the risks in an organized way to the appropriate governance bodies.

The ORMF defines roles and responsibilities through the global policy, using the three lines of defense model as a foundation. Thus, responsibility for the management of Operational Risk sits first and foremost with the business and functions.

- □ The first line is principally the businesses and business process owners, who are responsible for identifying and managing the risks inherent in the products, activities, processes and systems for which they are accountable for though out the course of their business activities
- The second line of defense, the independent Risk Management function, is responsible for reviewing and challenging the risks identified, assessed and managed by the first line of defense. EMEA Risk management, including the LERO, is also responsible for building and maintaining the ORMF framework and partnering the first line of defense to enable them to embed it
- The third line is Internal Audit (organizationally independent from both the first and second line of defense). A key responsibility of the third line as it pertains to the Operational Risk framework is to opine on the adequacy of the framework and governance process

Therefore, the monitoring and reporting of operational risks occurs within the business, entity and EMEA-region risk oversight functions as well as decision-making forums such as business risk committees and RMC.

#### **Management of Operational risk**

BNYM SA/NV ORMF relies on a culture of risk awareness, a clear governance structure and, Operational Risk policies and procedures, which define the roles and responsibilities of the first, second and third line

of defense. These policies and procedures complement each other to ensure that the operational risks of the business are effectively identified, managed, mitigated (where possible) and reported to the appropriate governance committees on a monthly basis.

BNYM SA/NV uses the ORMF to capture, analyse and monitor its operational risks. Below is an explanation of how the tools are used to manage the operational risks of the business. These tools are mandated through individual Operational Risk Polices. These activities are prescribed through the enterprise operational risk program, assessment systems and related processes, including but not limited to:

- •□ Risk Appetite BNY Mellon defines risk appetite as the aggregate level of risk a company is willing to assume after considering topics such as its strategic business objectives and business plan, the major risks facing the company and its risk capacity. BNYM SA/NV has, in line with the Enterprise risk policy for risk appetite, set a risk appetite statement which recognizes the inherent nature of Operational risk and the reliance on the ORMF to mitigate it
- •□ Risk Register BNYM SA/NV maintains a risk register which captures the most material risks associated with the business undertaken and the risk mitigations currently in place. The Risk Register is prepared and owned by the LERO. Senior Risk Officers of each Line of Business (LoB SROs), Risk Management function heads (e.g. Credit risk) and key representatives from the Lines of Business/Legal Entities contribute to the risk register sign off. The Risk Register is presented through the legal entity governance structures and is a living document and is updated regularly, at least annually or upon significant change
- •□ Risk Control-Self Assessments (RCSA) A comprehensive process for Business Groups and Business Partners to identify risks associated with key business processes, identifying and assessing the quality of controls in place to mitigate risk and assigning accountability for the effectiveness of those controls in place to mitigate that risk
- □ Operational Risk Events (OREs) A standard for the capture, notification and reporting of Operational Risk Events. The collection of internal loss data provides information for assessing the company's exposure to operational risk. Analysis of loss events provides insight into the root cause and information on whether a control weakness is isolated or potentially more systemic
  - OREs are mapped to Basel II operational risk event categories and the impact to BNYM SA/NV is identified. Information on operational risk event losses or gains exceeding \$10,000 (USD) are analyzed to understand root cause(s) and to identify improvements needed in order to reduce the recurrence and/or magnitude of future events. All OREs (over \$10,000) are reviewed for root cause and possible mitigating actions are reported to the RMC monthly
- ■ **Key Risk Indicators** Key risk metrics designed to monitor activities which could cause financial loss or reputation damage to BNYM SA/NV. Periodic and consistent monitoring of KRIs ensures that deviations from predetermined standards can be identified
- High Level Assessments The High Level Assessment (HLA) is an independent business level qualitative assessment performed at the Lines of Business/Business Partner Group level. It is a consolidated review that analyzes the risk profile of the business, the quality of controls in place to mitigate risks and internal and external factors impacting the business.

The HLA is designed to ensure that Lines of Business/Business Partners and Risk Management identify, review and discuss the risks of the business including Material Operational Risks on a regular basis. It enables current and emerging risks to be identified, discussed, addressed and elevated as appropriate.

Being a Business Line exercise, the HLA does not provide specific information on Legal Entities. However this is a useful source of information for the Legal Entity Operational Risk Officer who needs to form a view on the risks the Business Lines operating in BNYM SA/NV have identified

• Operational Risk Scenario Analysis (ORSA) - Operational risk scenario analysis is used by BNYM SA/NV to identify and assess plausible, high impact, low probability Operational Risk loss events using a combination of the Operational Risk data and expert management judgment. Scenario Analysis provides a broad perspective of risks faced globally based on the expertise of senior business and risk managers and supports an understanding of how significant operational losses could occur. Scenario analysis also supports the calculation of Operational Risk capital by using the output of scenario analysis (frequencies and severities) as an input for Pillar II operational risk capital modeling

#### Monitoring and reporting

BNYM SA/NV utilizes a global platform, Risk Management Platform (RMP) for monitoring and reporting operational risk.

Monitoring and reporting of operational risks occur within the business, Legal Entity and EMEA-region risk oversight functions, as well as decision-making forums such as business risk committees and the RMC.

Regional Committees such as the EMEA Senior Risk Management Committee also monitor and incorporate the material risks of BNYM SA/NV in forming its regional risk assessment.

### Policies and procedures

BNYM SA/NV utilizes comprehensive policies and procedures designed to provide a sound operational environment. The Corporate Operational Risk Policies are reviewed and enhanced on an ongoing basis, and adopted by all businesses/Legal Entities including BNYM SA/NV.

#### Organization and governance

Within BNYM SA/NV, business risk partners oversee the activities undertaken in each of the business lines, with oversight from a Legal Entity point of view through the LERO. Besides business risk partners and LEROs other internal functions also ensure that processes are in place to support the sound operational risk management of the business, notably:

- •□ **Technology Risk Management (TRM)** TRM is a 2<sup>nd</sup> Line of Defense group that provides oversight and challenge of the 1<sup>st</sup> line's management of technology risk. TRM works in partnership with BNY Mellon Businesses and Business Partners to help protect the company and its clients from cyber and information risks.
- Business Continuity Planning (BCP) This function is responsible for the governance of planning for continued service in the face of external events, and utility or system outages or disruptions. The BCP function has clear escalation processes and plans available; Crisis Management Teams (CMT) are in place to oversee any issue escalation, whilst the Communication Task Force (CTF) is responsible for approved communication with employees, clients and other stakeholders. Operational staff (business plan owners) are responsible for identifying a business impact analysis, and maintaining a business continuity plan for their specialist area. These plans set out information such as recovery requirements, alternative sites, training and evacuation procedures.
- •□ Third Party Governance BNYM SA/NV uses outsourcing to support its daily business activities. The BNYM SA/NV Board of Directors retains the ultimate responsibility for any outsourcing arrangement and accordingly, ensures the establishment and maintenance of an adequate outsourcing framework covering all key components of the outsourcing life-cycle. To ensure appropriate oversight of outsourced activities, the Business/Business Partner Groups ensure that all outsourced activities are identified, assessed, approved and appropriately managed throughout the life of the outsourced relationship.

Decisions to control, transfer, accept or avoid risks are conducted through a combination of business and legal entity governance bodies in line with the hybrid organisation structure of BNY Mellon.



#### Enhancements to the Operational Risk Framework as at H2 2017

Since the last ICAAP was submitted there have been several developments within Operational Risk, as outlined below:

- BNYM EMEA Internal Audit conducted a review of the embedding of remediation in the EMEA Operational Risk Framework. The report, issued during H2, rated the internal control environment as 'Satisfactory'. The overall control environment surrounding the current state of embeddedness of remediation actions into the Operational Risk Framework of the Legal Entities in EMEA was considered to be generally effective, relating to Operational Risk Appetite, Operational Risk Management Information, and Legal Risk. In addition to the above, Internal Audit acknowledged that the regional and global Operational Risk Framework was still improving, and significant progress had already been made by Operational Risk to further enhance the Framework and address regulatory findings and expectations via numerous initiatives.
- •□ Scenario Analysis Following the strategic review of the EMEA Scenario Analysis process in H1 2016, a number of regional enhancements were delivered in 2017 including a single common process, development of a set of core scenarios covering the full scope of the operational risk taxonomy and further leverage of the group-wide scenarios, enabling better integration with the corporate approach and an enhanced process of review and challenge.
- RCSAs for tier 1 to 4 Critical Business Services across BNY Mellon have been enhanced in accordance with the policy standard introduced in August 2016. This activity also involved aligning to the new Operational Risk taxonomy to facilitate consistent risk identification and reporting.
- ORE Work to align historic OREs to the current Taxonomy has been completed.

#### Planned Enhancements to the Operational Risk Framework

The following enhancements will continue to be implemented in 2018:

- Risk Appetite BNYM SA/NV will continue to embed and align its Risk Appetite with the refreshed BNYM Corporate risk appetite policy and statement. Work to further enhance the linkage between the strategy of BNYM SA/NV, the risk profile and the articulation of risk appetite is ongoing.
- Scenario Analysis BNYM SA/NV intends to implement a quarterly review process to ensure that coverage of scenario analysis is maintained in line with the risk profile of the entity, prompting amendments to existing scenarios where there is material change.
- RCSA Further work is required to enhance the Legal Entity identification within the RCSAs, which will further enhance BNYM SA/NV's assessment of its risk profile.

### Regulatory and Compliance risk management

The BNYM SA/NV Compliance Department is comprised of Compliance Officers based in Brussels, Frankfurt, Amsterdam, Dublin, Luxembourg, Milan and London. BNYMSKVG is required to maintain a separate compliance function. As part of the second line of defense, the compliance department shares a joint responsibility with Legal, HR, Finance and Risk to implement policies as required in order to ensure that BNYM SA/NV operates within the scope of its license and in compliance with applicable regulatory requirements.

The key responsibilities of the Compliance Department as part of the second line of defense are to identify applicable laws and regulations, provide advice regarding the implementation of those regulations falling under its material scope of oversight, monitor compliance by the relevant functions, report on identified weaknesses and manage the relationship with regulators.

The Compliance Department is independent from any commercial or operational function of BNYM SA/NV. The Compliance Department directly reports into the BNYM SA/NV Chief Executive Officer and also reports into the BNYM SA/NV governance bodies.



### 10.2 Capital Resource Requirement

Capital requirement for operational risk Pillar 2 (using an internal hybrid model) resulted in an amount of €278m (Dec. 2017: €150m), versus the Pillar 1 calculation of €93m (Dec. 2017: €89m) in March 2018.



## 11 Leverage

The following risk metrics present BNYM SA/NV's risk components as at 30 June 2018.

Total leverage ratio exposure €39,220m

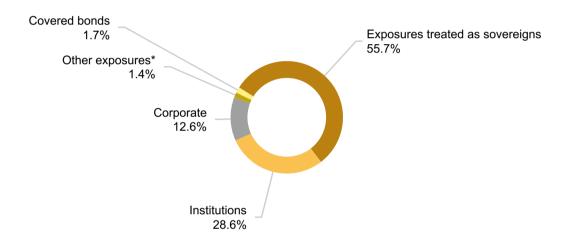
31-Mar-18: €39,966m

Leverage ratio

7.0%

31-Mar-18: 6.9%

# CRR banking book leverage ratio exposures□



The leverage ratio by is defined as the capital measure (the numerator) divided by the total exposure measure (the denominator), with this ratio expressed as a percentage:

In accordance with article 499 (2) and (3) of the CRR the leverage ratio is calculated based on Tier 1 capital and is the arithmetic mean of the monthly leverage ratios over the final quarter of 2017. The capital measure for the leverage ratio is the Tier 1 capital of the risk-based capital framework, taking into account transitional arrangements. Total exposure measure is the sum of the following exposures:

- On-balance sheet exposures
- Derivate exposures
- Security financing transaction (SFT) exposures
- · Off-balance sheet items



Leverage ratio calculation for BNYM SA/NV as of 30 June 2018 is presented below: □

# ➤ Table 18: Leverage ratio summary

This table shows BNYM SA/NV summary reconciliation of accounting assets and leverage ratio exposures.

Leverage ratio summary at 30 June 2018 (€m)	
Total assets as per published financial statements	36,943
Adjustment for entities which are consolidated for accounting purposes but are outside the scope of regulatory consolidation	_
(Adjustment for fiduciary assets recognised on the balance sheet pursuant to the applicable □ accounting framework but excluded from the leverage ratio exposure measure in accordance with □ Article 429(13) of Regulation (EU) No 575/2013 "CRR")	_
Adjustments for derivative financial instruments	169
Adjustments for securities financing transactions (SFTs)	_
Adjustment for off-balance sheet items (i.e. conversion to credit equivalent amounts of off-balance   sheet exposures)	42
(Adjustment for intragroup exposures excluded from the leverage ratio exposure measure in□ accordance with Article 429 (7) of Regulation (EU) No 575/2013)	_
(Adjustment for exposures excluded from the leverage ratio exposure measure in accordance with ☐ Article 429 (14) of Regulation (EU) No 575/2013)	_
Other adjustments	2,06
Total leverage ratio exposure	39,220
Table 19: Leverage ratio common disclosure □  Regulatory leverage ratio exposures at 30 June 2018 (€m)	
Regulatory leverage ratio exposures at 30 Julie 2010 (em)	
On-balance sheet exposures (excluding derivatives and SFTs)	
On-balance sheet items (excluding derivatives and SFTs, but including collateral)	39,325
Asset amounts deducted in determining Tier 1 capital	(425
Total on-balance sheet exposures (excluding derivatives and SFTs)	38,899
Derivative exposures	
Replacement cost associated with derivatives transactions	77
Add-on amounts for PFE associated with derivatives transactions	201
Exposure determined under Original Exposure Method	_
Total derivative exposures	278
Securities financing transaction exposures	
SFT exposure according to Article 220 of CRR	
SFT exposure according to Article 222 of CRR	
Total securities financing transaction exposures	_
Off-balance sheet exposures	



Regulatory leverage ratio exposures at 30 June 2018 (€m) □	
Off-balance sheet exposures at gross notional amount	212
Adjustments for conversion to credit equivalent amounts	
·	(170)
Total off-balance sheet exposures	42
Capital and Total Exposures	
Tier 1 capital	2,737
Exposures of financial sector entities according to Article 429(4) 2nd of CRR	_
Leverage Ratios	
Total Exposures	39,220
End of quarter leverage ratio	6.98%
Choice on transitional arrangements and amount of derecognised fiduciary items	
Choice on transitional arrangements for the definition of the capital measure	Fully phased-in
Amount of derecognised fiduciary items in accordance with Article 429(11) of CRR	_

# Table 20: Composition of on-balance sheet exposures

This table shows the composition of on-balance sheet exposures excluding derivatives at 30 June 2018.

### CRR leverage ratio exposures at 30 June 2018 (€m)□

Total on-balance sheet exposures (excluding derivatives, SFTs, and exempted exposures), of which:	38,899
Trading book exposures	_
Banking book exposures, of which:	38,899
Covered bonds	659
Exposures treated as sovereigns	21,659
Exposures to regional governments, MDB, international organisations and PSE not treated as sovereigns	21
Institutions	11,119
Secured by mortgages of immovable properties	_
Retail exposures	_
Corporate	4,890
Exposures in default	_
Other exposures*	552

<sup>\*</sup> this amount is after asset amounts deducted from tier 1 capital (I.e. goodwill and intangible)

The Board is committed to ensuring that the BNYM SA/NV is well capitalised at all times. The level of regulatory capital held by BNYM SA/NV shall always be in excess of current regulatory requirements and shall not fall below levels approved by the Board. Leverage ratio requirements shall be monitored as part of the regulatory reporting process and shall not fall below the internal (risk appetite) limits of 4% in 2018, as measured on a quarter end basis.

The internal and external limits with respect to the leverage ratio requirements for BNYM SA/NV will be proposed once the final regulatory definition has been issued for the binding requirement starting 1 January 2018. The leverage ratio is reported internally on a regular basis for monitoring purposes and a full calculation of exposure and capital is performed quarterly per the COREP process.



### **Appendix 1 Other Risks**

#### **Liquidity Risk**

BNYM SA/NV defines Liquidity Risk as the inability to access funding, convert assets to cash quickly and efficiently, or to roll over or issue new debt, especially during periods of market stress, at a reasonable cost in order to meet its short-term (up to one year) obligations.

BNYM SA/NV has a strong liquidity risk management culture and liquidity risk management is demonstrably embedded in its policies and processes.

The goal of BNYM SA/NV's liquidity management is to ensure that all liquidity risks are defined, understood, and effectively managed through well-designed policies and controls. In this context, BNYM SA/NV has established a robust liquidity risk management framework that is fully integrated into its risk management processes.

The liquidity risk management framework, is prepared in accordance with the guidelines set forth by the regulators, corporate standards, and encompasses the unique structure and characteristics of BNYM SA/NV.

#### **Business and Financial Risk**

#### **Legal Entity and Business Risk**

Business Acceptance Workgroups are responsible for aligning new business to appropriate business lines and subsidiaries, assessing and approving the associated risks.

Each legal entity has a risk manager aligned to the business. Risk managers are independent of the business and oversee the adherence to corporate risk policies and governance requirements. The risk management organisation is based on a three tiered structure beginning with corporate risk which creates the corporate policies, Risk management form the second tier, and the third tier is the operational unit which is considered to be the primary owner of all risk relating to the business activities. Each operational unit has a dedicated Embedded Control Management (ECM) resource assigned to it. At the direction of the business or the Global Operational Control management team, the ECM resource will conduct testing of the operational activities to support internal and external audit work.

#### **Regulatory and Compliance Risk**

Compliance risk is comprised of sustaining loss arising from non-compliance with laws, directives, regulations, reporting standards and lack of adequately documented and understood processes. Regulatory risk is mitigated using Stress Testing that is carried out on a regular basis, and prior to any regulatory changes enters into force.

Monitoring & Reporting Risk is the risk of loss arising from a failure to comply with financial reporting standards, agreements or regulatory requirements. This includes risks resulting from action taken by existing and new stockholders, regulators and investors who may have sustained losses due to incomplete, inaccurate or untimely reporting of financial performance.

BNYM SA/NV aims to comply with the applicable laws, regulations, policies, procedures and BNYM SA/NV's Code of Conduct. Existing and new directives and regulations are monitored and reviewed by Compliance and Risk management and findings are reported to senior management and the Board. Strategies and preparations to comply with regulations are put in place when necessary.

#### **Conduct Risk**

The risk that detriment is caused to clients, the market, the Firm or its employees because of inappropriate execution of our business activities or inappropriate behavior by BNY Mellon or its employees.



### **Reputation Risk**

Reputation risk is the risk to the bank's brand and relationships which does not arise out of any error. It can arise from all aspects of business activities, including but not limited to operational failures in business practices, legal or regulatory sanctions, joint ventures with outside firms, engagements with third party vendors, or off-balance sheet activities.

BNY Mellon relies heavily on its reputation and standing in the market place to retain and attract clients. Through analysis of other risks, potential reputational impacts have been identified as follows:

- Group default or reputational event could lead to loss of confidence in the brand
- •□ Legal or operational event leading to publicised failure could lead to loss of confidence in the brand
- •□ Inability to provide products and services that fulfil local and/or international law, compliance directives or regulations. This may also result in regulatory penalties and subsequent loss of business

#### **Legal Risk**

Legal Risk is the risk of inadequate legal advice, inadequate contractual arrangements and failing to take appropriate legal measures to protect rights or changes in laws or regulations. Legal Risk could crystallise through:

- □ Receipt or provision of wrong or inadequate legal advice
- □ Failure to manage litigation or disputes effectively
- □ Failure to identify and implement changes in legislation or law
- □ Failure to appropriately make notifications required as a result of legal requirements
- Failure to ensure adequate contractual arrangements (excluding outsourcing arrangements)
- Failure to manage and /or protect the infringement of rights arising outside of contracts

#### **Settlement Risk**

Settlement risk is the probability of loss arising from the failure of one counterparty to settle its side of a transaction, thus preventing other counterparties from settling their commitments. It tends to occur when payments are not exchanged simultaneously such as in a multi-leg Swap trade.

BNYM SA/NV is not subject to settlement risk as it holds no commodities commitments to settle during the reporting period. This risk is monitored for the transactions pertaining to the securities portfolio. BNYM SA/NV has no trading book. The bank transacts FX trades for banking book purposes with intra-group legal entities and trades are settled within one business day. To date, the bank has not experienced any unsettled FX transactions.

#### **Non-Trading Book Exposures in Equities**

BNYM SA/NV did not have any non-trading book exposures in equities as at 30 June 2018 or during the reporting period.

#### Securitisation Risk

Securitisation risk is the risk that the capital resources held in respect of assets that BNYM SA/NV has securitised is insufficient to cover associated liabilities. As at 30 June 2018 and during the reporting period BNYM SA/NV did not have any securitisation risk-weighted exposure.



### **Outsourcing Risk**

Outsourcing risk is the risk that failure in respect of the provision of services by third party providers could potentially damage BNYM SA/NV's operations, or if contracts with any of the third party providers are terminated, that BNYM SA/NV may not be able to find alternative providers on a timely basis or on equivalent terms.

BNYM SA/NV relies on internal and external outsourcing entities within and outside of the BNY Mellon group to perform its core business activities. To date, BNYM SA/NV has only outsourced critical tasks to BNY Mellon group entities that hold the required permissions in their jurisdiction to carry out the respective delegated tasks. Currently there are no critical tasks outsourced to third parties outside BNY Mellon entities.

BNYM SA/NV's outsourcing policy describes minimum standards that should be adopted when considering or dealing with a service and/or activity that is outsourced to another legal entity, either within the BNY Mellon group or to an external provider and establishes a framework for evaluating and analysing outsourcing projects.

#### **Business Risk**

Business risk is defined as the risk of loss caused by unexpected changes in the macro-economic environment, client behavior, inappropriate management actions, performance of competitors or events that impact earnings, for example, market contraction, reduced margins from competition, adverse customer selection and business concentration.

The principal business risk for BNYM SA/NV is within the Asset Servicing and Alternative Investment Services businesses, mainly driven by the fact that fees are largely based on the client's net asset value. As business risk is difficult to assess, it has been defined as the residual risks that confront BNYM SA/NV after taking all known and quantifiable risks into consideration.

Regular monitoring of assets under custody, revenue and profitability is a key control used to mitigate the risk.

#### Concentration Risk

Concentration risk is the risk of loss arising from significant interrelated asset or liability exposures, which in cases of distress associated with markets, sectors, countries, or areas of activity, may threaten the stability of the institution.

Traditionally analysed in relation to credit activities, concentration risk arises from exposures that may arise within or across different risk types, including intra-risk concentration where exposure concentration exists within a single risk type, and inter-risk concentration arising from interactions between different risk exposures across different risk categories connected by a common risk factor (e.g. counterparties, vendor, economic sector, geographic region, and/or financial instrument/product type).

BNYM SA/NV manages concentration risk as part of its credit, market, operational and liquidity management policies.

#### **Group Risk**

Group risk is the risk that the financial position of BNYM SA/NV may be adversely affected by its relationships (financial and non-financial) with other entities within BNY Mellon or by risks which may affect the financial position of the whole Group, for example reputational contagion or Group default.

As part of a large complex and interconnected company, BNYM SA/NV has a number of dependencies on BNY Mellon. These range from business leadership, dependency on certain IT systems and support services provided by central functions.



BNYM SA/NV management has considered several possible scenarios where these services may be affected, these include IT services outage and other business continuity issues. Although these will cause operational issues they are not expected to have a significant cost impact and are therefore not modelled, but are included in the scenarios as part of operational risk assessment and in the liquidity stress testing.

#### **Model Risk**

Model risk refers to the possibility of unintended business outcomes arising from the design, implementation or use of models. Model risk includes the potential risk that management makes incorrect decisions based either upon incorrect model results, or incorrect understanding and use of model results.

Model risk can result in material financial loss, inaccurate financial or regulatory reporting, misaligned business strategies or damage to the reputation of BNYM SA/NV or BNY Mellon as a whole. BNYM SA/NV uses models in its risk management framework. All models have been assessed in line with the relevant corporate policies and model risk management framework wherein the individual model is categorised into one of three tiers based on materiality, complexity, and level of reliance. The tiers determine the controls applicable to the model classes. The Enterprise Model Risk Committee oversees model risk management at the enterprise level and approves the overall framework and standards, which are applicable across the organisation. The Model Risk Management Group, based in the US, retain ultimate responsibility for overall model governance.

Model Risk Management Governance has responsibility for the governance of inventory and provides a mechanism to report on models to key stakeholders.

Models that impact the capital assessment process are categorised as Tier 1 models and the execution of the validation of Tier 1 models is done by a designated independent model validation function. Tier 1 models are required to be validated or reviewed, as per the validation standards, at least annually.

BNY Mellon internal audit provides independent reviews of compliance with the corporate model validation policy.

#### Strategic Risk

Strategic risk is defined as the risk arising from adverse business decisions, poor implementation of business decisions, or lack of responsiveness to changes in the financial industry and operating environment. Strategic and/or Business risks may also arise from the acceptance of new businesses, the introduction or modification of products, strategic finance and risk management decisions, business process changes, complex transactions, acquisitions/ divestitures/ joint ventures and major capital expenditures/ investments.

### **Country Risk**

Country risk is the risk of adverse impact on operating profits and/or value of assets due to changes in the business environment resulting from political or macroeconomic factors. It can also be due to exposure to sovereign and economic debts in EMEA countries such as Italy, Russia, and the Eurozone.

#### **Pension Obligation Risk**

Pension obligation risk is caused by contractual liabilities or moral obligation to a company's staff pension schemes. Pension risk in BNYM SA/NV arises from the defined benefit pension plans offer to the employees. Defined benefit plans constitute a risk because BNYM SA/NV must compensate any shortfall in the fund's guaranteed pensionable amount. Only the Belgium and German plans result in a liability for BNYM SA/NV.



## **Appendix 2 Glossary of Terms**

The following terms are used in this document:

**Basel III:** The capital reforms and introduction of a global liquidity standard proposed by the Basel Committee on Banking Supervision (BCBS) in 2010

Belgium ALCO: Belgium Asset and Liability Committee

BNY Mellon: The Bank of New York Mellon

**CRD IV:** On 27 June 2013, the European Commission published, through the Official Journal of the European Union, its legislation for a Capital Requirements Directive (CRD) and Capital Requirements Regulation (CRR), which together form the CRD IV package. Amendments published on 30 November 2013 were made to the Regulation. The package implements the Basel III reforms in addition to the inclusion of new proposals on sanctions for non-compliance with prudential rules, corporate governance and remuneration. CRD IV rules apply from 1 January 2014 onwards, with certain requirements set to be phased in

**Capital Requirements Directive (CRD):** A capital adequacy legislative package issued by the European Commission and adopted by EU member states

**Capital Requirements Regulation (CRR):** Regulation that is directly applicable to anyone in the European Union and is not transposed into national law

Central Bank of Ireland (CBI): Responsible for the regulation of all financial services firms in Ireland

**Common Equity Tier 1 capital:** The highest quality form of regulatory capital under Basel III comprising common shares issued and related share premium, retained earnings and other reserves excluding the cash flow hedging reserve, less specified regulatory adjustments

**Core Tier 1 capital:** Called-up share capital and eligible reserves plus equity non-controlling interests, less intangible assets and other regulatory deductions

Credit risk mitigation (CRM): A technique to reduce the credit risk associated with an exposure by application of credit risk mitigants such as collateral, guarantees and credit protection

**Derivatives:** A derivative is a financial instrument that derives its value from one or more underlying assets, for example bonds or currencies

**ECB**: European Central Bank

**EMEA:** Europe, Middle-East and Africa region

**Exposure:** A claim, contingent claim or position which carries a risk of financial loss

**Exposure at default (EAD):** The amount expected to be outstanding, after any credit risk mitigation, if and when a counterparty defaults. EAD reflects drawn balances as well as allowance for undrawn amounts of commitments and contingent exposures over a one-year time horizon

**Financial Conduct Authority (FCA):** The Financial Conduct Authority regulates the conduct of financial firms and, for certain firms, prudential standards in the UK. It has a strategic objective to ensure that the relevant markets function well

**High Level Assessment (HLA):** An assessment of the quality of controls in place to mitigate risk and residual risk. Residual risk is assessed as high, moderate to high, moderate, moderate to low and low with direction anticipated

**Institutions:** Under the Standardised Approach, institutions are classified as credit institutions or investment firms



**Internal Capital Adequacy Assessment Process (ICAAP):** The group's own assessment of the levels of capital that it needs to hold through an examination of its risk profile from regulatory and economic capital viewpoints

**ISDA Master Agreement:** A document that outlines the terms applied to a derivatives transaction between two parties. Once the two parties have agreed to the standard terms, they do not have to renegotiate each time a new transaction is entered into

**Key Risk Indicator (KRI):** Key Risk Indicators are used by business lines to evaluate control effectiveness and residual risk within a business process

**Master Netting Agreement:** An agreement between two counterparties that have multiple contracts with each other that provides for the net settlement of all contracts through a single payment in the event of default or termination of any one contract

**NBB**: National Bank of Belgium

**Pillar 3:** The part of Basel III that sets out information banks must disclose about their risks, the amount of capital required to absorb them and their approach to risk management. The aim is to encourage market discipline and improve the information made available to the market

**Prudential Regulation Authority (PRA):** The statutory body responsible for the prudential supervision of banks, building societies, credit unions, insurers and major investment firms in the UK. The PRA is a subsidiary of the Bank of England

**Residual maturity:** The period outstanding from the reporting date to the maturity or end date of an exposure

Risk appetite: A definition of the types and quantum of risks to which the firm wishes to be exposed

**Risk and Control Self-Assessment (RCSA):** Risk and Control Self-Assessment is used by business lines to identify risks associated with their key business processes and to complete a detailed assessment of the risk and associated controls

**Risk Governance Framework:** BNYM SA/NV's risk governance framework has been developed in conjunction with BNY Mellon requirements. Key elements of the framework are:

- Formal governance committees, with mandates and defined attendees
- Clearly defined escalation processes, both informally (management lines) and formally (governance committees, board, etc.)
- •□ A clear business as usual process for identification, management and control of risks
- Regular reporting of risk issues

**Risk Management Committee (RMC):** A committee which meets on a monthly basis to provide governance on risk related items arising from the business of the group

**Risk Weighted Assets (RWAs):** Assets that are adjusted for their associated risks using weightings established in accordance with CRD IV requirements

**Standardised Approach:** Method used to calculate credit risk capital requirements using the Basel III, CRD IV, CRR model supplied by the BCBS. All financial institutions must opt to either use the Standardised Approach (SA) specified by the regulator, or develop and use their own Internal Ratings Model (IRM). The SA model uses external credit assessment institution ratings and supervisory risk weights supplied by external credit assessment agencies

**Tier 2 capital:** A component of regulatory capital under Basel III, mainly comprising qualifying subordinated loan capital, related non-controlling interests and eligible collective impairment allowances



**Value-at-Risk (VaR):** A measure of the potential loss at a specified confidence level from adverse market movements in an ordinary market environment



# Appendix 3 CRD IV Reference

CRR ref.	Requirement summary	Compliance ref.	Page ref.
Scope of disc	closure requirements		
431 (1)	Institutions shall publish Pillar 3 disclosures	Pillar 3 disclosures published on company's internet site	N/A
431 (2)	Firms with permission to use specific operational risk methodologies must disclose operational risk information	N/A	N/A
431 (3)	Institution shall adopt a formal policy to comply with the disclosure requirements	see Pillar 3 policy	N/A
431 (4)	Explanation of ratings decision upon request	N/A	N/A
Non-material,	proprietary or confidential information		
432 (1)	Institutions may omit disclosures if the information is not regarded as material (except Articles 435(2)(c), 437 and 450)	see Pillar 3 policy	N/A
432 (2)	Institutions may omit information that is proprietary or confidential if certain conditions are respected.	see Pillar 3 policy	N/A
432 (3)	Where 432 (1) and (2) apply this must be stated in the disclosures, and more general information must be disclosed	N/A	N/A
432 (4)	Paragraphs 1, 2 & 3 are without prejudice to the scope of the liability for failure to disclosure material information		
Frequency of	disclosure		
433	Institutions shall publish the disclosures required at least on an annual basis, in conjunction with the date of the publication of the financial statements	see Pillar 3 policy	N/A
Means of disc	closure	I.	
434 (1)	Institutions may determine the appropriate medium, location and means of verification to comply effectively	Single Pillar 3 disclosure	N/A
434 (2)	Disclosures made under other requirements (e.g. accounting) can be used to satisfy Pillar 3 if appropriate	Any cross-references to accounting or other disclosures are clearly signposted in this document	N/A
Risk manage	ment objectives and policies		
435 (1)	Institutions shall disclose their risk management objectives and policies	Section 4 Risk Management Objectives and Policies	22
435 (1) (a)	Strategies and processes to manage those risks	Section 4.1 Risk Objectives	24
435 (1) (b)	Structure and organisation of the risk management function	Section 4.2 Risk Governance	24
435 (1) (c)	Scope and nature of risk reporting and measurement systems	Section 4.1 - 4.8	24
435 (1) (d)	Policies for hedging and mitigating risk	Section 4.3 - 4.8	30
435 (1) (e)	Approved declaration on the adequacy of risk management arrangements	Section 4 Risk Management Objectives and Policies	22
435 (1) (f)	Approved risk statement describing the overall risk profile associated with business strategy	Section 4 Risk Management Objectives and Policies	22
435 (2) (a)	Number of directorships held by directors	Section 4.2.1 Board of Directors	24

435 (2) (b)	Recruitment policy of Board members, their experience and expertise	Section 4.2.1 Board of Directors	24
435 (2) (c)	Policy on diversity of Board membership and results against targets	Section 4.2.1 Board of Directors	24
435 (2) (d)	Disclosure of whether a dedicated risk committee is in place, and number of meetings in the year	Section 4.2.2 - 4.2.4	27
435 (2) (e)	Description of information flow on risk to Board	Section 4.2.2 - 4.2.4	27
Scope of applic	cation		
436 (a)	The name of the institution to which the requirements of this Regulation apply	Section 1 Introduction	6
436 (b) (i) 436 (b) (ii) 436 (b) (iii) 436 (b) (iv)	Outline the differences in the basis of consolidation for accounting and prudential purposes, with a brief description of the entities therein, explaining whether they are: fully consolidated; proportionally consolidated; deducted from own funds; neither consolidated nor deducted	Section 1 Introduction	6
436 (c)	Current or foreseen material practical or legal impediment to the prompt transfer of Own Funds or repayment of liabilities among the parent undertaking and its subsidiaries	N/A	N/A
436 (d)	Aggregate amount by which the actual Own Funds are less than required in all subsidiaries not included in the consolidation, and the name or names of such subsidiaries	N/A - Entities outside the scope of consolidation are appropriately capitalised	N/A
436 (e)	If applicable, the circumstance of making use of the provisions laid down in Articles 7 & 9	N/A	N/A
Own funds□			
437 (1)	Requirements regarding capital resources table	Section 2 Own Funds	16
437 (1) (a)	Full reconciliation of Common Equity Tier 1 (CET1) items	Table 2: Own funds, full reconciliation	16
437 (1) (b)	Description of the main features of the CET1 and Additional Tier 1 and Tier 2 instruments	Table 3: Composition of regulatory capital	17
437 (1) (c)	Full terms and conditions of all CET1, Additional Tier 1 and Tier 2 instruments	Table 3: Composition of regulatory capital	17
437 (1) (d) (i) 437 (1) (d) (ii) 437 (1) (d) (iii)	Each prudent filter applied Each deduction made Items not deduction	Table 2: Own funds, full reconciliation	16
437 (1) (e)	Description of all restrictions applied to the calculation of Own Funds	N/A - no restrictions apply	N/A
437 (1) (f)	Explanation of the basis of calculating capital ratios using elements of Own Funds	N/A - Capital ratios calculated on basis stipulated in the Regulations	N/A
437 (2)	EBA to publish implementation standards for points above	BNYM follows the implementation standards	N/A
Capital require	ments		
438 (a)	Summary of institution's approach to assessing adequacy of capital levels	Section 3 Capital Requirements	20
438 (b)	Result of ICAAP on demand from authorities	N/A	N/A
438 (c)	Capital requirement amounts for credit risk for each Standardised Approach exposure class	N/A	N/A



438 (d) 438 (d) (i) 438 (d) (ii) 438 (d) (iii) 438 (d) (iv)	Capital requirements amounts for credit risk for each Internal Ratings Based Approach exposure class	N/A - internal ratings based approach is not used	N/A
438 (e)	Own funds requirements for market risk or settlement risk, or large exposures where they exceed limits	Table 6: Capital requirements and Section 9: Market Risk	21 & 51
438 (f)	Own funds amounts for operational risk, separately for the basic indicator approach, the standardised approach, and the advanced measurement approaches as applicable	Table 6: Capital requirements and Section 10: Operational Risk	21 & 52
438 (endnote)	Requirement to disclose specialised lending exposures and equity exposures in the banking book falling under the simple risk weight approach	Table 6: Capital requirements	21
Exposure to co	ounterparty credit risk (CCR)		
439 (a)	Description of process to assign internal capital and credit limits to CCR exposures	Section 8 Counterparty Credit Risk	48
439 (b)	Discussion of process to secure collateral and establishing reserves	Section 8 Counterparty Credit Risk	48
439 (c)	Discussion of management of wrong-way exposures	Section 8 Counterparty Credit Risk	48
439 (d)	Disclosure of collateral to be provided (outflows) in the event of a ratings downgrade	N/A - a credit ratings downgrade is managed at the BNYM Corp level	N/A
439 (e)	Derivation of net derivative credit exposure	Section 8 Counterparty Credit Risk	48
439 (f)	Exposure values for mark-to-market, original exposure, standardised and internal model methods	Section 8 Counterparty Credit Risk	48
439 (g)	Notional value of credit derivative hedges and current credit exposure by type of exposure	N/A - BNYM does not have credit derivative transactions	N/A
439 (h)	Notional amounts of credit derivative transactions for own credit, intermediation, bought and sold, by product type	N/A - BNYM does not have credit derivative transactions	N/A
439 (i)	Estimate of alpha, if applicable	N/A	N/A
Capital buffers			
440 (1) (a)	Geographical distribution of relevant credit exposures	N/A	N/A
440 (1) (b)	Amount of the institution specific countercyclical capital buffer	N/A	N/A
440 (2)	EBA will issue technical implementation standards related to 440 (1)	N/A	N/A
Indicators of g	lobal systemic importance		
441 (1)	Disclosure of the indicators of global systemic importance	N/A	N/A
441 (2)	EBA will issue technical implementation standards related to 441 (1)	N/A	N/A
Credit risk adj	ustments		
442 (a)	Disclosure of bank's definitions of past due and impaired	Section 5.6 Analysis of Past Due and Impaired Exposures	38
442 (b)	Approaches for calculating credit risk adjustments	Section 5.6 Analysis of Past Due and Impaired Exposures	38
442 (c)	Disclosure of pre-CRM EAD by exposure class	N/A	N/A



442 (d)	Disclosures of pre-CRM EAD by geography and exposure class	N/A	N/A
442 (e)	Disclosures of pre-CRM EAD by industry and exposure class	N/A	N/A
442 (f)	Disclosures of pre-CRM EAD by residual maturity and exposure class	N/A	N/A
442 (g) 442 (g) (i) 442 (g) (ii) 442 (g) (iii)	Breakdown of impaired, past due, specific and general credit adjustments, and impairment charges for the period, by exposure class or counterparty type	Section 5.6 Table 7: Credit quality of exposures by counterparty type	39
442 (h)	Impaired, past due exposures, by geographical area, and amounts of specific and general impairment for each geography	Section 5.6 Table 9: Credit quality of exposures by country	41
442 (i) 442 (i) (i) 442 (i) (ii) 442 (i) (iii) 442 (i) (iv) 442 (i) (v)	Reconciliation of changes in specific and general credit risk adjustments	Section 5.6 Analysis of Past Due and Impaired Exposures	38
442 endnote	Specific credit risk adjustments recorded to income statement are disclosed separately	Section 5.6 Analysis of Past Due and Impaired Exposures	38
Unencumbere	d assets		
443	Disclosures on unencumbered assets	N/A	N/A
Use of ECAIs			
444 (a)	Names of the ECAIs used in the calculation of Standardised Approach RWAs, and reasons for any changes	Section 7 External Credit Assessment Institutions (ECAIs)	46
444 (b)	Exposure classes associated with each ECAI	N/A	N/A
444 (c)	Explanation of the process for translating external ratings into credit quality steps	N/A	N/A
444 (d)	Mapping of external rating to credit quality steps	Section 7 External Credit Assessment Institutions (ECAIs)	46
444 (e)	Exposure value pre and post-credit risk mitigation, by credit quality step	Section 7 Table 12-13: Credit Risk Mitigation (CRM) effects	46
Exposure to m	arket risk		
445	Disclosure of position risk, large exposures exceeding limits, FX, settlement and commodities risk	Section 9 Market Risk	51
Operational ris	sk		
446	Disclosure of the scope of approaches used to calculate operational risk, discussion of advanced methodology and external factors considered	Section 10 Operational Risk	52
Exposure in ed	quities not included in the trading book		
447 (a)	Differentiation of exposures based on objectives	Appendix 1 Other Risks: no non- trading book exposure in equities	61
447 (b)	Recorded and fair value, and actual prices of exchange traded equity where it differs from fair value	Appendix 1 Other Risks: no non- trading book exposure in equities	61
447 (c)	Types, nature and amounts of the relevant classes of equity exposures	Appendix 1 Other Risks: no non-trading book exposure in equities	61
447 (d)	Realised cumulative gains and losses on sales over the period	Appendix 1 Other Risks: no non- trading book exposure in equities	61



447 (e)	Total unrealised gains/losses, latent revaluation gains/losses, and amounts included within Tier 1 capital	Appendix 1 Other Risks: no non- trading book exposure in equities	61
Exposure to int	terest rate risk on positions not included in the trading b	pook	
448 (a)	Nature of risk and key assumptions in measurement models	N/A	N/A
110 (1)		N/4	21/2
448 (b)	Variation in earnings or economic value, or other measures used by the bank from upward and downward shocks to interest rates, by currency	N/A	N/A
Exposure to se	curitisation positions		
449	Exposure to securitisations positions	Appendix 1 Securitisation risk	62
Remuneration	disclosures		
450	Remuneration disclosure regarding remuneration policy and practices	N/A	N/A
450 (1) (a)	Information concerning the decision-making process used for determining the remuneration policy	N/A	N/A
450 (1) (b)	Information on link between pay and performance	N/A	N/A
450 (1) (c)	Important design characteristics of the remuneration system	N/A	N/A
450 (1) (d)	Ratios between fixed and variable remuneration	N/A	N/A
450 (1) (e)	Information on the performance criteria on which the entitlement to shares, options and variable components of remuneration is based	N/A	N/A
450 (1) (f)	Main parameters and rationale for any variable component scheme and any other non-cash benefits	N/A	N/A
450 (1) (g)	Aggregate quantitative information on remuneration by business area	N/A	N/A
450 (1) (h) 450 (1) (h) (i) 450 (1) (h) (ii) 450 (1) (h) (iii) 450 (1) (h) (iv) 450 (1) (h) (v) 450 (1) (h) (vi)	Aggregate quantitative information on remuneration, broken down by senior staff management and members of staff whose actions have a material impact on the risk profile	N/A	N/A
450 (1) (i)	Number of individuals being remunerated EUR 1 million or more per financial year	N/A	N/A
450 (1) (j)	Total remuneration for each member of the management body upon demand from the Member State or competent authority	N/A	N/A
450 (2)	For institutions that are significant in terms of their size, internal organisation and the nature, scope and the complexity of their activities, the quantitative information above shall be made available to the public	N/A	N/A
Leverage□			
451 (1) (a)	Leverage ratio	Section 11: Leverage	58



451 (1) (b)	Breakdown of total exposure measure	Section 11 Table 20: Leverage ratio common disclosure	59
451 (1) (c)	Derecognised fiduciary items	N/A	N/A
451 (1) (d)	Description of the process used to manage the risk of excessive leverage	N/A	N/A
451 (1) (e)	Description of the factors that had an impact on the leverage ratio	Section 11: Leverage	58
451 (2)	EBA to publish implementation standards for points above	BNYM follows the implementation standards	N/A
Use of the IR	B approach to credit risk		
452	Risk-weighted exposure under the IRB approach	N/A	N/A
Use of credit	risk mitigation techniques		
453 (a)	Use of on- and off-balance sheet netting	Section 6.1 Netting	43
453 (b)	How collateral valuation is managed	Section 6.2 Collateral Valuation and Management	43
453 (c)	Description of types of collateral used	Section 6.3 Collateral Types	43
453 (d)	Types of guarantor and credit derivative counterparty, and their creditworthiness	N/A - BNYM's EMEA entities do not enter into credit derivative transactions	N/A
453 (e)	Disclosure of market or credit risk concentrations within risk mitigation exposures	Section 6.6 Credit Risk Concentration	44
453 (f)	For exposures under either the Standardised or Foundation IRB approach, disclose the exposure value covered by eligible collateral	N/A	N/A
453 (g)	Exposures covered by guarantees or credit derivatives	Section 6.6 Table 11: Credit risk mitigation techniques - overview	45
Use of the Ad	lvanced Measurement Approaches to operational risk		
454	Description of the use of insurance or other risk transfer mechanisms to mitigate operational risk	N/A - Pillar 1 : standardized approach, Pillar 2 : self- assessment approach	N/A
Use of interna	al market risk models		
455	Institutions calculating their capital requirements using internal market risk models	N/A	N/A
Commission	Implementing Regulation (EU) No 1423/2013□		
Article 1	Specifies uniform templates for the purposes of disclosure	N/A	N/A
Article 2	Full reconciliation of own funds items to audited financial statements	Section 2 Own Funds	16
Article 3	Article 3 Description of the main features of CET1, AT1 and Tier 2 instruments issued (Annex II and III) Section 2 Table 5: Tier 2 instruments		19
Article 4	Disclosure of nature and amounts of specific items on own funds (Annex IV and V)	Section 2 Table 4: Transitional own funds	17
Article 5	Disclosure of nature and amounts of specific items on own funds during transitional period (Annex VI and VII)	Section 2 Table 4: Transitional own funds	17
Article 6	Entry into force from 31 March 2014	N/A	N/A



451 (1) (b)	Breakdown of total exposure measure	Section 11 Table 20: Leverage ratio common disclosure	59
451 (1) (c)	Derecognised fiduciary items	N/A	N/A
451 (1) (d)	Description of the process used to manage the risk of excessive leverage	N/A	N/A
451 (1) (e)	Description of the factors that had an impact on the leverage ratio	Section 11: Leverage	58
451 (2)	EBA to publish implementation standards for points above	BNYM follows the implementation standards	N/A
Use of the IR	B approach to credit risk		
452	Risk-weighted exposure under the IRB approach	N/A	N/A
Use of credit	risk mitigation techniques		
453 (a)	Use of on- and off-balance sheet netting	Section 6.1 Netting	43
453 (b)	How collateral valuation is managed	Section 6.2 Collateral Valuation and Management	43
453 (c)	Description of types of collateral used	Section 6.3 Collateral Types	43
453 (d) Types of guarantor and credit derivative counterparty, and their creditworthiness		N/A - BNYM's EMEA entities do not enter into credit derivative transactions	
453 (e)	Disclosure of market or credit risk concentrations within risk mitigation exposures	Section 6.6 Credit Risk Concentration	44
453 (f)	For exposures under either the Standardised or Foundation IRB approach, disclose the exposure value covered by eligible collateral	N/A	N/A
453 (g)	Exposures covered by guarantees or credit derivatives	Section 6.6 Table 11: Credit risk mitigation techniques - overview	45
Use of the Ad	vanced Measurement Approaches to operational risk		
454	Description of the use of insurance or other risk transfer mechanisms to mitigate operational risk	N/A - Pillar 1 : standardized approach, Pillar 2 : self-assessment approach	N/A
Use of interna	al market risk models		
455	Institutions calculating their capital requirements using internal market risk models	N/A	N/A
Commission	Implementing Regulation (EU) No 1423/2013□		
Article 1	Specifies uniform templates for the purposes of disclosure	N/A	N/A
Article 2	Full reconciliation of own funds items to audited financial statements	Section 2 Own Funds	16
Article 3	Description of the main features of CET1, AT1 and Tier 2 instruments issued (Annex II and III)	Section 2 Table 5: Tier 2 instruments	19
Article 4	Disclosure of nature and amounts of specific items on own funds (Annex IV and V)	Section 2 Table 4: Transitional own funds	17
Article 5	Disclosure of nature and amounts of specific items on own funds during transitional period (Annex VI and VII)	Section 2 Table 4: Transitional own funds	17
Article 6	Entry into force from 31 March 2014	N/A	N/A



# Appendix 4 Capital instruments terms and conditions

This is a translation from French to English, for your information only. In case of discrepancy between the French and the English versions, only the French version shall be valid.

"The Bank of New York Mellon"
Public Limited Liability Company
Rue Montoyer, number 46 at 1000 Brussels

VAT BE 0806.743.159 RLE Brussels

<u>INCORPORATION</u>: deed executed by the undersigned Notary on thirty September two thousand and eight, published in extract form in the Annexes to the Belgian Official Gazette of the following nine October under number 20081009/160324.

MODIFICATION OF THE ARTICLES OF ASSOCIATION: deed executed by Mr Bertrand Nerincx, associated Notary on twenty seven April two thousand and nine, published in extract form in the Annexes to the Belgian Official Gazette the following eight May under number 2009-05-08/0065306.

MODIFICATION OF THE ARTICLES OF ASSOCIATION: deed realizing a capital increase executed by Mr Bertrand Nerincx, associated Notary on thirty September two thousand and nine (opening of the meeting) and on first October two thousand and nine (closing of the meeting), published in extract form in the Annexes to the Belgian Official Gazette of twelve October 2009 under number 2009-10-12/0142895.

MODIFICATION OF THE ARTICLES OF ASSOCIATION: deed executed by Mr Bertrand Nerincx, associated Notary in Brussels on second December two thousand eleven, published in extract form in the Annexes to the Belgian Official Gazette the following twenty-two December under number 2011-12-22/0191941.

MODIFICATION OF THE ARTICLES OF ASSOCIATION: deed executed by Mr Bertrand Nerincx, associated Notary in Brussels on 31 January 2013, realizing a capital increase a result of the merger by acquisition of "The Bank of New York Mellon (Ireland) Limited", the modifications of the Articles of Association being effective as of I February 2013, in the process of being published.

MODIFICATION OF THE ARTICLES OF ASSOCIATION: deed executed by Mr Bertrand Nerinx, associated Notary in Brussels on 24 March 2017, realizing a capital increase as result of the merger by acquisition of "The Bank of New York Mellon (Luxembourg) S.A.", the modifications of the Articles of Association being effective as of I April 2017, in the process of being published.

#### COORINATED VERSION OF THE ARTICLES OF ASSOCIATION

## **TITLE ONE - LEGAL FORM**

## ARTICLE 1 - NAME

The company is incorporated under the legal form of a public limited liability company ("société anonyme"). It is named "The Bank of New York Mellon". □

In all written documents issued by the company, the name must be preceded or followed immediately by the words□ "société anonyme" or the initials "SA".□

## ARTICLE 2 - REGISTERED OFFICE

The registered office of the company is established at 1000 Brussels, Rue Montoyer, number 46. □

The registered office may be transferred to any other location in the Region of Brussels Capital or in the French speaking region by simple decision of the board of directors, which is fully empowered to have a deed executed to enact the modification to the articles of association resulting therefrom.

The company may, by simple decision of the board of directors, establish administrative offices, branches and agencies ☐ in Belgium or abroad. ☐



### **ARTICLE 3 - PURPOSE**

Subject to the authorization as a Belgian credit institution being obtained from the Banking, Finance and Insurance Commission (CBFA), the purpose of the company is the carrying out of all banking and savings activities pursuant to Article 3 § 2 of the Law of 22 March 1993 on the legal status and supervision of credit institutions, and more particularly to receive deposits in cash, financial instruments and other assets, to extend credits in any form whatsoever, to conclude any transactions relating to currencies, financial instruments and precious metals, to provide all financial and administrative services, as well as to hold interests in other companies and to carry out all other financial, movable and immovable transactions which directly or indirectly relate to its purpose or facilitate its achievement.

#### ARTICLE 4 - TERM

The company is incorporated for an indefinite term.

It can be dissolved by decision of the shareholders' meeting deciding under the conditions required for the modification of the articles of association.

### TITLE TWO - CAPITAL - SHARES

#### ARTICLE 5 - CAPITAL

The subscribed and entirely paid up share capital amounts, since 1 April 2017 to one billion seven hundred and twenty three million four hundred and eighty five thousand five hundred and twenty six Euros and twenty one cents (EUR 1,723,485,526.21). It is represented by one million six hundred and seventy-two thousand and seventeen (1,672,017) shares, without par value, representing each one million six hundred and seventy-two thousand and seventeenth (1/1,672,017<sup>th</sup>) of the statutory capital.

### ARTICLE 6 - MODIFICATION OF CAPITAL

The capital may be increased or reduced by decision of the shareholders' meeting under the conditions laid down by law.

In case of capital increase to be subscribed in cash, the new shares must be offered by priority to the shareholders in proportion to the capital represented by their shares and subject to the special regime of shares without voting rights.

The exercise of the preferential subscription right is organized in accordance with the legal provisions.

The shareholders' meeting may, in the company's interest, under the quorum and majority conditions required for the modification of the articles of association and in compliance with the legal provisions, restrict or remove the preferential subscription right.

If, upon a capital increase, an issue premium is requested, this premium will be recorded in the books of the company in a non-available "issue premium" account that will constitute a guarantee to the benefit of third parties to the same extent as the capital and which cannot be disposed of, except for the possibility of conversion to equity, in accordance with the conditions provided in Article 612 of the Companies Code.

#### ARTICLE 7 - CALLS ON SHARES

Calls for funds are determined by the board itself.

Any payments called are apportioned among all the shares which the shareholder holds. The board may allow the shareholders to pay up their shares in advance, in which case it determines any conditions under which such advance payments are allowed. Advance payments are considered as cash advances.

A shareholder who, after a formal notice sent by registered mail, does not fulfill a request for funds must pay the company interest calculated at the legal interest rate as from the date the payment was due.

The board may also, after a second notice remains unsuccessful within a month of its date, order the forfeiture of the shareholder and have his/her/its shares sold, without prejudice to the right to claim the outstanding balance and any damages. The net proceeds of the sale shall be charged against what is owed by the defaulting shareholder, who shall remain liable for the difference or shall benefit from the surplus.

The exercise of the voting rights attached to shares on which payments have not been made is suspended for as long as such payments regularly called and payable have not been made.



#### ARTICLE 8 - AUTHORIZED CAPITAL

The board of directors is authorized to increase the capital, in accordance with the law, in one or more times up to an amount of two billion Euros (EUR 2,000,000,000.00) (by contribution in cash or in kind, or by converting reserves with or without emission of new shares). This authorization is valid for a period of five years from the publication of the document evidencing such authorization. The authorization is renewable.

This authorization includes the power for the board of directors to have the resulting amendments to the articles of association passed in a deed.

In case of capital increase by the board of directors by means of the authorized capital:

- (i) ☐ the board of directors may not decide on an increase mainly achieved through a contribution in kind exclusively reserved to a shareholder who holds shares in the company to which more than ten per cent of the votes are attached;
- (ii) the board may decide to issue convertible bonds and subscription rights;
- (iii) the board of directors is entitled to limit or suppress the preferential subscription right of the shareholders under the same conditions as those applicable to the general meeting;
- (iv) the board of directors has the right to limit or remove the preferential subscription right in favor of one or more specific persons who are not employees of the company or any of its subsidiaries. In this case the requirements of the Companies Code must be complied with.

### ARTICLE 9 - AMORTIZATION OF CAPITAL

The shareholders' meeting may decide by a simple majority vote the amortization of the subscribed capital by using the portion of the profits which may be distributed, without a capital reduction. The shareholders whose shares have been amortized shall retain their rights in the company, except for the right to a refund of their contributions and to a first dividend allocated to the non-amortized shares, fixed at five percent (5%) of the fully paid-up capital they represent, and obtain securities representing rights in the company.

#### TITLE THREE - SHARES

#### ARTICLE 10 - NATURE OF THE SHARES

The shares are registered.

Any transfer of shares shall be effective after registration in the register of shares.

The transfer of shares is not subject to any restriction.

The same rules apply in case of transfer of bonds whether convertible or not and of subscription rights issued by the company.

## ARTICLE 11 - ISSUE OF BONDS

The company may issue bonds, linked to mortgages or other, by decision of the board of directors, which determines the type and fixes the interest rate, method and timing of reimbursements, special guarantees and other conditions of the issue.

However, without prejudice to article 8, when issuing convertible bonds or bonds with subscription rights and in case of issue of subscription rights whether or not attached to another security, the decision is taken by the shareholders' meeting deciding under the conditions provided by law for the modification to the articles of association.

The shareholders' meeting may, in the interest of the company, restrict or remove the preferential subscription right in accordance with the requirements for the modification of the articles of association.

## ARTICLE 12 - SHARES WITHOUT VOTING RIGHTS

The company may issue shares without voting rights. Shares without voting rights confer the right to a preferential and recoverable dividend, a preferential right to the repayment of the capital contribution and a right in the distribution of the liquidation proceeds. These rights will be determined upon each issue of shares without voting rights.

Shares with voting rights can be converted into shares without voting rights. The board of directors may determine the maximum number of shares to be so converted and the conversion conditions.



The company may require the purchase of its own shares without voting rights by decision of the shareholders' meeting deliberating under the conditions provided for a reduction of the capital, from those shareholders holding shares with or without voting rights.

## TITLE FOUR - MANAGEMENT AND SUPERVISION

#### ARTICLE 13 - COMPOSITION OF THE BOARD OF DIRECTORS

The company is managed by a board of at least three members, natural or legal persons, shareholders or not, appointed by the shareholders' meeting for a maximum term of six years (after obtaining a concurring opinion from the National Bank of Belgium, if necessary and in line with legal requirements) and which may be revoked at any time by the shareholders' meeting. To the extent it is legally admissible, the outgoing directors can be re-elected.

In case a legal person is appointed as a director, it must appoint amongst its shareholders, managers, directors or employees, a permanent representative to take care of the director's duties in the name and for the account of the legal person. The appointment and the termination of the functions of the permanent representative are subject to the same rules of publication as if the representative would exercise this mission in its own name and for its own account.

The mandate of outgoing and non-re-elected directors terminates immediately after the shareholders' meeting deciding on the appointments.

In addition to the reimbursement of their costs, the shareholders' meeting may decide to grant a fixed remuneration to the directors, the amount of which will be determined each year by the shareholders' meeting and which will be booked as a general expense of the company. In addition, the shareholders' meeting may grant *tantièmes* (directors 'fees, percentage of the profits) to the directors from the available profits of the financial year.

## **ARTICLE 14 - VACANCY**

In the case of vacancy within the board of directors because of death, resignation or other cause, the remaining directors have the right to temporarily fill the vacancy until the next annual general shareholders' meeting. In this case, the annual general shareholders' meeting appoints a replacement at its first meeting. The director appointed under the above conditions to replace a director completes the term of the director he/she/it replaces.

#### ARTICLE 15 - CHAIR

The board of directors may elect a chairperson amongst its members.

In the event of absence or impediment of the chairperson, the board appoints one of its members to replace him/her.

#### **ARTICLE 16 - MEETINGS**

The board of directors meets upon notice of its chairperson or in case of impediment of the latter, her/his substitute. The board of directors also meets each time the interest of the company requires it or each time at least two directors or the chair of the executive committee request it.

The meetings are held at the location indicated in the notices.

If all members of the board are present or represented, the prior notice must not be justified. The presence of a director at a meeting covers the possible irregularity of the notice and entails a waiver of the right to complain in this respect.

### ARTICLE 17 - COMPANY SECRETARY

The board of directors may appoint a company secretary. The company secretary shall, in the name of the board of directors and under its authority, convene the general shareholders' meetings and the meetings of the board of directors and shall act as secretary of these meetings.

## **ARTICLE 18 - DELIBERATIONS**

The board may validly deliberate and decide if at least half of its members are present or represented.

The meetings of the board are held in person. The meetings of the board may also be held by telephone or video conference. In this event, the meeting of the board is deemed to be held at the registered office of the company.

Any director can give a power of attorney to one colleague, in writing or by any other means of (tele)communication having a physical support, to represent him/her at a given meeting of the board and to vote in his/her stead.



In extraordinary circumstances duly justified by urgency and the company's interest, the decisions of board of directors can be taken by the unanimous consent of the directors, expressed in writing. This procedure cannot however be used for the finalization of the annual accounts or in order to use the authorized capital.

The decisions of the board of directors are taken by a simple majority vote, without taking the abstentions into account. In the event of a tie, the vote of the person who chairs the meeting is decisive. However, if the board is composed of only two directors, the vote of the chairperson ceases to be decisive.

Without prejudice to the exceptions mentioned in the Companies Code, a director who has directly or indirectly a financial interest conflicting with a decision or transaction falling within the competence of the board of directors, must inform the other directors prior to the deliberation of the board of directors. The provisions of Article 523 of the Companies Code must be taken into account.

#### **ARTICLE 19 - MINUTES**

The deliberations of the board of directors are recorded in minutes signed by the chair of the meeting and by the directors who wish so. These minutes are inserted in a special register.

Delegations, as well as the opinions and votes submitted in writing, by telegram, telex, fax, e-mail or other printed documents are appended.

Copies or extracts of the minutes to be produced in court or elsewhere shall be validly authenticated if signed by the chairperson o the board of directors, two directors or the company secretary.

#### ARTICLE 20 - POWERS OF THE BOARD

The board of directors may perform all acts necessary or useful for the achievement of the corporate purpose, except those reserved to the shareholders' meeting by law or by the articles of association.

### ARTICLE 21 - ADVISORY COMMITTEES

The board of directors may create advisory committees within the board and under its responsibility. It describes their composition and their mission.

### ARTICLE 22 - EXECUTIVE COMMITTEE

In accordance with Article 524bis of the Companies Code and the Article 26 of the Act of March 22, 1993 relating to the status and the supervision of credit institutions, the board of directors may delegate its management powers to an executive committee, provided that this delegation does not include the power to decide on the general policy of the company or the entirety of the acts reserved to the board of directors pursuant to other provisions of the law.

The executive committee is composed of at least two members and constitutes a board whose all members are also members of the board of directors. The president of the executive committee is appointed by the board of directors after consultation of the National Bank of Belgium.

Any member of the executive committee may grant to any other member of said committee whatsoever, in writing or by any other means of (tele)communication having a physical support, a power to represent him/her at a given meeting of this committee and to vote in his/her stead.

The board of directors must supervise this committee.

The appointment conditions of the members of the executive committee, their dismissal, their remuneration, the term of their appointment and the functioning of the executive committee, shall be determined by the board of directors.

If a member of the executive committee has a direct or indirect conflicting interest of a financial nature in a decision or a transaction within the competence of the executive committee, it must notify it to the other members prior to the deliberation of the committee. The provisions of Article 524ter of the Companies Code must be taken into account.

## **ARTICLE 23 - DAILY MANAGEMENT**

In the course of its duties, the executive committee may delegate the daily management of the company as provided for in Article 525 of the Companies Code, the management of one or more transactions of the company, or the implementation of the decisions of the executive committee or of the board of directors to one or more persons, whether a director or not. It may revoke the delegations so conferred.



### ARTICLE 24 - SPECIAL DELEGATES

The board of directors as well as the executive committee and those appointed for the daily management may also,  $\Box$  each within the course of their duties, delegate special powers to one or more persons of their choice, acting individually  $\Box$  or jointly.  $\Box$ 

The board of directors, the executive committee and those appointed for the daily management, as the case may □ be, may at any time revoke the persons and powers that they conferred pursuant to the preceding paragraph. □

#### ARTICLE 25 - REPRESENTATION - OFFICIAL DEEDS AND LEGAL ACTIONS

The company is validly represented, including for deeds and in litigation: □

- either by two directors acting jointly; □
- or by one director acting alone if he/she is also member of the executive committee; □
- or, but within the limits of the daily management, by the person or persons delegated to this daily management,
   acting jointly or severally.

These representatives do not need to justify vis-à-vis third parties of a prior decision of the board of directors or of the executive committee.

Furthermore, the company is validly bound by special delegates within the limits of their mandate.

### ARTICLE 26 - CONTROL

The control of the financial situation, of the annual accounts and of the regularity of the transactions to be reported in the annual accounts must be entrusted to one or more statutory auditors, members of the Institute of Chartered Accountants ("Institut des Réviseurs d'Entreprises"), appointed by the shareholders' meeting for a renewable term of three years.

## TITLE FIVE - GENERAL MEETINGS OF SHAREHOLDERS

### ARTICLE 27 - COMPOSITION AND POWERS

The shareholders' meeting is composed of all the owners of shares who are entitled to vote by themselves or through proxy holders, subject to having complied with any applicable legal requirements or provisions of the articles of association. Bondholders and holders of subscription rights are entitled to participate in the meeting subject to the same conditions but only in an advisory capacity.

Decisions duly adopted by the shareholders' meeting bind all the shareholders even absent or dissenting ones. □

## ARTICLE 28 - MEETING□

The annual shareholders' meeting statutorily meets on the last Tuesday of the month of May at 4 (four) PM. If this □ day is a legal holiday, the meeting is held the following business day. □

Except for decisions to be recorded in a deed, the shareholders may unanimously take in writing all decisions which lall within the powers of the shareholders' meeting.

An extraordinary shareholders' meeting can be convened each time the interest of the company so requires. □

Shareholders' meetings may be convened by the board of directors or by the statutory auditors and must be so convened upon the request of shareholders representing together one fifth of the statutory capital.

## ARTICLE 29 - CONVENING NOTICES

Shareholders' meetings are held at the statutory office of the company or at any other place in Belgium, stated in the □ convening notice to the meeting. □

The convening notices to any shareholders' meeting shall contain the agenda, which includes an indication of the □ topics to be handled and are sent in accordance with the law. □

Any person may waive this notice and, in any case, be regarded as having been duly called if he/she/it is present or □ represented at the meeting. □

If the written procedure is used pursuant to Article 536 of the Companies Code, the board will send a circular by mail, □ fax, e-mail or any other medium, with reference to the agenda and proposals for decisions, to all the shareholders □



and the auditors, if any, asking the shareholders to approve the proposed decisions and to return the circular duly  $\square$  signed within the term stated therein, to the company's statutory office or to any other place indicated in the circular.  $\square$ 

The decision must be regarded as not having been taken, if all shareholders do not approve all items on the agenda □ and the written procedure, within the aforementioned term. □

Shareholders, bondholders, holders of subscription rights or holders of registered certificates are entitled to be informed of the decisions taken at the registered office of the company.

#### ARTICLE 30 - ADMISSION TO THE MEETING

The board of directors may require that the shareholders and bondholders inform it in writing (by letter or proxy), at □ least three days prior to the meeting, of their intent to attend the meeting and that the shareholders specify the number □ of shares for which they intend to participate in the vote. □

If the board of directors uses this right, it must be mentioned in the notices calling for the meeting. □

A list of attendance mentioning the name of the shareholders and the number of shares they hold is signed by each of them or by their proxies prior to joining the meeting.

#### ARTICLE 31 - REPRESENTATION□

Any owner of securities may be represented at the shareholders' meeting by a representative, proxy holder, whether □ a shareholder or not. A proxy holder may represent more than one shareholder □

The board or the company secretary may adopt the form of proxy and require that they be deposited at the place ☐ indicated by it within the term it sets. ☐

Co-owners as well as pledgors and pledgees must be represented by one single person. □

#### ARTICLE 32 - BUREAU

All shareholders' meetings are chaired by the chairperson of the board or in his/her absence, by another director. □

The chairperson may appoint a secretary. If the number of shareholders present allows it, the meeting may choose one or more tellers from amongst its members.

## ARTICLE 33 - POSTPONEMENT OF THE MEETING□

Every shareholders' meeting, whether annual or special, may be postponed forthwith for three more weeks by the board of directors. The postponement cancels all decisions taken.

The formalities complied with to attend the first meeting and the proxies will remain valid for the second meeting,  $\square$  without prejudice to the right to comply with these formalities for the second meeting in the event they have not been  $\square$  complied with for the first one.  $\square$ 

The second meeting decides on the same agenda. Its decisions are final. □

#### ARTICLE 34 - RIGHT TO VOTE

Each share gives right to one vote. □

#### ARTICLE 35 - DELIBERATION OF THE SHAREHOLDERS' MEETING

Except in the cases provided by law, decisions are taken, irrespective of the number of shares represented at the meeting, with a simple majority of the votes validly exercised, disregarding abstentions.

The votes are expressed by show of hands or by calling of names unless the shareholders' meeting decides otherwise □ by a majority vote. □

## ARTICLE 36 - SPECIAL MAJORITY -

Whenever the shareholders' meeting must decide on an increase or decrease of the statutory capital, on a de-merger or a merger of the company with other entities, on the winding up or any other modification to the articles of association, it can only deliberate if the purpose of the proposed modifications is specifically mentioned in the notices and if those attending the meeting represent at least one half of the statutory capital.

If this last condition is not met, a new notice is necessary and the second meeting will validly deliberate whatever the □ portion of the capital represented. □



No modification is valid if it is not adopted with a three guarters majority vote.

However, when the deliberation concerns the modification of the corporate purpose, the modification of the respective rights of categories of securities, the winding up of the company resulting from a reduction of the net assets to an amount which is less than one half or one quarter of the capital, the transformation of the company, or a merger, a de-merger, the contribution of universality or of a branch of activity, the meeting is validly constituted and may decide only with the quorum of attendance and the majority of votes required by law.

#### **ARTICLE 37 - MINUTES**

The minutes of the shareholders' meeting are signed by the members of the bureau and the shareholders who request it. Copies or extracts of minutes of the shareholders' meeting to be produced in court or elsewhere shall be validly authenticated if signed by two directors or by an executive director.

## TITLE SIX - ANNUAL ACCOUNTS - DISTRIBUTION

#### ARTICLE 38 - FINANCIAL YEAR

The financial year starts on the first of January and ends on the thirty first of December of each year.

#### ARTICLE 39 - VOTE ON THE ANNUAL ACCOUNTS

The annual shareholders' meeting decides on the annual accounts.

Once the annual accounts are adopted, the meeting decides by special vote on the release to be granted to the  $\Box$  directors and to the auditor(s).  $\Box$ 

#### ARTICLE 40 - DISTRIBUTION□

The profits are determined in accordance with the law. Each year, five percent will be deducted from the profits to □ constitute the legal reserve. This deduction ceases to be mandatory when this legal reserve fund reaches one tenth □ of the statutory capital. It must start again if the legal reserve is being used. □

The balance is allocated by the shareholders' meeting deciding upon proposal of the board of directors according to  $\Box$  the law.  $\Box$ 

#### ARTICLE 41 - PAYMENT OF DIVIDENDS

The payment of dividends, if any, is made annually, at the time and the place indicated by the board of directors, in □ one or several times. □

The board of directors may, under its responsibility, decide the payment of interim dividends by deducting them from □ the profits of the current financial year. It determines the amount of these interim dividends and their payment date. □

#### TITLE SEVEN - DISSOLUTION AND LIQUIDATION

### ARTICLE 42 - LIQUIDATION

In case of dissolution of the company for any reason and at any time whatsoever, the liquidation is carried out by the liquidator(s) appointed by the shareholders' meeting or, failing such appointment, by the board of directors in office at that time and acting as a liquidation committee.

For this purpose, the liquidators have the widest powers conferred by law. □

The shareholders' meeting shall, where appropriate, determine the remuneration of the liquidator(s).

## ARTICLE 43 - DISTRIBUTION□

After settlement of the debts and of the expenses of the liquidation or consignment of the amounts required for this □ purpose,- the net assets shall first be applied to reimburse, in cash or in securities, the paid up amount on the shares. □

If not all shares are paid up in the same proportion, the liquidators, before proceeding with any distribution, will take into account this diversity of situation and re-establish the balance by calling funds or by proceeding with a prior distribution. The balance shall be distributed equally among all shares.

### TITLE EIGHT - GENERAL PROVISIONS



#### ARTICLE 44 - ELECTION OF DOMICILE

For the enforcement of these articles of association, all shareholders, bondholders, directors, auditors, managers or liquidators residing abroad, elect domicile at the statutory office where all communications, summonses, subpoenas and notifications can be validly made.

#### ARTICLE 45 - JURISDICTION

For all disputes between the company, its shareholders, bondholders, directors, auditors and liquidators relating to the affairs of the company and the enforcement of these articles of association, exclusive jurisdiction is granted to the courts of the statutory office, unless the company expressly waives such jurisdiction.

### **ARTICLE 46 - LEGAL PROVISIONS**

The company intends to fully comply with the law. Consequently, the legal provisions which would not be legally waived, shall be deemed part of these articles of association while clauses contrary to mandatory provisions of the law are deemed unwritten.

## For lawful co-ordination on [•I

21 juni

I, Nathalie Ryckaert, Secretary General of The Bank of New York Mellon SA/NV do hereby certify that the document is a true and correct copy of the original which I have examined. Brussels, Belgium, this



#### Dated 14 September 2009

BNY Mellon GSS Holdings (Luxembourg) S.à.r.l.

as Lender

and

The Bank of New York Mellon SA as Borrower

#### EUR95.500

### Subordinated Perpetual Loan Agreement

This Subordinated Perpetual Loan Agreement (this "Agreement") was made on this 14<sup>th</sup> day of September 2009.

#### BETWEEN:

- 1 . BNY Mellon GSS Holdings (Luxembourg) S.à r.l., a company organised and existing under the laws of the Grand Duchy of Luxembourg and having its registered office at 1--1450 Luxembourg, 73 Côte d'Eich, R.C.S. Luxembourg B 134 044 (together with its successors and permitted assigns and transferees, the "Lender'); and
- 2. The Bank of New York Mellon SA, a company organised and existing under the laws of Belgium and having its registered office at Rue Montoyer 46, B-1000 Brussels, RPM Brussels, enterprise number 0806743159 (the "Borrower').

#### WHEREAS:

- (A) The Borrower wishes to obtain financing for general corporate purposes.
- (B) The Lender is willing to make available this financing by means of a perpetual loan in the amount of EUR 92,500,000 to the Borrower, subject to the terms and conditions of this Agreement.

### NOW IT IS AGREED AS FOLLOWS:

#### DEFINITIONS

Unless otherwise defined herein, capitalised terms and expressions used in this Agreement (including the recitals hereto) will have the same respective meaning as set forth below:

"2006 Decree" means the Decree of the CBFA on the regulation of the own funds

of the credit institutions and investment firms of 17 October 2006,

as amended from time to time.

"Administrative Action" means any judicial decision, official administrative

pronouncement, published or private ruling, regulatory procedure, notice or announcement (including any notice or announcement of intent to adopt such procedures or regulations) by any legislative body, court, governmental or administrative authority or regulatory

body having appropriate jurisdiction.

"Alternative Interest Payment Method" has the meaning given to it in Clause 8.□

"Business Day" means a day (other than a Saturday or Sunday) on which commercial □

banks are open for general business in Brussels and [Luxembourg].

"Calculation Agent" means the Borrower.

"CBFA" means the Belgian Banking, Finance and Insurance Commission

(Commission Bancaire, Financière et des Assurances / Commissie voor

het Bank-, Financie-, en Assurantiewezen).

"Clause" means a clause of this Agreement.



"Control"□	has the meaning given to it in article 5 of the Belgian Company Code.			
"Conversion Date"□	means the Business Day specified by the Borrower as the date on which it will satisfy its obligation to pay the Deferred Interest or, as the case, effect a Loss Absorption.			
"Deferred Interest"□	means interest of which the payment has been deferred in accordance with Clause 7.1.			
"Drawdown Date"□	means 1 October 2009 or such date as agreed between the Lender, the Borrower, and the CBFA. $$			
"EUR"□	means the single currency of the participating member states of the third stage of the European Economic and Monetary Union established pursuant to the Treaty of the European Community (as amended).			
"Hybrid Tier 1 Capital"□	means own funds ( <i>fonds propres/eigen vermogen</i> ) as defined in Article II.1 §I 1 <sup>0</sup> c) of the 2006 Decree.			
"Interest Event"	means any of the following events:			
in accordance with Article 617 of	w the sum of its paid-in capital and nondistributable reserves, as determined the Belgian Company Code in relation to the distribution of dividends or sult of the payment of the interest on the Interest Payment Date; or			
<ul><li>(ii)□a Net Assets Deficiency Event has occurred or payment of the relevant interest would result in becoming subject to a Net Assets Deficiency Event; or</li></ul>				
(iii) the Borrower would as a result of compliance with the 2006 Decree.	the payment of the interest on the Interest Payment Date be no longer in .			
"Interest Deferral Notice"□	has the meaning given to it in Clause 7.4.			
"Interest Payment Date"	means, in respect of an Interest Period, the last day of such Interest Period.			
"Interest Period"□	means a period of 6 months (or such other period as agreed between the Lender and the Borrower) but so that:			
(i)□ the first Interest Period shall comr	mence on the Drawdown Date and expire on 31 December 2009;			
(ii) each subsequent Interest Period s	shall commence on the first day after the previous Interest Period;			
(iii) an Interest Period which would otherwise end on a day which is not a Business Day shall end on the next succeeding Business Day or, if that Business Day falls in the following month of the year, on the preceding Business Day;				
(iv) the period commencing on and including the Drawdown Date and ending on (but excluding) the first Interest Payment Date and each successive period commencing on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date;				
shall (without prejudice to the app	or shortened by the application of (iii) above, the following Interest Period dication of (iii) above) end on the day on which it would have ended if the been so extended or shortened; and			
	n (a) the repayment date, if any, as determined in accordance with Clause the Loan into capital of the Borrower in accordance with Clause 9.			
"Interest Rate"	has the meaning given to it in Clause 6.2.			

"Interest Rate" has the meaning given to it in Clause 6.2.

"Law of 23 March 1993" means the Law dated 22 March 1993 on the status and supervision of

credit institutions, as amended from time to time.

"Loan" means the perpetual loan in an amount of EUR 92,500,000 or the

aggregate principal amount outstanding under this Agreement of the Loan.

"Loss Absorption" has the meaning given to it in Clause 9.1.



"Net Assets Deficiency Event"□	means each of the following events:
(i)□ the Borrower's own funds on a co out in Article III. 1 §1 3 <sup>0</sup> of the 200	ompany basis or on a consolidated basis falls below the requirements set 6 Decree; or
	$^{\circ}$ 1 Capital on a company basis or on a consolidated basis declines below article III.1 $\S$ 1 $3^{0}$ of the 2006 Decree; or
(iii) Article 633 of the Belgian Compar below 50% of its registered capita	ny Code becomes applicable by virtue of the Borrower's net assets falling il; or
(iv) the Borrower's own funds decline March 1993; or	below the minimum capital as determined in Article 23 of the Law of 22
(v)□at the discretion of the CBFA, in t § 1 of the Law of 22 March 1993.	he event the CBFA imposes special measures in application of Article 57
"Other Debt"□	means any liabilities of the Borrower for the payment of money other than (i) the liabilities of the Borrower under this Agreement and (ii) Other Hybrid Tier 1 Claims.
"Other Hybrid Tier 1 Claims"□	means any claims for financial indebtedness owed by the Borrower and subordinated by the creditors thereof so as to constitute Hybrid Tier 1 Capital in accordance with Article II.1 $\S 1\ 1^{\circ} c$ ).
"Postponement Event"□	means each of the following events:
(i)□ it would be illegal for the Borrowe	r to issue shares; or
	taking, guarantee or other similar provision in any Other Debt, the Borrower e its capital in accordance with this Agreement because it has not satisfied Debt as the case may be.
"Quotation Date"□	means in relation to any period for which an interest rate is to be determined, two Target Days before the first day of that period.
"Target Day"□	means any day on which the Trans-European Automated Real-time Gross Settlement Express Transfer payment system Target is open for the settlement of payments in EUR.
"Tax"□	means any tax, duty or other charge of a similar nature (including any penalty or interest payable in connection with any failure to pay or any delay in paying the same).
"Tax Event"□	means the receipt by the Borrower of an opinion of a nationally recognised law firm or other tax advisor in Belgium experienced in such matters to the affect that, as a result of:
	f, or change (including any announced prospective change) in the laws or under) of Belgium or any political subdivision or taxing authority thereof or

- (ii) any Administrative Action; or
- (iii) any amendment to, clarification of, or change in the official position on the interpretation of any Administrative Action or any interpretation of any Administrative Action or any interpretation or pronouncement that provides for a position with respect to any Administrative Action that differs from the theretofore generally accepted position, in each case, by any legislative body, court, governmental authority or regulatory body, irrespective of the manner in which such amendment, clarification, change, interpretation or pronouncement is made known, which amendment, clarification or change is effective or which interpretation or pronouncement is announced on or after the execution of this Agreement



there is more than an insubstantial risk that any interest deduction or other similar direct or indirect tax benefit available to the Borrower in respect of the Agreement is eliminated, reduced or otherwise adversely affected in any material respect.

"Tier 1 Capital" ☐ means own funds (fonds propres/eigen vermogen) as defined in Article

II.1 §1 10 of the 2006 Decree.

"Tier 1 Disqualification Event" ☐ means the receipt of the Borrower of an opinion or declaration, rule or decree of the CBFA to the effect that there has been either a change in

law or regulation or a change in the official interpretation thereof, resulting in more than an insubstantial risk that the Loan or any of the Borrower's liabilities under this Agreement (or any portion thereof) will no longer be capable of constituting Tier 1 Capital of the Borrower under applicable

laws and regulations.

### 2. THE LENDER'S COMMITMENT

Subject to the terms and conditions of this Agreement, the Lender will make the Loan available to the Borrower on the Drawdown Date, in immediately available funds, by crediting the amount of the Loan to the account BE70 5199 2722 9025, or such other account as agreed between the Lender and the Borrower, and the Borrower will draw down the Loan in full on such date.

#### PURPOSE□

The Loan shall be used by the Borrower for general corporate purposes.

### 4. ☐ CONDITIONS PRECEDENT

The obligation of the Lender to make the Loan available on the Drawdown Date for the Borrower to draw is subject to prior confirmation by the CBFA that this Agreement qualifies as Tier 1 Capital or Hybrid Tier 1 Capital.

#### 5. □ SUBORDINATION

The Loan and any payment obligations in connection therewith (whether for principal or interest) constitute subordinated obligations for financial indebtedness

- (i) which do not benefit from any security interest, whether a security interest in rem (zakelijke zekerheid/sûreté réelle), a personal security interest (persoonlijke zekerheid / sûreté personelle) or any other right of set off or similar right having the effect of constituting a security or guarantee in favour of the Lender;
- (ii) and which are subordinated; and
  - (a) take rank after any Other Debt; and
  - (b) are in the same rank (pari passu) with any Other Hybrid Tier 1 Claims,

in case of bankruptcy, liquidation or any other situation of composition of creditors (concours/samenloop) of the Borrower.

- 6.□ INTEREST
- 6.1 ☐ Interest will accrue on the Loan at the Interest Rate.
- 6.2 The Interest Rate on the Loan for each Interest Period is set to the fixed rate of 8.18%.
- 6.3 
  Interest under this Agreement shall accrue on and be calculated on the Loan, on the basis of the actual number of days elapsed (not counting within an Interest Period the last day of that Interest Period) and a year of 360 days.
- 6.4 Interest shall be payable in arrears on each Interest Payment Date unless the Borrower has issued a Interest Deferral Notice in accordance with Clause 7 in which case no interest (or less than the full interest as specified in the Interest Deferral Notice) shall be due and payable on such Interest Payment Date.
- 7.□ DEFERRAL OF INTEREST
- 7.1 The Borrower (i) may, in its sole discretion and for any reason whatsoever, and (ii) shall, if an Interest Event has occurred and is continuing prior to, or shall result following the payment of interest on, the next scheduled Interest Payment Date, defer the payment of the interest (or a specified portion thereof) that would be payable



amount) shall become payable on such Interest Payment Date. Any such deferred interest is hereinafter referred to as Deferred Interest. 7.2 No interest will accrue on Deferred Interest. 7.3 □ The Borrower shall satisfy its obligation to pay any Deferred Interest in accordance with the Alternative Interest Payment Method. The Borrower will notify the Lender, by no later than 10 Business Days preceding an Interest Payment Date, 7.4 □ that it will defer the interest (or a specified portion thereof) that would become payable on such Interest Payment Date, by sending a written notice to that effect (an "Interest Deferral Notice"). 7.5 □ The Interest Deferral Notice shall specify the Conversion Date on which the Borrower contemplates to satisfy its obligation to pay the Deferred Interest in accordance with the Alternative Interest Payment Method. No Conversion Date shall, subject to the occurrence of a Postponement Event, fall on a date which falls more 7.6 than 45 Business Days after the Interest Payment Date on which the Deferred Interest would have been payable, if it was not deferred in accordance with Clause 7.1. 7.7□ In case a Postponement Event occurs, the Borrower shall give a notice to the Lender and the Calculation Agent as soon as possible after the Borrower has determined that the Postponement Event has occurred (and specify the commencement date thereof), whereupon the Conversion Date shall be deferred with the period during which the Postponement Event is continuing. The Borrower shall notify the lender as soon as practicable possible of the termination of a Postponement Event and of the new date of the Conversion Date. In case the Postponement Event is not terminated before six (6) months as of its occurrence, the Deferred 7.8 Interest, subject to the Postponement Event shall be cancelled. ALTERNATIVE INTEREST PAYMENT METHOD 8. 🗆 8.1□ On the Conversion Date, all Deferred Interest to which the Conversion Date relates, will be contributed in kind for the account of the Lender to the share capital (or an issue premium account) of the Borrower against the issuance of ordinary shares having, according to the Calculation Agent and, subject to compliance with Article 602 of the Belgian Company Code, an aggregate fair market value equal to the aggregate amount of the Deferred Interest payable on the Conversion Date plus any expenses and fees to be borne by the Borrower in connection with the using the Alternative Interest Payment Method, including the claims for the fees and expenses of the Calculation Agent (the "Alternative Interest Payment Method"). 8.2 □ The Borrower undertakes to use all reasonable efforts to ensure that it has sufficient authorised and unissued ordinary shares for the purpose of the application of the Alternative Interest Payment Method. However, in case the Alternative Interest Payment Method cannot be applied within the limits of the authorised capital as provided in the articles of association of the Borrower for any reason whatsoever, the board of directors of the Borrower shall convene an extra-ordinary general shareholders' meeting to be held on the Conversion Date to approve the Alternative Interest Payment Method. 8.3 Failing such approval of the Alternative Interest Payment Method on the Conversion Date by the extra-ordinary general shareholders' meeting, the Borrower has the right (and the Lender hereby irrevocably and unconditionally agrees thereto), to cancel the Deferred Interest to which the Conversion Date relates. 8.4□ Any expenses in relation to the Alternative Interest Payment Method are to be born by the Borrower. 9. 🗆 LOSS ABSORPTION 9.1 In case of the occurrence of a Net Assets Deficiency Event which cannot be remedied by a deferral of interest in accordance with Clause 7, the board of directors shall contribute in kind such an amount of the Loan and interest accrued thereon to the share capital (or an issue premium account) of the Borrower for the account of the Lender against the issuance of ordinary shares having, according to the Calculation Agent and, subject to compliance with Article 602 of the Belgian Company Code, an aggregate value equal to the lower of: (i)□ the aggregate of: (a)□ the Loan; and (b)□ accrued but unpaid interest on the Loan with respect to the current Interest Period; and

on such Interest Payment Date, as a result of which no interest (or only the remaining balance of the interest



		(c)□	any outstanding Deferred Interest; less				
		(d)	any Tax imposed on the aforementioned items (i) to and including (iii); $\hfill\Box$				
	$AND \square$						
	(ii)	the am	ount required to remedy the Net Assets Deficiency Event.				
(a <b>"Los</b>	s Abso	rption")					
9.2 🗆	10 Bus	The Borrower will notify the Lender of a Loss Absorption by sending a notice to that effect by no later than 10 Business Days preceding the Conversion Date on which the Borrower contemplates to satisfy the Loss Absorption in accordance with Clause 8.1.					
9.3□	The Borrower undertakes to use all reasonable efforts to ensure that it has sufficient authorised and unissued ordinary shares for the purpose of the application of Clause 9.1. However, in case a Loss Absorption cannot be satisfied within the limits of the authorised capital as provided in the articles of association of the Borrower for any reason whatsoever, the board of directors of the Borrower shall convene an extra-ordinary general shareholders' meeting to be held on the Conversion Date to approve the Loss Absorption. Failing such approval of the Loss Absorption on the Conversion Date by the extra-ordinary general shareholders' meeting, the Borrower has the right (and the Lender hereby irrevocably and unconditionally agrees thereto), to reduce the Loan (as well as any interest accrued but not yet payable) by the lower of:						
	(i)□	the agg	regate of:				
		(a)□	the Loan; and				
		(b)□	accrued but unpaid interest on the Loan with respect to the current Interest Period; and				
		(c)	any outstanding Deferred Interest;□				
	$AND\square$						
	(ii)□	the am	ount required to remedy the Net Assets Deficiency Event.				
9.4□	Any reduction in accordance with Clause 9.4 shall first be imputed to any accrued but unpaid interest on the Loan and subsequently to the Loan.						
10.□	REPAYMENT						
10.1□	The Loan is perpetual.						
10.2 🗆	Notwithstanding the foregoing, the Loan may, subject always to the prior written approval of the CBFA, be repaid at the option of the Borrower:						
	(i)□	after th	e fifth anniversary of the Drawdown Date; or				
	(ii)□	in case	of a Tier 1 Disqualification Event; or				
	(iii)□	in case	of a Tax Event; or				
	(iv)□	in any s	such other case as agreed by the CBFA.				
10.3 🗆	If it becomes unlawful in any applicable jurisdiction for the Lender to have the Loan outstanding or otherwise perform any of its obligations under the terms and conditions of this Agreement, the Lender shall promptly notify the Borrower and the Lender and Borrower shall negotiate in good faith to revise this Agreement so it would be compliant with all applicable laws (any such amendments shall be subject to the approval of the CBFA). If no agreement can be reached, the Borrower shall enter into discussions with the CBFA in view of the (partial) repayment of the Loan, it being understood that no repayment can be made without the prior written approval of the CBFA, which has no legal obligation to approve the same.						
10.4 🗆	The repayment price will be an amount equal to the aggregate of (i) the amount of the outstanding Loan and, (ii) the amount of any accrued but unpaid interest on the Loan, (iii) the amount of any Deferred Interest, not yet converted in accordance with Clause 8 or Clause 9.						



11.□	FURTH	ER ASSURANCES			
		ives, to the fullest extent permitted by law (i) its rights pursuant to Article 1184 of the Belgian Civil ny rights it may have under Article 1117 of the Belgian Civil Code.			
12.□	PAYME	NTS			
12.1 🗆	to its ac	Unless otherwise provided herein, all payments by a party under this Agreement shall be made to such party to its account at such office or bank in Belgium as previously notified or to such other account at such other office or bank as it may otherwise notify to, otherwise agree with, the other party.			
12.2□	and in s	yments under this Agreement to the Lender shall be made for value on the due date at such times uch funds as the Lender may specify as being customary at the time for the settlement of transactions elevant currency in the place for payment.			
12.3 🗆	Arepay	ment of the Loan or any interest on the Loan is payable in Euro, unless parties have otherwise agreed.			
12.4 □	Amount are incu	s payable in respect of costs, expenses, taxes and the like are payable in the currency in which they irred.			
12.5 🗆		ment under this Agreement is due on a day which is not a Business Day, the due date for that payment stead be the next Business Day.			
12.6□	All payments by the Borrower hereunder will be free and clear of and without deduction or withholding for or on account of any Tax of any jurisdiction, unless a tax deduction is required by law.				
13.□	NOTICE				
Each n	otice, red	quest, direction or other communication under this Agreement will be sent:			
	if to the	Lender, to it at:			
		Eric Vanderkerken Eric.Vanderkerken@atcgroup.com□ +352 286 901 69□			
	if to the	Borrower, to it at:□			
	Attn: Email: Fax:	Jean-Christophe Mathonet, CFO□ jc.mathonet@bnymellon.com□ +32 2 545 8888□			
or to su		email address or facsimile number as is notified from time to time by one party hereto to the other			
14.□	ASSIGN	NMENT			
The Bo Lender.		nay not assign its rights and obligations under this Agreement without the prior written consent of the			
15.□	AMEND	DMENTS			
15.1□	Any am	endments to this Agreement shall be in writing.			
15.2□	The Lender acknowledges that the Borrower needs to obtain the prior written approval of the CBFA before agreeing to any amendments.				
16.□	COUNT	ERPARTS			
_	reement ne instru	may be executed in any number of counterparts, all of which taken together shall constitute one and ment.			
17.□	GOVER	RNING LAW AND JURISDICTION			
17.1□	This Ag	reement shall be governed by Belgian law.			
17.2 🗆	The Co Agreem	urts of Brussels have exclusive jurisdiction to settle any dispute arsing from or connected with this tent.			



IN WITNESS WHEREOF the authorised representatives of the Lender and the Borrower have each caused this Agreement to be duly executed in two originals on the date first above written by attaching their respective signatures to the execution page (each party acknowledging haven received one original).

#### **EXECUTION PAGE**

EUR 92,500,000 Subordinated Perpetual Loan Agreement (Tier 1)

FOR AND ON BEHALF OF

BNY MELLON GSS HOLDINGS (LUXEMBOURG) S.À.R.L.

as Lender

Name: ERIC VANDERKERKEN

Title: MANAGER

FOR AND ON BEHALF OF

THE BANK OF NEW YORK MELLON SA

as Borrower

Name: Jean-Christophe Mathonet Title: Executive Director – C.F.O.

#### **Dated 23 July 2010**

BNY Mellon GSS Holdings (Luxembourg) S.à.r.l.

as Lender

and

The Bank of New York Mellon SA as Borrower EUR 253.000.000,00

Subordinated Perpetual Loan Agreement (Tier 1)

This Subordinated Perpetual Loan Agreement (this "Agreement") was made on this 23<sup>rd</sup> day of July 2010.

#### BETWEEN:

- 1. BNY Mellon GSS Holdings (Luxembourg) S.à r.l., a company organised and existing under the laws of the Grand Duchy of Luxembourg and having its registered office at 1--1931 Luxembourg, 13-15, Avenue de la Liberté, R.C.S. Luxembourg B 134 044 (together with its successors and permitted assigns and transferees, the "Lender"); and
- 2. □The Bank of New York Mellon SA, a company organised and existing under the laws of Belgium and having its registered office at Rue Montoyer 46, B-1000 Brussels, RPM Brussels, enterprise number 0806743159 (the "Borrower").

#### WHEREAS:

- (A) The Borrower wishes to obtain financing for general corporate purposes.
- (B) The Lender is willing to make available this financing by means of a perpetual loan in the amount of EUR 253.000.000,00 to the Borrower, subject to the terms and conditions of this Agreement.

#### NOW IT IS AGREED AS FOLLOWS:

#### 1. DEFINITIONS

Unless otherwise defined herein, capitalised terms and expressions used in this Agreement (including the recitals hereto) will have the same respective meaning as set forth below:

2006 Decree" means the Decree of the CBFA on the regulation of the own funds of the

credit institutions and investment firms of 17 October 2006, as amended

from time to time.

"Administrative Action" means any judicial decision, official administrative pronouncement,

published or private ruling, regulatory procedure, notice or announcement (including any notice or announcement of intent to adopt such procedures or regulations) by any legislative body, court, governmental or administrative

authority or regulatory body having appropriate jurisdiction.

"Alternative Interest Payment Method" has the meaning given to it in Clause 8.

"Business Day" means a day (other than a Saturday or Sunday) on which commercial banks

are open for general business in Brussels and Luxembourg.

"Calculation Agent" means the Borrower.



"CBFA" means the Belgian Banking, Finance and Insurance Commission

(Commission Bancaire, Financière et des Assurances / Commissie voor het

Bank-, Financie-, en Assurantiewezen).

"Clause" means a clause of this Agreement.

"Control" has the meaning given to it in article 5 of the Belgian Company Code.

"Conversion Date" means the Business Day specified by the Borrower as the date on which it

will satisfy its obligation to pay the Deferred Interest or, as the case, effect

a Loss Absorption.

"Deferred Interest" means interest of which the payment has been deferred in accordance with

Clause 7.1.

"Drawdown Date" means 30 July 2010 or such date as agreed between the Lender, the

Borrower, and the CBFA.

"EUR" means the single currency of the participating member states of the third

stage of the European Economic and Monetary Union established pursuant

to the Treaty of the European Community (as amended).

"Hybrid Tier 1 Capital" means own funds (fonds propres/eigen vermogen) as defined in Article II.1

§1 1°c) of the 2006 Decree.

"Interest Event" means any of the following events.

(i) the Borrowers net assets are below the sum of its paid-in capital and non-distributable reserves, as determined in accordance with Article 617 of the Belgian Company Code in relation to the distribution of dividends or would fall below such sum as a result of the payment of the interest on the Interest Payment Date; or

(ii) □a Net Assets Deficiency Event has occurred or payment of the relevant interest would result in the Borrower becoming subject to a Net Assets Deficiency Event; or

(iii) the Borrower would as a result of the payment of the interest on the Interest Payment Date be no longer in compliance with the 2006 Decree.

"Interest Deferral Notice" has the meaning given to it in Clause 7.4.

"Interest Payment Date" means, in respect of an Interest Period, the last day of such Interest Period.

"Interest Period" means a period of 6 months (or such other period as agreed between the

Lender and the Borrower) but so that:

- (i) the first Interest Period shall commence on the Drawdown Date and expire on 30 January 2011;
- (ii) each subsequent Interest Period shall commence on the first day after the previous Interest Period;
- (iii) an Interest Period which would otherwise end on a day which is not a Business Day shall end on the next succeeding Business Day or, if that Business Day falls in the following month of the year, on the preceding Business Day;
- (iv) the period commencing on and including the Drawdown Date and ending on (but excluding) the first Interest Payment Date and each successive period commencing on (and including) an Interest Payment Date and ending on (but excluding) the next succeeding Interest Payment Date;
- (v) if an Interest Period is extended or shortened by the application of (iii) above, the following Interest Period shall (without prejudice to the application of (iii) above) end on the day on which it would have ended if the preceding Interest Period had not been so extended or shortened; and
- (vi) the last Interest Period shall end on (a) the repayment date, if any, as determined in accordance with Clause 10 or (b) the day of conversion of the Loan into capital of the Borrower in accordance with Clause 9.

"Interest Rate" □ has the meaning given to it in Clause 6.2.

"Law of 23 March 1993" ☐ means the Law dated 22 March 1993 on the status and supervision of credit

institutions, as amended from time to time.



Loan"□ means the perpetual loan in an amount of EUR 253.000.000.00 or the aggregate principal amount outstanding under this Agreement of the Loan. "Loss Absorption" has the meaning given to it in Clause 9.1 means each of the following events: "Net Assets Deficiency Event"□ (i) ☐ the Borrower's own funds on a company basis or on a consolidated basis falls below the requirements set out in Article III. 1 §1 30 of the 2006 Decree; or (ii) the amount of the Borrower's Tier 1 Capital on a company basis or on a consolidated basis declines below 5/8 of the requirement set out in Article III.1 §1 3° of the 2006 Decree; or (iii) Article 633 of the Belgian Company Code becomes applicable by virtue of the Borrower's net assets falling below 50% of its registered capital' or (iv) the Borrower's own funds decline below the minimum capital as determined in Article 23 of the Law of 22 March 1993; or (v) at the discretion of the CBFA, in the event the CBFA imposes special measures in application of Article 57 S 1 of the Law of 22 March 1993. "Other Debt"□ means any liabilities of the Borrower for the payment of money other than (i) the liabilities of the Borrower under this Agreement and (ii) Other Hybrid Tier 1 Claims. "Other Hybrid Tier 1 Claims" means any claims for financial indebtedness owed by the Borrower and subordinated by the creditors thereof so as to constitute Hybrid Tier 1 Capital in accordance with Article II.1 §1 1 °c) means each of the following events: "Postponement Event"□ (i) ☐ it would be illegal for the Borrower to issue shares; or (ii) □as a result of any covenant, undertaking, guarantee or other similar provision in any Other Debt, the Borrower would not be permitted to increase its capital in accordance with this Agreement because it has not satisfied its obligations under such Other Debt as the case may be. "Quotation Date" means in relation to any period for which an interest rate is to be determined, two Target Days before the first day of that period "Target Day" means any day on which the Trans-European Automated Real-time Gross Settlement Express Transfer payment system Target is open for the settlement of payments in EUR. "Tax"□ means any tax, duty or other charge of a similar nature (including any penalty or interest payable in connection with any failure to pay or any delay in paying the same).

"Tax Event"□ means the receipt by the Borrower of an opinion of a nationally recognised

law firm or other tax advisor in Belgium experienced in such matters to the

affect that, as a result of:

(i) any amendment to, clarification of, or change (including any announced prospective change) in the laws or treaties (or any regulations thereunder) of Belgium or any political subdivision or taxing authority thereof or therein affecting taxation; or

- (ii) any Administrative Action; or
- (iii) any amendment to, clarification of, or change in the official position on the interpretation of any Administrative Action or any interpretation of any Administrative Action or any interpretation or pronouncement that provides for a position with respect to any Administrative Action that differs from the theretofore generally accepted position, in each case, by any legislative body, court, governmental authority or regulatory body, irrespective of the manner in which such amendment, clarification, change, interpretation or pronouncement is made known, which amendment, clarification or change is effective or which interpretation or pronouncement is announced on or after the execution of this Agreement there is more than an insubstantial risk that any interest



deduction or other similar direct or indirect tax benefit available to the Borrower in respect of the Agreement is eliminated, reduced or otherwise adversely affected in any material respect.

"Tier 1 Disqualification Event"

means the receipt of the Borrower of an opinion or declaration, rule or decree of the CBFA to the effect that there has been either a change in law or regulation or a change in the official interpretation thereof, resulting in more than an insubstantial risk that the Loan or any of the Borrower's liabilities under this Agreement (or any portion thereof) will no longer be capable of constituting Tier 1 Capital of the Borrower under applicable laws and regulations.

## 2. THE LENDER'S COMMITMENT

Subject to the terms and conditions of this Agreement, the Lender will make the Loan available to the Borrower on the Drawdown Date, in immediately available funds, by crediting the amount of the Loan to the account BE70 5199 2722 9025, or such other account as agreed between the Lender and the Borrower, and the Borrower will draw down the Loan in full on such date.

#### PURPOSE□

The Loan shall be used by the Borrower for general corporate purposes. □

#### 4. ☐ CONDITIONS PRECEDENT

The obligation of the Lender to make the Loan available on the Drawdown Date for the Borrower to draw is subject to prior confirmation by the CBFA that this Agreement qualifies as Tier 1 Capital or Hybrid Tier 1 Capital.

#### 5. □ SUBORDINATION

The Loan and any payment obligations in connection therewith (whether for principal or interest) constitute subordinated obligations for financial indebtedness

- (i) which do not benefit from any security interest, whether a security interest in rem (zakelijke zekerheid/sûreté réelle), a personal security interest (persoonlijke zekerheid / sûreté personelle)) or any other right of set off or similar right having the effect of constituting a security or guarantee in favour of the Lender; and
- (ii) which are subordinated; and
  - (a) take rank after any Other Debt; and
  - (b) are in the same rank (pari passu) with any Other Hybrid Tier 1 Claims,

in case of bankruptcy, liquidation or any other situation of composition of creditors (concours/samenloop) of the Borrower.

- 6.□ INTEREST
- 6.1 Interest will accrue on the Loan at the Interest Rate.
- 6.2□ The Interest Rate on the Loan for each Interest Period is set to the fixed rate of 8.75%.
- 6.3 
  Interest under this Agreement shall accrue on and be calculated on the Loan, on the basis of the actual number of days elapsed (not counting within an Interest Period the last day of that Interest Period) and a year of 360 days.
- 6.4 
  Interest shall be payable in arrears on each Interest Payment Date unless the Borrower has issued a Interest Deferral Notice in accordance with Clause 7 in which case no interest (or less than the full interest as specified in the Interest Deferral Notice) shall be due and payable on such Interest Payment Date.
- 7.□ DEFERRAL OF INTEREST
- 7.1 The Borrower (i) may, in its sole discretion and for any reason whatsoever, and (ii) shall, if an Interest Event has occurred and is continuing prior to, or shall result following the payment of interest on, the next scheduled Interest Payment Date, defer the payment of the interest (or a specified portion thereof) that would be payable on such Interest Payment Date, as a result of which no interest (or only the remaining balance of the interest



	amount) shall become payable on such Interest Payment Date. Any such deferred interest is hereinafted referred to as Deferred Interest.						
7.2□	No inte	rest will	accrue on Deferred Interest.				
7.3 □		rrower s nt Meth	hall satisfy its obligation to pay any Deferred Interest in accordance with the Alternative Interest od.				
7.4 □	that it v	The Borrower will notify the Lender, by no later than 10 Business Days preceding an Interest Payment Date, that it will defer the interest (or a specified portion thereof) that would become payable on such Interest Payment Date, by sending a written notice to that effect (an <sup>U</sup> Interest Deferral Notice").					
7.5 □			eferral Notice shall specify the Conversion Date on which the Borrower contemplates to satisfy pay the Deferred Interest in accordance with the Alternative Interest Payment Method.				
7.6 □	than 45	5 Busine	Date shall, subject to the occurrence of a Postponement Event, fall on a date which falls more ess Days after the Interest Payment Date on which the Deferred Interest would have been as not deferred in accordance with Clause 7.1.				
7.7 🗆	In case a Postponement Event occurs, the Borrower shall give a notice to the Lender and the Calculation Agent as soon as possible after the Borrower has determined that the Postponement Event has occurred (and specify the commencement date thereof), whereupon the Conversion Date shall be deferred with the period during which the Postponement Event is continuing, The Borrower shall notify the lender as soon as practicable possible of the termination of a Postponement Event and of the new date of the Conversion Date						
7.8 🗆			stponement Event is not terminated before six (6) months as of its occurrence, the Deferred ct to the Postponement Event shall be cancelled.				
8.□	ALTER	NATIVE	INTEREST PAYMENT METHOD				
8.1 🗆	On the Conversion Date, all Deferred Interest to which the Conversion Date relates, will be contributed in kind for the account of the Lender to the share capital (or an issue premium account) of the Borrower agains the issuance of ordinary shares having, according to the Calculation Agent and, subject to compliance with Article 602 of the Belgian Company Code, an aggregate fair market value equal to the aggregate amount of the Deferred Interest payable on the Conversion Date plus any expenses and fees to be borne by the Borrower in connection with the using the Alternative Interest Payment Method, including the claims for the fees and expenses of the Calculation Agent (the "Alternative Interest Payment Method").						
8.2 □	The Borrower undertakes to use all reasonable efforts to ensure that it has sufficient authorised and unissu ordinary shares for the purpose of the application of the Alternative Interest Payment Method. However, case the Alternative Interest Payment Method cannot be applied within the limits of the authorised capital provided in the articles of association of the Borrower for any reason whatsoever, the board of directors the Borrower shall convene an extra-ordinary general shareholders' meeting to be held on the Conversi Date to approve the Alternative Interest Payment Method.						
8.3 □	Failing such approval of the Alternative Interest Payment Method on the Conversion Date by the extra-ording general shareholders' meeting, the Borrower has the right (and the Lender hereby irrevocably a unconditionally agrees thereto), to cancel the Deferred Interest to which the Conversion Date relates.						
8.4□	Any expenses in relation to the Alternative Interest Payment Method are to be born by the Borrower.						
9.□	LOSS ABSORPTION						
9.1 🗆	In case of the occurrence of a Net Assets Deficiency Event which cannot be remedied by a deferral of interest in accordance with Clause 7, the board of directors shall contribute in kind such an amount of the Loan and interest accrued thereon to the share capital (or an issue premium account) of the Borrower for the account of the Lender against the issuance of ordinary shares having, according to the Calculation Agent and, subject to compliance with Article 602 of the Belgian Company Code, an aggregate value equal to the lower of:						
	(i)□	the ago	gregate of.				
		(a)□	the Loan; and				
		<b>(</b> b <b>)</b> □	accrued but unpaid interest on the Loan with respect to the current Interest Period; and				
		(c)□	any outstanding Deferred Interest; less				



		(d)	any Tax imposed on the aforementioned items (i) to and including (iii);			
AND						
	(ii) the amount required to remedy the Net Assets Deficiency Event.					
(a "Los	s Abso	rption")				
9.2 🗆	10 Bus	iness Da	will notify the Lender of a Loss Absorption by sending a notice to that effect by no later than ays preceding the Conversion Date on which the Borrower contemplates to satisfy the Loss ecordance with Clause 8.1.			
9.3 □	The Borrower undertakes to use all reasonable efforts to ensure that it has sufficient authorised and unissue ordinary shares for the purpose of the application of Clause 9.1. However, in case a Loss Absorption cannot be satisfied within the limits of the authorised capital as provided in the articles of association of the Borrower for any reason whatsoever, the board of directors of the Borrower shall convene an extra-ordinary general shareholders' meeting to be held on the Conversion Date to approve the Loss Absorption. Failing succeptive approval of the Loss Absorption on the Conversion Date by the extra-ordinary general shareholders' meeting the Borrower has the right (and the Lender hereby irrevocably and unconditionally agrees thereto), to reduce the Loan (as well as any interest accrued but not yet payable) by the lower of:					
	(i)□	the agg	regate of:			
		(a)□	the Loan; and			
		<b>(b)</b> □	accrued but unpaid interest on the Loan with respect to the current Interest Period; and			
		(c)	any outstanding Deferred Interest;			
AND						
	(ii)□	the amo	ount required to remedy the Net Assets Deficiency Event.			
9.4 🗆	-	ny reduction in accordance with Clause 9.4 shall first be imputed to any accrued but unpaid interest on the oan and subsequently to the Loan.				
10.□	REPAY	MENT				
10.1□	The Lo	an is per	petual.			
10.2 repaid a			g the foregoing, the Loan may, subject always to the prior written approval of the CBFA, be ne Borrower:			
	(i)□	after the	e fifth anniversary of the Drawdown Date; or			
	(ii)□ in case of a Tier Disqualification Event; or					
	(iii)□	in case	of a Tax Event; or			
	(iv)□	in any s	such other case as agreed by the CBFA.			
10.3□	If it becomes unlawful in any applicable jurisdiction for the Lender to have the Loan outstanding or otherwise perform any of its obligations under the terms and conditions of this Agreement, the Lender shall promptly notify the Borrower and the Lender and Borrower shall negotiate in good faith to revise this Agreement so it would be compliant with all applicable laws (any such amendments shall be subject to the approval of the CBFA). If no agreement can be reached, the Borrower shall enter into discussions with the CBFA in view of the (partial) repayment of the Loan, it being understood that no repayment can be made without the prior written approval of the CBFA, which has no legal obligation to approve the same.					
10.4□	The repayment price will be an amount equal to the aggregate of (i) the amount of the outstanding Loan and, (ii) the amount of any accrued but unpaid interest on the Loan, (iii) the amount of any Deferred Interest, not yet converted in accordance with Clause 8 or Clause 9.					
11.□	FURTHER ASSURANCES					
			the fullest extent permitted by law (i) its rights pursuant to Article 1184 of the Belgian Civil it may have under Article 1117 of the Belgian Civil Code.			



12.□	PAYMENTS

- 12.1 ☐ Unless otherwise provided herein, all payments by a party under this Agreement shall be made to such party to its account at such office or bank in Belgium as previously notified or to such other account at such other office or bank as it may otherwise notify to, otherwise agree with, the other party.
- 12.2 
  Any payments under this Agreement to the Lender shall be made for value on the due date at such times and in such funds as the Lender may specify as being customary at the time for the settlement of transactions in the relevant currency in the place for payment.
- 12.3 \( \text{ A repayment of the Loan or any interest on the Loan is payable in Euro, unless parties have otherwise agreed.
- 12.4 ☐ Amounts payable in respect of costs, expenses, taxes and the like are payable in the currency in which they are incurred.
- 12.5 

  If a payment under this Agreement is due on a day which is not a Business Day, the due date for that payment shall instead be the next Business Day.
- 12.6 
  All payments by the Borrower hereunder will be free and clear of and without deduction or withholding for or on account of any Tax of any jurisdiction, unless a tax deduction is required by law.

#### NOTICE

Each notice, request, direction or other communication under this Agreement will be sent:

if to the Lender, to it at:

Attn: Eric Vanderkerken

Email: Eric.Vanderkerken@atcgroup.com

Fax: +352 2689 01 69

if to the Borrower, to it at:

Attn: Jean-Christophe Mathonetl CFO Email: jc.mathonet@bnymellon.com

Fax: +32 2 545 8888

or to such other email address or facsimile number as is notified from time to time by one party hereto to the other party hereto.

#### 14. ☐ ASSIGNMENT

The Borrower may not assign its rights and obligations under this Agreement without the prior written consent of the Lender,

## 15. ☐ AMENDMENTS

- 15.1 ☐ Any amendments to this Agreement shall be in writing.
- 15.2 The Lender acknowledges that the Borrower needs to obtain the prior written approval of the CBFA before agreeing to any amendments.

### 16.□ COUNTERPARTS

This Agreement may be executed in any number of counterparts, all of which taken together shall constitute one and the same instrument.

## 17. GOVERNING LAW AND JURISDICTION

- 17.1 This Agreement shall be governed by Belgian law.
- 17.2 ☐ The Courts of Brussels have exclusive jurisdiction to settle any dispute arsing from or connected with this Agreement.

IN WITNESS WHEREOF the authorised representatives of the Lender and the Borrower have each caused this Agreement to be duly executed in two originals on the date first above written by attaching their respective signatures to the execution page (each party acknowledging haven received one original).



#### **EXECUTION PAGE**

EUR 253.000.000,00 Subordinated Perpetual Loan Agreement (Tier 1)

FOR AND ON BEHALF OF

BNY MELLON GSS HOLDINGS (LUXEMBOURG) S.À.R.L.

as Lender

Name:

Title: Manager.

FOR AND ON BEHALF OF

THE BANK OF NEW YORK MELLON SA

as Borrower

Name: Jean-Christophe Mathonet

Title: Executive Director - C.F.O.

**EXECUTION PAGE** 

EUR 253.000.000,00 Subordinated Perpetual Loan Agreement (Tier 1)

# FOR AND ON BEHALF OF

BNY MELLON GSS HOLDINGS (LUXEMBOURG) S.À.R.L. as Lender

Name:

Title:

FOR AND ON BEHALF OF

THE BANK OF NEW YORK MELLON SA as Borrower

forthone!

Name: Jean-Christophe Mathonet

Title: Executive Director – C.F.O.

Dated 19 December 2011 □

BNY Mellon GSS Holdings (Luxembourg) S.à.r.l. as Lender□ and□ The Bank of New York Mellon SA as Borrower□

Amendment Agreement to Subordinated Perpetual Loan Agreement

(Tier 1)

# AMENDMENT AGREEMENT TO THE SUBORDINATED PERPETUAL LOAN AGREEMENT MADE ON 23 JULY 2010

#### BETWEEN:

- 1.□ BNY Mellon GSS Holdings (Luxembourg) S.à r.l., a company organised and existing under the laws of the Grand Duchy of Luxembourg and having its registered office at L--1931 Luxembourg, 13-15, Avenue de la Liberté, R.C.S. Luxembourg B 134 044 (together with its successors and permitted assigns and transferees, the "Lender"); and
- The Bank of New York Mellon SA, a company organised and existing under the laws of Belgium and having 2. 🗆 its registered office at Rue Montoyer 46, B-1000 Brussels, RPM Brussels, enterprise number 0806743159 (the "Borrower");

#### WHEREAS:

- (A)□ The Lender and the Borrower entered into a Subordinated Perpetual Loan Agreement ("Agreement") of EUR 253.000.000.00 on 23 July 2010, date of execution of this Agreement;
- The Borrower attributed this Loan to its Frankfurt Branch on 30 November 2010; (B)□
- (C)□ The Lender and the Borrower are willing to limit the duration of this perpetual Loan to thirty (30) years starting as of the date of execution of the Agreement;
- (D) 🗆 Any amendments to the Agreement shall be in writing and primarily approved in writing by the National Bank of Belgium ('NBB'), that has succeeded to CBFA (now Financial Services and Market Authority) in its capacity as Belgian prudential supervision authority;

FOLLOWS:

- SUBJECT TO THE PRIOR WRITTEN APPROVAL OF THE NATIONAL BANK OF BELGIUM, IT IS AGREED AS The Loan is granted for a period of thirty (30) years starting as from the date of execution of the Agreement; 1.□ 2. 🗆 The terms of Clause 10 of the Agreement are replaced as follows: **DURATION & REPAYMENT** 10. □ 10.1 □ The Loan is granted for a period of thirty (30) years starting as from the date of execution of the Agreement. 10.2□ At the date of expiry of the Loan, the Loan shall be repaid. Notwithstanding the foregoing, the Loan may, subject always to the prior written approval of the NBB, be repaid before the expiry of the Loan at the option of the Borrower:
  - after the fifth anniversary of the Drawdown Date; or (i)□
  - (ii)□ in case of a Tier 1 Disqualification Event; or
  - in case of a Tax Event; or (iii)□
  - (iv)□ in any such other case as agreed by the NBB.



- 10.4 The NBB may request the suspension of the repayment of the Loan if the Borrower does not comply with the applicable requirements on own funds as well as because of the financial situation and the solvability of the Borrower.
- 10.5 If it becomes unlawful in any applicable jurisdiction for the Lender to have the Loan outstanding or otherwise perform any of its obligations under the terms and conditions of this Agreement, the Lender shall promptly notify the Borrower and the Lender and Borrower shall negotiate in good faith to revise this Agreement so it would be compliant with all applicable laws (any such amendments shall be subject to the approval of the NBB). If no agreement can be reached, the Borrower shall enter into discussions with the NBB in view of the (partial) repayment of the Loan, it being understood that no repayment can be made without the prior written approval of the NBB, which has no legal obligation to approve the same.
- 10.6□ The repayment price will be an amount equal to the aggregate of (i) the amount of the outstanding Loan and, (ii) the amount of any accrued but unpaid interest on the Loan, (iii) the amount of any Deferred Interest, not yet converted in accordance with Clause 8 or Clause 9.
- 3. In the Agreement, any references to the perpetual character of the Loan shall be deleted.
- 4. Except to the extent expressly amended by this Amendment Agreement, all provisions of the Agreement remain unchanged, in full force and effect as stated therein.
- 5. This Amendment Agreement is an integral part of the Agreement.

IN WITNESS WHEREOF the authorised representatives of the Lender and the Borrower have each caused this Amendment Agreement to be duly executed in two originals on the date first above written by attaching their respective signatures to the execution page (each party acknowledging haven received one original).

### **EXECUTION PAGE**

Amendment Agreement to the Subordinated Perpetual Loan Agreement of 23 July 2010 □

FOR AND ON BEHALF OF

BNY MELLON GSS HOLDINGS (LUXEMBOURG) S.À.R.L. as Lender

Name:		
Title:		

FOR AND ON BEHALF OF

THE BANK OF NEW YORK MELLON SA as Borrower

Name: Paul Bodart

Title: Executive Director - C.E.O.



THE BANK OF NEW YORK MELLON SA/NV
46 RUE MONTOYER
1000 BRUXELLES - BELGIQUE
T.V.A. BE 0806.743.159 - N° D'ENTREPRISE 0806.743.159 BRUXELLES RPM.

The Bank of New York Mellon SA/NV est une société publique belge à responsabilité limitée (société anonyme), autorisée et réglementée en tant qu'établissement de crédit par la Banque Nationale de Belgique (BNB). C'est une filiale de The Bank of New York Mellon, une banque organisée selon les lois de l'Etat de New York, ayant son siège au 1 Wall Street, New York, NY 10286, U.S.A.